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INDIGENOUS GHANAIAN FOLK GAMES

Interactive Visual Stories

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ABSTRACT

Folk games and storytelling is an integral part of people's culture, that manifests itself in various aspect of oral tradition. Cultural values and norms represent the core beliefs and system of ruling in most Akan societies in Ghana, and for that matter, across the world. These social customs are on the brink of extinction due to the lack of practice of these traditions especially among young people. Therefore, it is important to bridge these dying cultures with the interest of Ghanaian youth, not only to encourage them but also to create awareness of the fact that savvy lifestyles and fast-moving innovations may have rendered some of these traditional customs obsolete.

Several folk games have been identified including their game mechanics to support this study, which primarily focused on creating the foundation to develop an immersive and expansive game, with several dilemmas and branching stories, that propagate the rich cultural traditions of Ghanaian descent.

The subsequent chapters highlighted several Ghanaian folk games that have been conceptualised as a game to run on various platforms. This included the mechanic and art style that gave a general sense of how the finished game would look. A survey was conducted to understand young people's views on merging folk games and storytelling in a mobile game. Even though, there were challenges pertaining to finding respondents of a certain age group which this survey targeted the most, the few responses proved that the concept is unique and interesting for most of these respondents.

The project is considered broad and therefore would have required proper resources such as like-minded experts to support the programming to be able to meet completion. Besides, the limitation of time compelled this study to be used as a proper foundation to build a game that addresses the problems raised. In view of this, the study has prepared a game project that outlines the various mechanics to be used, the art style, game characters, game platform as well as testing and iteration process.

Keywords: folk games, storytelling, interactive, Ghanaian customs, traditions

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1 INTRODUCTION

There are numerous folklore and indigenous tales which are of African descent, specifically from Ghana. In this, Ghanaians use storytelling to advise the youth on various aspects of life. These tales are known to be around as far back as formal record keeping and documentation began. Although there are several books that give an account of these stories, the youth are more interested in something that would spark excitement and enthusiasm to find the moral of these stories as a meaningful guide, that can potentially help, and positively shape their life choices.

Essentially, this project will merge visual stories of Ghanaian background with indigenous folk games to give players an immersive gaming experience while they learn useful traditional norms and culture. The problem this thesis seeks to subsequently address is to create a platform to solve emerging issues about lost traditional practices, and to alleviate the fear that indigenous Ghanaian practices, predominantly storytelling would soon die out. This can only be possible if there is something tangible to help sustain people's interest in Ghanaian culture.

A lot of young people have various means of entertaining themselves these days, this includes online gaming, social interactions online, television and movies.

Therefore, by creating a game idea and subsequently making it to be interactive would reignite young people's interest. The idea of merging Ghanaian folk games and storytelling would be portrayed in a short 2D playable game which would lean towards an immersive, visual appreciation theme. As a game idea, the story would focus on a central character, who would at least appear in the playable game scene.

The first step of this thesis is to research various traditional backgrounds in Ghana, their influence on modern culture and the extent it will possibly take to create awareness of a vibrant culture that may be forgotten due to low publicity and modern practices.

The motive behind developing this game is to make an all-inclusive and immersive visual story-based game, that aims at reaching a large number of marginalised group, for which the project is intended to reach. A survey that is

targeted at collecting data to gain insight on factors that will support the development process of the game will be discussed in subsequent chapters. The results of the survey will be taken into account when designing the game.

Moreover, the preceding chapter discusses in detail some of the traditional norms and practices of some tribes in Ghana. This includes taboos, storytelling and some folk games that are still practiced in certain areas of Ghana. The approach to these general practices in terms of folk stories and games is to give a proper context to any person that is yet to make contact with any of the cultural practices in Ghana.

Furthermore, the idea pertaining to developing an immersive gaming experience is to simply create an enjoyable and fun-filled game that could easily resonate with players. Per the gamer motivation model by quantic foundry, it is well established in game design that immersion and mastery are some of the key aspects regarding gamer motivation. Therefore, this project will be a good starting point to test these aspects of the gamer motivation model in a game that will not only be enjoyable to only a section of people but the whole family.

2 HISTORY OF GHANAIAN NORMS AND TRADITIONS

Moral value is another aspect of customs and traditions, that pertains to life choices people in a society make, these choices are believed to be significant to how people see each other. Deviance is something frown upon, although these negative behaviours may vary according to the community one may be, there are other negative behaviours that could become an outcast. (Bempong 1974.) In other words, there are codes of constitution that guide human behaviour. Moral values are laid down in a verbal account that has helped to preserve the culture and identity of the people. (Dickson 2019.)

For generations, the laid down guides which constitute taboos, societal norms and value have influenced chieftaincy rule over the years. There are scanty written accounts on the origins of these norms and traditions, except for the verbal accounts given during storytelling and social gatherings. Furthermore, it is

assumed that customs and traditions were from the supreme being who gave them to the wise chief to rule his people. (Yankah et al. 2004.) However, other schools of thought are of the view that the common ancestor had to make some rules to guide the indigenes from negative behaviour.

2.1 Literature

In recent years, Ghana has seen enormous cultural changes, evident in the sudden lifestyle change seen among ordinary Ghanaians, specifically, the generations born between the 1980s to the early 2000s. The lifestyle of teenagers has been influenced lately by external factors and the previous generations, which in itself is not something tagged as negative, but rather, a thing that is bound to happen because of the fast pace of social networking, cross-cultural integration and higher education. (Senyo 2021.) The rapid innovative features of smartphones and computers have allowed more people the ability to experience how technology feels like and how it is transforming lives positively. (Adom 2014.)

The impact has not only been felt in traditional ways of doing things but also in the field of entertainment, specifically in video gaming. Indigenous outdoor games of Ghanaian origin emerged from the rich culture of Ghanaian traditions, among those are keeping fit, staying healthy and most importantly, passing down the tradition to the young ones. Traditional games were a major source of entertainment among the youth during pre-colonial times. The surge in technology and modern lifestyle has led to new games being invented but they are inspired by the old games. (Nusran et al. 2010.)

Storytelling was a major activity organized after dusk where people gather around a bonfire to listen to mythical stories about hunters exploring the thick forest and the creatures they encountered. Anthropomorphic stories filled with dilemmas, with the intention of advising people on life choices, are among the activities carried out during gatherings under the moonlight. Even though there are concerns about traditional culture going extinct, some school of thought has it that, traces of old traditional activities still have an influence on modern-day innovations. (Umeasiegbu 1975.)

Mythical characters and creatures have been idolized due to their popularity; these characters have somehow been transformed into popular culture through storytelling. (Katalin 2012.)

The most revealing of such mythologies surviving through the ages would be that of the Greeks, due to their popularity which is somewhat similar to the stories told in Ghana. Kweku Ananse is a mythical creature known to be wise and cunning. Akomfo Anokye is said to have invoked a golden stool from the skies, based on the stories told about them, they are seen to have possessed special abilities. (Resario 2018.)

The portrayal of the warlike tendencies of the Spartans, to the grandiose representation of Archilis and Hector to say the least, draws similar interest to know more about the stories behind such revered characters.

The Dogons of Mali, the Nok from modern day Nigeria and the magnificent stool lands of the Ashanti people of Ghana have all been able to preserve their custom and traditions dating back to ancient times. Even though these tribes have lived through wars and migration, they have been able to preserve their identity through their art forms. (Ogundipe et al. 1978.)

Storytelling by the Ashantis does not only connote the verbal account the old deliver during gatherings but also through their elegant dance ceremonies known as Adowa. Dancers use body and hand gestures to tell detailed stories, these dance forms silently communicate to people at durbar grounds. Furthermore, drums are also used to convey messages which can be decoded by the trained ear. Ghanaian drummers play drums known as Talking-Drums to advise authorities on issues that they may not be able to directly say to them, since they do not verbally say things, the sound created by the drums can be misinterpreted and so, it is very unlikely that a drummer may be held accountable for communicating in a negative fashion, that may be offensive to a seated chief at a durbar ground. (Agyekum 2020.)

One of the important features of computer gaming is avatar usage and this somehow reflects the traditional ceremonies of the kingdom of Dahomey which lies east of Ghana, within the regions of present-day Togo and Benin. During the religious vodoun rites, spirits of the ancestors are invoked into costumes to

dance. In essence, one would realize the invocation of an entity that is not present, that shares something in common with that of digital interaction where players are immersed in virtual worlds where they control fictional characters. The word avatar is derived from the Sanskrit word in Hindu, that simply means manifestation of oneself in physical form. Just like the Dogons and other ageing traditional customs, not just in Ghana but across the world, the Avatar usage is very common. According to written accounts, the Asantis of Ghana has spiritual means of summoning the spirit of a dead ancestor or anyone that died with the cause of death unknown. The practice of incarnation known as "abisa" meaning "asking" is done presently in some traditional areas of Ghana. (Yankah et al. 2004.)

Some schools of thought believe that Interactive storytelling dates back to prehistory when stories were told by head of tribes and the knowledgeable members of the tribe. Anthropologists are of the view that storytellers in prehistoric times would take into account some suggestions from their audience during performances and incorporate them. If these assertions are true, then modern-day narration by a single person is somewhat a later invention.

Therefore, this raises questions pertaining to the fact that, at what point can one say that interactivity began, since is it well known that digital media and games are more recent invention. What influences does interactive storytelling of the old have on modern-day video games. (Bottigheimer 2009.)

Storytelling is not limited to what we know as having an author or narrator and audience and telling tales as pointed out earlier, freeze imagery which not until recently, has been limited to cinematic of the twentieth century. However, the advent of motion pictures has increased in popularity and, therefore, has limited the scope of storytelling as such. Furthermore, when one travels back in time to the times of prehistory where simple visual storytelling gives an insight into the adventures of the ancient tribes and their quest to survive their hostile environment, fast forward to the days of Caravaggio, where the narrative presented is striking and intimate, with drama and suspense, that suggests a cinematic visual story captured in a single frame that is being told in a remarkable way. (McIver 2012.)

2.2 Taboos

Across the tribes in most African countries, taboos are just one of the numerous traditional practices that are well observed. Not only in Ghana are these set of strict rules is observed but in neighbouring countries as well. Essentially, taboos are considered a ritual and as such, sacred for that matter. Therefore, taboos play an important role in the cultural settings of most Ghanaian traditional areas. However, this writing may not delve deeper in the realms of spirituality but to surface the incredible narrative, and the captivating sense of awareness of people when taboos are mentioned. Therefore, for the purpose of understanding the background of these taboos and the effects it is believed to carry, one should choose to ignore. Moreover, taboos are embroidered in the fabric of most African societies so it will be essential to consider its importance in folk games. (Macaulay 2020).

Taboo is defined as "a culture or religious custom that does not allow people to do, use or talk about a particular thing, object or place" (Hornby 2010.) While some of the rules seem to make no sense due to modernisation, some tribes still value taboos highly.

Essentially, some people are of the view that, taboos are supposed to be rules guided by common sense, that should protect people from harm or just protect the environment. However, taboos have been attached with serious consequences to deter people from committing offence. (Agyekum 2009.)



Figure 1. Voodoo followers attend the festival in Ouidah, Benin (Yanick 2016)

Voodoo which is locally known as vodoun is a festival celebrated by the people along the coast of Benin and Togo. This religious practice stems from the days of the Dahomey kingdom but it is still practiced annually as a tribute to the deities and their revering ancestors. (Yanick 2016.) Figure 1 shows the priests invoking an entity in to the empty structure to move around the festival grounds.

2.3 Adinkra symbols

Adinkra symbols are decorative, visual symbols of Ghanaian decent. These symbols have deep meanings which are related to a set of proverbs or popular phrases. Adinkra symbols are widely accepted and used to convey message in the form of moral values visually.



Figure 2. Selected Ghanaian Adinkra symbols (The Prince 2022)

These symbols are inscribed in various ways on traditional and government places, including the palaces. Although, there are numerous Adinkra symbols, some are very popular because they appear in prints for textiles, in movies and important objects of authority. For instance, the Adinkra symbol called "Gye Nyame" represents the supreme power of the creator, the creator is revered and it is believed that he created all things. The symbol at the top left corner in Figure 2 is called "Sankofa" which literally means to go back and take. This explains the importance of learning from the past because the past has useful information that can help understand the future.

These symbols have deep metaphorical meanings which need to be decoded to fully understand what a symbol means. (Dickson 2019.)

3 GHANAIAN FOLK GAMES

Technological advancement through the 21st century has rendered most indigenous folk games completely dormant. However, as far back as the 1980s, out of boredom, children at the time with far little to play with devised creative ideas to keep them occupied. (Obeng et al. 2022)

Most of these folk games to be discussed in the following topics will give a general overview of the dominant games that have lived through the ages. One important factor to note about these games is that, they were designed to foster team work and to equip young people with the necessary skills to thrive in the society. It will be worthy to note that technology has its positive aspects and has impacted Ghanaian societies not only these past years but for the future as well. Therefore, the question is how one can take advantage of technology to revive these folk games that are on the brink of extinction into something much more appreciable and permanent. Below are selected folk games that will be examined to understand the game play and, to some extent, address the relevance of the game to the society.

3.1 Oware

Oware is believed to be one of the oldest and most popular board games among Ghanaian societies. It originated from the Mancala Family. Oware literally means "marry" or "He or she marries". The story behind this game stems from marriage which in traditional Ghanaian settings involves customary practices such as dowry payment. Oware is a two-player game but cooperative gameplay is possible. The gameplay has evolved throughout the centuries. Typically, the original game was supposed to be played in a shallow dugout pit arranged in two rows of ten. Four pebbles are placed in each of the holes to begin the game. During game play, each hole with four pebbles would have to be emptied in an attempt to refill the holes to it's original state of four pebbles. Once the player succeeds in filling the holes, he or she collects those four pebbles as a win. The process is repeated until each of the holes has been refilled with four pebbles. Therefore, players are bound to win the game by capturing more pebbles of four. (Obeng et al. 2022.)



Figure 3. Men playing Oware game in front of the Palais du Prince Heritier Guezo, Abomey, Benin (Munstermann 2018)

Essentially this game can be seen as territorial battles or in a simplistic way, developing math skills by young people. Figure 3 shows a group of people playing the board game of Oware as recreation.

The game can be immersive and competitive especially when it is played on occasion of social gatherings. As part of the game's immersion, mind games, heckling and witty comments about your opponents moves are allowed to some extent when playing on the streets.

In recent years, Oware is not played on the ground as often as it used to. Among the Asantis of Ghana for instance, Oware is hand carved out of wood. Some tribes also have them carved permanently on a large stretch of stones installed permanently at the compound of homes. The pebbles are Caesalpinia bonduc as their scientific name but is commonly known as gray nickernut or gray marble nuts. (Quashie 2017.)

3.2 Chaskele

In its simplest form, Chaskele is a Bat and Ball game that can be related to Cricket or American baseball. This indigenous street game requires a lot of energy, zeal and agility to even make it through one game. Therefore, it is regarded as a game for youth.



Figure 4. Chaskele character holding a bat and crushed metal container (Quashie 2017)

What makes this game unique is that it does not require a lot of props, the basic things needed is a bat, an empty tin of milk crushed to the size of a hockey puck and a rimless car tyre (Figure 4). During game play, each player is required to hit the tin to go through the tyre. The game becomes more difficult when a one person becomes a defender who tries to prevent the tin from going through the car tyre. There is a goal when the defender fails to prevent the tin from going through the tyre. Chaskele is a competitive street game that fosters cooperation and team spirit among players.

3.3 Pilolo

Another memorable outdoor folk game among Ghanaians is Pilolo. This game has no age restriction; hence it can be played at schools. The game play is relatable to Easter egg hunt game played in most European and American countries. (Ghanaweb 2019.)

In the game, Players are divided in to two groups. The moderator or the referee or in some cases a teacher would show a list of items that he or she would later

hide. Whilst the players are not looking, the referee hides the items. Figure 5 below shows pilolo players in search for hidden items.



Figure 5. Players in search of hidden objects (Ghanaweb 2019)

The referee shouts "pilolo" when all the items are hidden and by doing this announces the commencement of the game. There is a winner only when the hidden items are recovered by the searching parties and moved to a designated point selected by the leaders.

3.4 Ampe

Ampe is physically demanding but interesting game played by two people. In most communities, Ampe is regarded as a game for girls. Ampe does not require any props or items to play. During Ampe gameplay, one will see two players jumping and clapping their hands in mid, while they move either feet forward. Before the game, players agree that when both of their opposing feet meet or match, one player scores and and if the feet do not match, it will be a point to the opposing player.



Figure 6. School children playing Ampe (Tornyi 2021)

Ampe can also be played in teams but each member of the team plays at a time. Figure 6 shows a photograph of two groups of students actively engaged in Ampe.

3.5 Alasa

This game can be played both indoors and outdoors. Essentially, the game requires a shallow dug out hole where players flick a seed, a seed from a fruit called the African star apple. The seed is flicked from a line drawn about 5-10 metres away from the hole. Figure 7 below depicts young people playing Alasa game on the bare ground.



Figure 7. Young people playing Alasa (OMGvoices 2019)

During game play, the players line each seed in the line and one at a time, they aim at the dug out hole and flick the seed, each player has a go until all of the seeds enter the hole. To make the game interesting, players may decide to put more seeds in the hole, for example, ten seeds each. If all the players succeed on flicking their seeds into the hole, another round of flicking would be allowed. There is a winner when all but one of the players fails to hit the target.

3.6 Multiplayer games in Ghanaian folk games

Indigenous Ghanaian folk games are usually designed to be a Multiplayer, co-op games. While they teach about collaborative skills and people working together to achieve a common objective, there are single player games which may not be as interesting as Multiplayer games. Below are some reasons why most of Ghanaian folk games are multiplayer games.

Cultural preservation is the main reason why most of these games are designed as multiplayer. The shared game experience among co-op players makes the passing down of traditions to the younger generations easier and simple, since the game experience is not only shared by single players but a group of people, so the experience may be shared to a larger group by players.

Unity and cooperation fosters community building and development. Therefore, by way of promoting communal bond among young people, multiplayer games encourage people to work together.

Multiplayer folk games aim at reaching a wider audience and at encouraging people to work in groups to find a common sense of purpose. For this reason, people of all ages find a sense of belonging and the assurance of being secured in their communities.

Finally, while multiplayer folk games impart social and educational values among people, they also tend to support young people to develop cultural knowledge, communication skills and strategic thinking. (Gill 2012.)

4 FOLK GAME INTERACTIVITY

Interactivity is an essential aspect of folk games, the purpose of the engagement is to foster unity and cooperation among people in a tribe or a whole community. There are several forms of interaction in folk games, they can be physical or mental interaction, but most importantly, the key objective is to build active engagement and connection.

It is generally accepted that playing games has been part of humans long before written records. Although these types of games were not solely for the purpose of leisure, but to equip early humans with essential hunting and fighting skills due to the hostile environment they found themselves. It is well established that these activities are organised to build cooperation among groups to work as a team. (McErlean 2018.)

The directors of the family animation movie The Croods (2013) were able to present in simple terms a captivating picture that depicts how the early humans lived. They were portrayed to be working together in a group to survive their environment.

Another example of a vivid and immersive interactive story of the stone age would not have been accomplished without taking in to consideration the 2016 multiplatform video game *Farcry Primal* published by Ubisoft.

Recreational activities by the early people were functional, hunting simulation games were developed by the early men to equip them with survival skills. These skills are important for survival and so every activity done was geared towards this need.

The need to survive continued to evolve overtime because of civilization across the globe, territorial dispute and wars saw people develop war surviving skills by training soldiers and building armies. Through the lost cities of Timbuktu to the most popular ancient cities in Athens and Rome, the ruins have attested to the numerous athletic games, that happened in medieval times.

Games and religious rites were inseparable during medieval times, one can rely on the ancient ruins for evidence of what had motivated people to develop games, because it is believed that there was close connection between their religion and games. Therefore, game development stems far back in history not only for recreation but for survival and religious purposes. (Richards 2023, 15-23.)

4.1 Folk Stories in Games

Storytelling in games is one of the numerous means that stories from different cultures are told. While some of these stories may be fictional and of myths, some are based on facts, or simply by adding a touch of twist to make them dramatic to appeal to the audience. Regardless of these stories being true or not, they always convey important message to their audience. Figure 8 depict a mythical character we known in Ghanaian storytelling known as Ananse. Ananse and his family have been used severally to tell different stories for entertainment, books and stage performances have also featured Ananse on numerous occasions.



Figure 8. Kweku Ananse and the family by Parables studio (Abban 2020)

Folk stories are part of oral traditions dating back centuries, since there was little or no documentation to preserve such stories, the originality of these folk stories may have been tampered for the reason being that, when a storyteller dies, salient information may have died with them if nobody had listened to those stories being told by them. (Katalin 2012.)

4.2 Moral stories

Storytelling in indigenous Ghanaian setting is to project moral values. The core idea of these stories is not only to help young people to make right choices in life, but also, to be as a source of entertainment. During storytelling gatherings, stories of disobedient children and deviant adults, are usually the main motives of the stories told. However, the endings of these characters portrayed are not explained in depth, so this leaves the audience perplexed and in a state of dilemma. This strategy is to allow the audience to make assumptions of how the story ends up (Osei-Tutu et al. 2023).



Figure 9.Story setting portrayed in drawing (Sekyiama 2014)

Stories with deep meaning which essentially is the background to storytelling are regarded as a form of oral history. This involves folk tales, myths and legends that have been foretold and have lived through generations. Moral stories are often brief and direct and they focus the attention of the audience to a certain life someone had lived and the consequences they may have seen. Figure 9 shows a pen and ink drawing of a family that has gathered for storytelling.

Typical example of a moral story is the one told of a bird, a tree and a tortoise, whereby the tortoise was advising the bird to not sing too loud on top of the tree but the bird refused. A hunter passing by heard the loud singing of the bird and shot it down, the bird laid dead next to the tortoise and the hunter took both the dead bird and the slow tortoise away. Essentially, the moral of the story was that if the bird had heeded tortoises' advice, both of them would have been safe. (Ashanti folk story n.d.)

4.3 Folk tales and Fairytale

Oral history has been told through generations among those are folktales and fairy tales. There is little evidence of the origins of such stories as ever told except for the fact that the disintegration of myth being told orally has somewhat affected the true origination of tales. (Macaulay 2020).



Figure 10. Anthropomorphic character design

The assertion is still the same in Ghanaian societies. One prominent feature of Ghanaian folk tales and fairy tales is their connection to nature. Folk tales among Ghanaian societies is somewhat relatable to other cultures around the world. One of those aspects is the attribution of animals with human-like characteristics, Figure 10 is an imaginary character that can be used in storytelling.

Little is known of the origins of these stories which is being told often by old men and women. However, these stories seem to convey profound messages that seek to advise people on morality, societal norms that assist the people to coexist in a common space. One remarkable anthropomorphic character that appears in most Akan folktales is Kweku Ananse. "Kweku" is a common name for a male child born on Wednesday among the Akans, and "Ananse" is an Akan name for spider.

Short magical creatures who move with the wind known as "mmoatea" have prominent positions in storytelling (Anansesem 2023). Mmoatea are portrayed as children loving and foodies. Unlike Mmoatea, Ananse is a multi-faceted character portrayed as a villian and protagonist in folk stories, some school of thought argue that Kweku Ananse's bad deeds far outweigh his qualities of being selfless victim, therefore when Ananse finds himself in trouble which is of no fault of his, he still gets little sympathy (Pursiful 2014).

4.4 Folk music for Games

Generally, the Akan tribe in Ghana have their storytelling filled with interludes known as Mmoguo. Interludes are relatable in most storytelling not just in the Akan societies. In recent years, music itself has become a storytelling tool due to the nature of how the music is sang. For instance, the lyrics often have a full story being told, and guite often, the theme of the story range from a wide range of subjects. Folk music has been used in various ways by the media to capture right audience for various shows including stage performances, movies and other social gathering ceremonies. Due to the deep-rooted oral traditions, storytelling in most traditional areas of Ghana is paramount. It is important to consider how folk music can be implemented to achieve an immersive interactive experience for users. Firstly, musical instruments that produce unique sounds and rhythms can be used in relation to the environment of the game. For instance, in numerous movies, urban settings have peculiar music background that suggests business hustling and fast life. However, in the context of countryside life, simple musical instruments such as the xylophone, flute and drums being played in a slow rhythmic pace also suggest the forest and rural settings. (Agyekum 2020.) Therefore, creatively incorporating folk music in games will enhance the gaming experience among players and also protect the vibrant Ghanaian musical heritage.

4.5 Movies

In recent times, Ghanaian filmmakers have devised creative means of cultural preservation by entertaining audiences with engaging content that projects Ghanaian history and norms. Several animation studios, most of them start-ups have seen the importance of drawing inspiration from traditional folklore as a tool for modern storytelling, they are making unique titles out of existing characters and stories by adding unique attributes to them for young people to be able to relate to them.

Other unique ways of projecting traditions in Ghanaian movies are the use of costumes and attire. Body art of various forms that range from filling of the teeth, body tattoos and scarification are carefully designed to give a better insight to various cultural groups and their ways of doing things. Asantewaa is a short animated movie that featured prominent Ashanti female warrior called Asantewaa. Her fighting prowess during the British encounter with the Gold coast presently known as Ghana is still recognised today. Yaa Asantewa as she is popularly known is seen as a heroine figure who has helped to shape the history of Ghana. She fought for the Golden stool which is the primary symbol of the people of Ashante (first character in Figure 11).



Figure 11. Characters from the Ghanaian animation Asantewaa (Mills 2023)

Moreover, music and dance also play vital role in movie production in Ghana, they add value to the storytelling by way of the musical instruments and dance forms are displayed on the screen. The key aspect of Ghanaian movies is the

moral and ethical background of the stories. Movie producers creatively address various issues faced by characters through dilemmas, the consequences faced by the character for making such decisions, and the implications they may have on the audience. This kind of story encourages discussion among the audience, and the goal of this is to make the subject of discussion to be focused on Ghanaian traditions. (Adjahoe 2017.)

4.6 Theatre / stage performance

Stage performance and theatre arts have been affected significantly by storytelling; it remains the vital medium for storytelling in Ghana, and also one of the platforms used to express cultural and traditional values. Stage performance and theatre is the few of the mediums used to push traditional narratives. In addition, most theatre performances in Ghana these days focus on socio-political issues, social commentary conveyed in a satirical manner. (Dickson 2019.) The landscape of stage performances has been transformed positively due to storytelling, because it continues to be one of the mediums that has survived the test of time.

4.7 Folk stories in games

Most cultures in Ghana share common traits, they share common cultural values in terms of their customs and values. Another aspect of commonality pertaining to trans ethnic traits are folk stories. Earlier books suggest that there has been generalisation in a broad sense. However, there are specific traits that may have been missed and therefore, makes it challenging to address the uniqueness of each culture. Several sources corroborate the fact, and has confirmed that tales from Africa leaves the audience with more questions than answers, this practice literally known as dilemma tales are very much evident in Ghanaian tales, where the audience has to figure out the moral of the stories (Katalin 2012). Again, these raises concerns as to why there are dilemma tales told much more in Africa.

4.8 Animals in storytelling (Anansesem)

Idea of using anthropomorphism is quite essential in indigenous Ghanaian storytelling. In this, inanimate objects as well as animals are portrayed as humans in stories. There are several stories told in this manner from western perspective. However, what makes indigenous Ghanaian storytelling unique is the musical interludes and deep moral meanings associated with behaviour of certain characters in the stories (Agyekum 2009). Lack of resources and computer-generated imagery as an innovation on its own would compel storytellers to resort to using humans to represent animals in the form of changing the actor's name.



Figure 12. Kweku Ananse anthropomorphic character well known in Akan storytelling (Odiahenkan 2020)

4.9 Game mechanic

Game rules and Mechanics share similarities as to their application in games. However, game rules vary in terms of how they are used. It can be a set of written instructions that players may have to read to understand how a game is played. In most cases, board games have rules that players must read to be able to play the game.

In contrast to game rules, mechanics in games are objectively kept away from the players. Players understand the game mechanics through playing, whereby the game itself teaches the player game mechanics.

Moreover, mechanics is needed to control the operation of the game, it is devoid of confusion, and it is more concrete as programmers need a clear set of rules to make the game mechanic (Hill-Whittall 2015).

Essentially, a game's core mechanic is of much more importance to mere mechanic. Core mechanic affects for instance, the gravity of all objects in the game. Core mechanics checks the damage a player or object gets when dropped in a platformer game, for example. It should also be pointed out that, core mechanics and mechanics have no clear distinctions but players who learn to understand the behaviour of the game may be able to play to their own advantage, as a result core mechanics are mostly hidden from players. (Hill-Whittall 2015).

5 PROJECT

Intense preparation is required to develop the game concept, mechanic and game flow. This project will focus on creating a moral story, full of captivating dilemmas that portray indigenous Ghanaian moral values, sociocultural norms and will promote societal identity among the young people of Ghana. To achieve a desirable concept that can be appreciated by players, the development process that involve pre production, production and post production has been taken into account. Therefore, rapid prototyping that involves a flow chart has been considered to curtail production cost, while the production is in a stage whereby the proof of concept can be ascertained.

5.1 Choosing and developing an ideal folk game

The project will highlight the key aspects of what this write up has explored regarding storytelling and folk games that are of Ghanaian origin. The aspect of choosing a folk game, and conceptualizing them into an interactive game, that will incorporate dilemma tales, which are predominant in Ghanaian folktales remained challenging. Therefore, the choice stopped on selecting one key popular character in Ghanaian folktale known as Kweku Ananse, a cunningly wise character full of deceit and lies. Even though, Kweku Ananse is perceived as a character with negative traits, the audience are amused by his clever ways of getting himself out of trouble. There are several stories told of Kweku Ananse where the audience would assume that there is no possible solution but Ananse would find clever means to resolve his problems. Therefore, Kweku Ananse is the obvious character that seems to resonate with the audience.

5.1.1 The first Game Idea: Nsoromma's Magical journey

The first game idea focuses mainly on dilemmas in storytelling predominantly based on Ghanaian folk tales. The game has branching stories with several endings which will be determined by the choices a player makes during gameplay. Several of these folk stories are going to be merged in order to create an immersive experience for a player.

Nsoromma's magical journey is inspired by the Adinkra symbol known as nsoromma, which literally means a star. Symbolically, the Star means faith and belief in the supreme being of whom every creation depends. (Dickson 2019.) The game will feature a main character portrayed as a young protagonist with a backstory that makes him a special character who can talk to the creator of all things. Nsoromma goes on a fantasy filled journey through an enchanted Ashanti forest. The protagonist will engage in puzzles and riddle solving by interacting with mythical creatures to unlock new paths. The platform will be a virtual reality platform for full immersion. PC and consoles can also be considered as ideal platforms to run the game. The art style will be one of fantasy and surrealism with vibrant aesthetic motifs that portrays Ghanaian countryside.

5.1.2 The second Game idea: The Chaskele Arena

Chaskele is previously discussed as a game related to cricket and baseball. Chaskele arena will be a multiplayer game that will be a battle between factions. The gameplay involves players controlling characters with special abilities to contest in clan matches that are fast paced. Players have to formulate a set of strategies that sums up the full abilities of each character to be able to perform at the top level. The art style will depict a minimalist approach, where a monochromatic colour scheme, with a sketchy looking background will be used. However, the mix of traditional art forms will be employed to give a sense of originality to the game background. The platform for Chaskele arena to run will be ideally an online platform, PC and consoles.

5.1.3 The Third Idea: Rhythmic Ampe Runner

Rhythmic Ampe Runner is inspired by the traditional folk game known as Ampe. The game will merge rhythm-based palm wine music with an endless runner game with occasional puzzle based-side missions. The player runs through breath-taking Ghanaian landscapes by using special moves that will allow the player to perform parkour moves, jumping and sliding through obstacle courses with rhythmic cues. The progression of the player depends on the accuracy and

timely performance of acrobatic moves, and the amount of side missions the player undertakes.

The game platform will run on mobile devices, specifically android and IOS with touch controls and or motion sensors.

The art style will feature a vibrant and rich 2D cartoony visuals, merged with modern and traditional blend of Ghanaian aesthetics.

5.1.4 Questionnaire

Ghanaian customs and traditions are broad and may vary in terms of the tribes, and the way they are used in cultural groups. Therefore, it is instructive to perform feasibility study by collecting data regarding young people's opinions on the game concept. The results from the feasibility study will enable the author to have a better understanding of potential user's opinion on the game concept, the platform on which they would like the game to run and, most importantly, will ascertain on some level the author's views on merging traditional folk games and folk stories.

Moreover, the goal of this survey is to discover different views from young Ghanaian people to know how engaging it will be for them to have an interactive educational experience that focuses on their own culture.

5.1.5 Questionnaire making process

The survey was conducted remotely using google forms, the reason for this is because that makes the questionnaire accessible to a wider audience within the target group. Moreover, the survey involves, young groups in Ghana and, therefore, reaching them online will help save time and money. Ideally, the survey is targeting people from different cultural backgrounds who are from different parts of Ghana. Their societal norms and general views will be questioned to know how the project will effect positive changes to their own culture. Most of these questions were multiple choice questions, some of the questions require respondents to choose more than one answer, there are also open-ended questions in the midst. However, the questions were made as simple and clear as possible so that respondents were able to understand the purpose of the questions.

Firstly, the questionnaire asks demographic questions such as the age group. This question is to get a general view on the age range of the respondents, this is followed by other questions to verify their overall knowledge on how they perceive their culture in recent times.

The preceding question asked respondents their familiarity with folk stories and games. The goal of this question is to gain insight on the contact respondents have with folk games and stories. This is due to the fact that people have not been actively participating in storytelling and folk games in recent times, so it will be interesting to know if these respondents are aware of these latest development.

Again, respondents were asked if they are interested to learn more about different cultures. The rationale behind this question is to give an insight on how respondents are open to learning about other people's culture. Moreover, it will be important to know if respondents are only interested in learning just about their own culture or cultures of other people as well.

Giving players an unforgettable experience by creating an immersive game is one of the major goals of this project. Therefore, it was important to ask what motivates the respondents to explore in a game. This is to know if they are more inclined to unlocking secrets playing through the game because of the storyline and quest or simply because they are interested to learn about Ghanaian customs and traditions.

Finally, participants were asked open-ended questions, such as giving any suggestions and ideas they are willing to share to make the game much more appealing and engaging for young people.

5.1.6 Results

gaming experience.

The survey recorded a number of responses that have affected the game design process, the game mechanic, the general presentation and the folk games used. There were a total of 7 respondents selected from the 5 main cultural tribes in Ghana: specifically, Ashanti, Ewe, Hausa, Fante and Guan people. Essentially, these tribes are dominant in terms of traditional practices, therefore it is not just a matter of getting respondent but representatives who are immersed in the cultural practices of the tribes they are affiliated.

The age distribution among the participants are between 15 to 21 years but the result suggests that the participants are of diverse opinion regarding their thoughts on the game. However, most of the respondents demonstrated their familiarity with both Ghanaian folk stories and games. This response was quite fascinating given the fact that the respondents shown some level of awareness pertaining their cultural background. Therefore, it is well established that the respondents will appreciate the content, since it will connect them to the culture that they know.

The participants have been receptive to learning about their own culture as it reflects in the responses given, where majority of them were open to the idea. The results also suggest openness with the participants to learn not only their own culture but other cultures from other areas of the country. Engaging storyline, puzzles and character customizations were the features most of the respondents were looking forward to experience. This opens up the likelihood of the players embracing a more immersive and culturally enriching

The merging of folk stories and games seems to be a laudable idea as shown in the responses given. The majority of the respondents perceived the idea as unique. None of the respondents found the idea unappealing. Therefore, there is a huge promise that players may find the game intriguing.

The platform on which the game will be played produced interesting responses: majority of the respondents envisioned the game being played on mobile platforms. The responses corroborate the initial view of the author to make the game much more accessible to people. Phones running on IOS and Android seem to be a handy platform that would help make the games' accessibility much more convenient.

In terms of promoting educational content, the responses suggest the importance of incorporating important historical and cultural content that will help sustain young learners the desire to learn while playing games.

Open questions that allowed participants to suggest ideas that would improve the game saw many useful responses. These responses were highly valued as they highlighted useful game development elements that will help maintain constant updated contents after game launch.

All in all, the survey results projected strong desire by the respondents to have a unique gaming experience that will encourage learning about their own heritage. Again, the responses suggest a strong backing for the proposed game project to go into development.

5.2 Conceptualizing an existing folk game as interactive.

The indigenous Ghanaian folk games discussed above have inspired the game ideas discussed prior to this sub topic. This is to inform that several ideas have been drawn from each of the game ideas to conceptualise the final game titled *Ananse's Quest: The Legend of Adinkra*.

Additionally, folktales with branching stories leading to dilemmas, where players would have to make choices will be highlighted as part of the game mechanics

along with the puzzle solving aspects of the game levels. Furthermore, this study aims at creating a game concept that can be developed in the future.

5.2.1 Game title: "Ananse's Quest: The Legend of Adinkra"

The game "Ananse's Quest: The Legend of Adinkra" is a 2D mobile game that touches on various traditional aspects of a typical indigenous Ghanaian community. The game merges folk stories and the traditional game of Oware. Furthermore, the game highlights some important social values for the players, this is portrayed by playing as the infamous protagonist, well known as a cunning spider from Ghanaian folklore, called Ananse, as he embarks on an adventurous journey to recover the lost Adinkra symbols. Adinkra symbols hold the foundation of the Ghanaian society, they guide the rulers and also foster communal integration. Therefore, the quest to retrieve these lost Adinkra symbols will bring hope and a sense of purpose back to the people.

Players learn about Ghanaian customs and culture and the significance of these Adinkra symbols, what they stand for and their meanings by going through the strategic gameplay.

5.2.2 Game mechanics

The core mechanic of the game is the traditional board game of Oware, a strategy filled game where players engage in a turn base match. However, in this game, players will battle against AI or online opponents, by strategically collecting and distributing round beads in each of the twelve shallow holes up to a number of four beads for the player to capture that territory. Therefore, this mechanic can be perceived as battle to capture and, or to protect one's territory. Furthermore, if the player makes sufficient moves to capture more of the opponents beads, or a new territory, that opens up or unlocks special abilities to the player to enable them to make progress in the story.

Additionally, puzzle solving will reveal one of several pieces of the overarching stories that will give clues to the player to find a hidden Adinkra symbol.

Moreover, the puzzles will task players with the ability to be familiar with Ghanaian folktales, which will be outlined at the beginning of each level to give

the uninformed player, a proper context of these folktales. This aspect of the game will require problem solving skills and players' ability to recognise Adinkra patterns when solving puzzles.

5.2.3 Narrative choices

Another integral aspect of the game are narrative choices. This plays a vital role for players to progress in the game. Several stories of dilemma will be featured throughout the game, and the choices players make will have an impact on the game's story line. The choices players make will reveal both the negative or positive character trait of Ananse; this will ultimately affect the type of relationship Ananse would build with other characters. Again, narrative choices will reveal hidden caves and path, and also the turn of events as the game progresses. This technique gives additional storytelling dynamics, that will ultimately motivate players to replay the game to uncover different endings to the game.

5.2.4 Game aesthetics and Outlook

The aesthetics and general outlook of the game is another aspect of the game development process that needs to be examined in detail, in order to portray a general sense of the atmosphere previously described in Ghanaian storytelling. Therefore, the art style in Ananse's Quest: The Legend of Adinkra" will combine vibrant portrayal of Ghanaian traditional elements. The visual language would be one that suggests the artistic and traditional values of a Ghanaian society. The motive is to promote the cultural heritage through a sustainable medium which would give players an experience they will value, and also appreciate visually appealing rich culture of a typical Ghanaian traditional setting in 2D.



Figure 13. Game screen of Asantewaa mobile game (Mills 2023)

Prior to the development of the game, several resources and information outlets have been consulted through research. Several outdoor games became available, however, there is the need to choose commercially viable and engaging outdoor games that can be conceptualised digitally. Moreover, the key components of Ghanaian storytelling have been considered, and incorporating these elements would hypothetically define the general outlook expressed in this study, and subsequently, portray a generalised and informative game, that incorporate stories, Adinkra symbols, folk games, taboos and norms as part of the game's core mechanic.

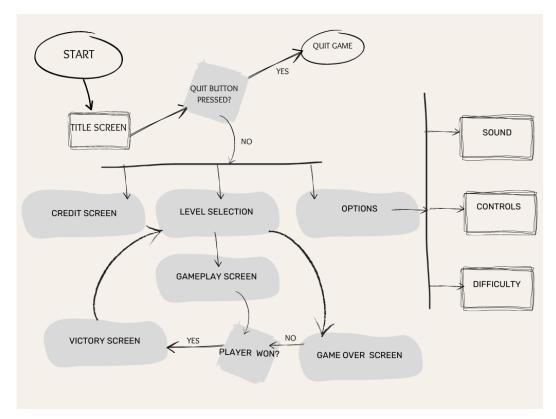


Figure 14. Game play user interface

The game design primarily focuses on Oware game rules, story-based dilemmas and narrative choices, puzzle solving. The details of the game has been outlined in Figure 19 and 20 that shows the gameplay flowchart. The overall player progression is determined by the branching stories and uncovering new paths. Balancing gameplay challenges and rewards system are vital components to examine. User Interface UI will be simple and yet intuitive for players of all level of gaming experience.

5.2.5 Art style

The art style of this project is one of the important aspects to help convey the objective of this project to the end user. This means several concept art and style guides need to be created with variations, that thoroughly explains the subject matter, then a careful selection of elements representing the rich culture of Ghanaian traditions will be used for art direction. This include main character, non-playable characters, environment and Adinkra symbol representations.

Furthermore, to set these characters in motion, there is the need to make animations, that would be used for trailers, cut scenes and in game motions. Programming Implementation would focus on Developing Oware gameplay with AI and online opponents. Moreover, puzzle solving mechanics and narrative choices system would also be implemented to incorporate art assets animations and sound effects.

5.2.6 Game Testing and Iteration

Testing and iteration would be considered next, conducting play testing to gather necessary feedback, general gameplay experience from respondents. The iteration will further clarify game mechanics, visuals and storyline. Furthermore, compatibility of the game to run on mobile devices to ensure good performance. This is to mitigate compatibility issues, so that the game may be able to reach most users in the target group.

Finally, the game will be published on app store and google play; bug fixes and updates will also be supported after the game is released. Moreover, there will be community engagement to get further feedback to assist in the development of future content.

Therefore, merging folktales and an old board game like Oware game mechanics, and adding immersive art style as part of the development process is important in order to engage young people to play this culturally rich mobile game, that seeks to entertain and educate players.

5.3 Interactive Narratives

Indigenous storytelling in the Ghanaian context offers unique ways of engaging and conveying cultural values and words of wisdom. These narratives are expressed through storytelling, riddles, and traditional games, this is an informal approach to teaching these values to young people. Essentially, interactive narratives have been expressed through oral storytelling, whereby storytellers interact with the audience.

Therefore, incorporating interactive narrative as a game mechanic in this game project seems laudable as a concept that will not only support the development of

the project but also, transmit cultural values to the user. Moreover, the power of interactive storytelling can be immersive when the game world provides the platform for the story to be told in a meaningful way. Furthermore, branching stories have been well implemented in a positive way in various game titles. Until Dawn (2015), Detroit: Become Human (2018) and The Walking Dead (2012) are a few examples that feature extensive use of branching stories in games. The use of local languages, dialects, and voices can resonate with players and give them a sense of connection to the game by projecting authenticity and relatable content. Therefore, if this project is successfully executed, it will not only provide players with an enjoyable experience but will help bridge the modern gaming experience to traditional norms and values of Ghanaian origin.



Figure 15. Scene from Until dawn (Hart 2021)

5.4 Merge stories to games

It is time to imagine existing story that has been retold many time. This involves a hunter, a tree, snake and a crocodile. In the story, the hunter was trapped in a tree with a snake on the branch. On other side of the tree there is a river with crocodile in it as shown in Figure 16. There have been several versions of endings to this tale and the most dominating was the man falling into the river and eaten by the crocodile.

The story can therefore be made interactive by giving several permutations to the player to choose which of the endings they prefer, based on their actions during

game play. For instance, the lion could be given the ability to climb steep tree, it is known how hostile lions can be so that trait of it will be left as it is. Each of the main variables may be a playable option to the player: they may decide to play as the serpent, the crocodile or the hunter, whereby each of the characters will be given special features to help navigate the environment. Perhaps, the environment will be expanded to give background information about each character. Therefore, by expanding the context within which the ending takes place, it will be much more immersive.



Figure 16. Image of a hunter in dilemma (Rishika 2017)

The straightforward story involving a hunter in trouble has been given several outcomes when interactivity applies. For instance, by giving players more interactive experience, the story may come out as role-playing survival game of a sort, where players can choose which of the characters to use in the 2.5D adventure. However, generous use of interactivity may render a game cumbersome if guides are not put in place. One of the disadvantages to point out will be the fact that the story may not always have the suitable ending as one would prefer to see plots being revealed in sequence that will build up to the climax, as in the case of traditional media such as movies and novels. Moreover, giving users more freedom may risk users of ignoring the character's traits or their special gifts and, how they transform as the story progresses, this is

because the user assumes the role of the character as a protagonist. As these can be genuine concerns that can ruin fixed sequence in a story, it is quite obvious that some games have been able to surpass this obstacle through player motivation by clearly outlining the character and player goals to be similar. An example of such a game can be the drama game Until Dawn (2015) where the player uses each character at certain points to advance the player's main goals.

5.5 Game play Flowchart

Essentially, game flow chart for the game is one important factor to consider, it basically gives an overview of the game progress structure which is suitable to fully enhance branching story and dilemma stories, in which the player would have the opportunity to experience different types of enhanced folk games that have been presented. In this case, the Gauntlet is what has been considered for this game. There is a main central thread and some choices which are mostly made of riddles, dilemma and puzzles. The idea is to fold all these mechanic in to one central adventure game story, whereby the focus will be on "Kweku Ananse's" magical journey to retrieve some lost cultural relics.

Gauntlet can be considered a standard pattern in a choice based game. Here, the game is long but not broad. There are linear elements that may cause the player to suddenly lose a game, due to the choices they make. (Ashwell 2015.) However, there is the possibility to backtrack after performing side missions as shown in Figure 17. Gauntlet usually grows into a branch and bottleneck structure. The ending in Gauntlet are more likely to derive from a final choice the player makes. (Story Stylus n.d.)

Gauntlet Start Choice Choice Choice Choice Choice End Choice Choice Choice Choice Choice End End End End End

Figure 17. Gauntlet branching story flow (Story stylus 2023)

It is worth considering the game series Dragon Age (2009) where players are offered multiple decision making. Some of these decisions may have far greater impact on the game, to the extent that they may even influence the sequel.



Figure 18. Scene from Dragon Age: Inquisition (Hinton 2023)

In Dragon Age: Inquisition (2014) for instance, players were presented with very difficult decisions that include choosing one of the companions to die. The decision will have consequences in the subsequent series such as Dragon age 4 to be released in 2024.

Figures 19 and 20 shows the gameplay flowchart story of *Ananse's Quest: The Legend of Adinkra*. The flow chart is in two parts in order to fit on the pages.

These figures show how the game will unfold during gameplay. *Ananse's Quest: Legend of Adinkra* is a choice-based game so the choices the player makes determined the outcome of the next level as outlined below.

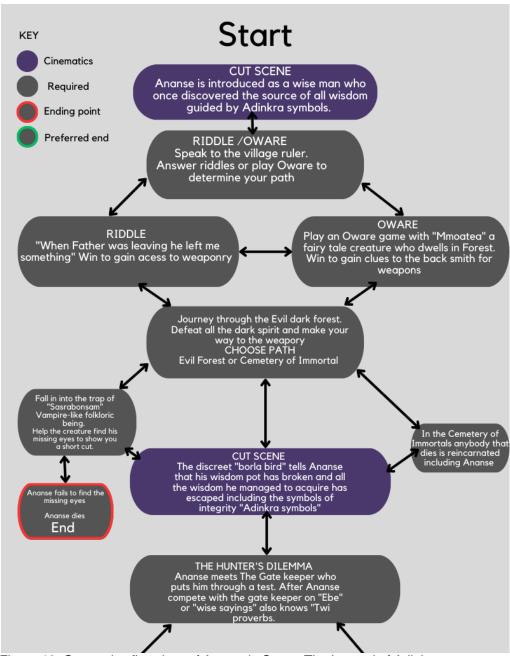


Figure 19. Game play flowchart of Ananse's Quest: The Legend of Adinkra

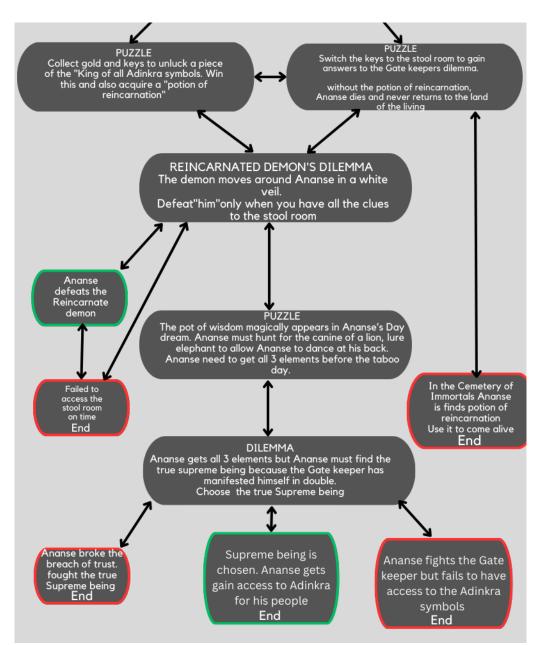


Figure 20. Continuation Game flow chart Ananse's Quest: The Legend of Adinkra

6 CONCLUSION

This writing delved into various traditional practices that shed light on the rich Ghanaian cultural heritage through the perspective of outdoor games engaged by the youth. Various outdoor games that capture a glimpse of how games brought people together to foster cooperation among people have been examined.

Storytelling full of dilemma narratives taught audience the importance of making right choices in life. Therefore, storytelling was seen as an educational event that helps young people to understand the fact that life presents them with choices that are of no second chances, and so decision made in such regards is permanent.

In anticipation to bringing ideas on board to support the development of an interactive folk game, it became necessary to conduct a survey. All respondents attested to the importance of the project objectives and its impact on the Ghanaian society in these modern times. Furthermore, the responses affirmed an innovative approach that can bridge the huge gap created in terms of young people getting acquainted with cultural practices.

The game design process for this project took into account various puzzles inspired by original folk games. Dilemmas, and branching stories that stood as part of the core game mechanic to guide the player to see the stories unfold. This stories are not only captivating but also deepen peoples understanding of traditional symbols. This expresses complexities of life for an indigene in a simplistic way.

Furthermore, the game flow chart presented compelling characters that are familiar in the Akan settings. This is to ensure that there is balance between innovation and player's general experience regarding traditions.

Contemporary culture has its positive impact on young people, as well as its negative implications, this means that contemporary culture will continue to evolve. However, the need to continuously be reminded of a fading culture that

would soon be forgotten is enough reason to support the development of this game.

This project does not only entail the revival of a faded Ghanaian culture but also has to be seen as a framework that can be emulated in any culture globally, that risk losing their cultural identity. However, there are various limitations that posed challenges to the project. The time factor can not be understated. Due to time constraint, a prototype of the game was not ready to be released, even though, there are substantial theoretical contributions that would foresee and facilitate the production process of the game project. Therefore, as a proof of concept, this project can help sensitize big budget game studios that would want to further explore the uniqueness of indigenous Ghanaian folk games to be enjoyed globally by gamers through interactive platforms. This would not only make them protectors of the cultural heritage of the people but also the torchbearers of a true African cultural tapestry.

REFERENCE

Anansesem. 2023. Kweku Ananse as an anthropomorphic character. WWW document. https://www.odiahenkan.com/ [Accessed 15 July 2023].

Ashwell, K.S. 2015. Standard patterns in choice-base Game. WWW document. https://heterogenoustasks.wordpress.com/2015/01/26/standard-patterns-in-choice-based-games/ [Accessed 4 August 2023].

Agyekum, K. 2020. Akan cultural concepts and expressions for "stress", "distress", "sorrow", and depression",29(3): 1-2. Available at: Nordic Journal of African Studies.

Agyekum, K. 2009. Akan verbal taboos: Traditional and contemporary. Research Review. 25(2):1-20 Accra: Institute of African Studies Legon.

Agyekum, K. 2011. Akan metalanguage and terminology. Berlin: Lambert Academic publishing.

Anyidoho, K. 1983. Death and burial of the dead: Ewe funeral folklore. Available at: https://ayeeko.africa/blogs/blog/adinkra-symbols-and-meaning/. [Accessed 10 February 2023].

Bottigheimer, R. B. 2009. Fairy tales A new history. New York: State University of New York press.

Brempong, K.O. 1978. Attacking deviations from the norm: insults in Bono-Ghana. Kumasi: Cultural centre

Brempong, K.O. 1984. Akan highlife in Ghana: songs of cultural transition. Kumasi: Cultural centre.

Cohen, S. 2011. Folk devils and moral panics. New York: Routledge.

Dickson, A. 2019. Ghanaian Cultural values and their foreign influence: A spotlight on clothing. Kumasi: Cultural centre.

Gill, T. 2012. Traditional outdoor games: why do they matter? Online Article. Available: https://rethinkingchildhood.com/2012/08/22/traditional-games/. [Accessed 5 May 2023].

Hill-Whittall, R. 2015. The indie game developer handbook.1st edition. Burlington: Focal press.

Ives, E.A. 2012. IGeneration: The Social Cognitive Effects of Digital Technology on Teenagers. Available at: https://eric.ed.gov/?id=ed543278/ [Accessed 24 April 2023].

J. Møller, J.2002. The symbolic significance of traditional sports and games. Preor postmodernism? - a cross cultural perspective. Online Article. Available at: https://www.playthegame.org/news/news-articles/2002/the-symbolic-significance-of-traditional-sports-and-games-pre-or-postmodernism-a-cross-cultural-perspective/ [Accessed 28 February 2023].

Katalin, L. 2012. Historicity in folk games and plays. WWW document. Available at: https://www.researchgate.net/publication/293053040_Historicity_in_folk_gamesand_plays [Accessed 11 November 2023].

Macaulay, R. 2020. The future of taboos in indigenous Ghanaian morality. Accra: Noyam publishers.

McErlean, K. 2018. Interactive Narratives and transmedia storytelling: Creating Immersive stories across new media platforms. New York: Routledge.

McIver, G. 2012. Art History for Filmmakers: The Art of Visual Storytelling. London: Bloomsbury publishing.

Mireku-Gyimah, P. 2018. The other side of Kweku Ananse of Akan folktale.

Nijdam, E. 2021. Sami-digital storytelling: Survivance and revitalization in Indigenous digital games. New Media & Society.

Nusran, M., Nurul, Z., Zin, M., Azan, N. 2010. Popularizing folk stories among young generation through mobile game approach. Proceeding - 5th International Conference on Computer Sciences and Convergence Information Technology.

Obeng, P., Brewu, J., Opoku, E. 2022. Use of Indigenous and folk-game songs for teaching and learning in early childhood education setting. International Journal of Multidisciplinary Studies. 4, 1-36.

Ogundipe, A., Elegbara, E. 1978. The Yoruba God of chance and uncertainty: A study in Yoruba mythology.

Opie, I, Opie, P. 2008. Children's Games in Street and Playground, Stourbridge: Floris Books.

Osei-Tutu, A., Dzokoto, V., Asamoah-Gyadu, J., Kenin, A., Stahl, A. 2023. Perceptions of Ghanaian values: A focus group study. 20. 20-38.

Hornby, A.S. 2010. Oxford advanced learner's dictionary. Oxford: Oxford University press.

Peek, M. Yankah, K. 2004. African folklore: an encyclopaedia. New York: Routledge.

Prince, T. 2022. Adinkra Symbols: 122 African symbols and meaning. Online Article. Available at: https://ayeeko.africa/blogs/blog/adinkra-symbols-and-meaning/. [Accessed 10 February 2023].

Pursiful, D. J. 2014. Mmoatia: Ghanaian tricksters of the forest. WWW document. Available at: https://intothewonder.wordpress.com/2014/03/28/mmoatia-ghanaian-tricksters-of-the-forest/ [Accessed 21 August 2023].

Quashie, R. 2017. 8 memorable games that define every Ghanaian's childhood. WWW document. Available at: https://yen.com.gh/82856-8-memorable-games-define-ghanaians-childhood.html#82856/ [Accessed 18 March 2023].

Resario, R. 2018. Kweku Ananse across media. Criticism of the film Kweku Ananse and the chest of stories.

Richards, S., Vine, T. 2023. Stories, storytellers, and storytelling. Melburne: UniPress.

Sekyiama, A. 2014. Telling stories that engage the ear, challenge the mind and delight the soul. WWW document. Available at: https://www.asakyiama.com/kweku-ananse/ [Accessed 19 August 2023].

Senyo, H. A. 2021. Using technology to bridge the gap of disappearing Ghanaian Childhood games. Berekusu: Ashesi University.
Story stylus. 2023. Branching story flow. WWW document. Available at: https://storystylus.com/storystylus/gameplay/ [Accessed 18 February 2023].

Tillman, B. 2011. Creative Character Design. Massachusetts: Focal Press.

Umeasiegbu, R.N. 1975. Folklore in Anglophone West African literature.

Yankah, K., Peek, M. P. 2004. African folklore: An Encyclopedia. London: Routledge.

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Figure 2: Prince, T. 2022. Adinkra Symbols: 122 African Symbols and Meaning. WWW document. Available at: https://ayeeko.africa/blogs/blog/adinkra-symbols-and-meaning/. [Accessed 10 February 2023].

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at: https://www.flickr.com/photos/ulrichmunstermann/42498128084/in/photostream/ [Accessed 12 June 2023].

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Figure 5: Ghanaweb. 2019. From 'Chaskele' to 'FIFA' - Games that 'indomie' kids may never experience. WWW document.

https://www.ghanaweb.com/GhanaHomePage/NewsArchive/From-Chaskele-to-FIFA-Games-that-indomie-kids-may-never-experience-800849 [Accessed 12 August 2023].

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QUESTIONNAIRE

Questionnaire for Young People - Game Project on Ghanaian Folklore

Thank you for participating in this questionnaire. Your feedback will help us create a game that effectively ignites young people's interest in learning about Ghanaian customs and traditions through the merging of traditional folk stories and folk games. Please answer the following questions:

What is your age?

- a) 10-12
- b) 13-15
- c) 16-18
- d) 19-21

Are you familiar with Ghanaian folk stories and folk games?

- a) Yes, I am familiar with both.
- b) I am only familiar with folk stories.
- c) I am only familiar with folk games.
- d) No, I am not familiar with either.

How interested are you in learning about different cultures and their customs and traditions?

- a) Extremely interested
- b) Very interested
- c) Moderately interested
- d) Slightly interested
- e) Not interested at all

Which of the following aspects do you find most appealing in a game? (Select all that apply)

- a) Engaging storyline and quests
- b) Interactive exploration of different environments
- c) Mini-games and challenges
- d) Customization options for characters
- e) Learning about different cultures and traditions

What do you think about merging traditional Ghanaian folk stories and folk games in a game?

- a) It sounds interesting and unique.
- b) I'm not sure how it would work.
- c) It may be boring or unappealing.
- d) I would be excited to learn more about Ghanaian customs and traditions through the game.

How likely would you be to play a game that merges traditional Ghanaian folk stories and folk games?

- a) Very likely
- b) Likely
- c) Neutral
- d) Unlikely
- e) Very unlikely

Which game platform do you prefer for playing games? (Select all that apply)

- a) PC
- b) Console (PlayStation, Xbox, etc.)
- c) Mobile (Smartphone or tablet)
- d) Virtual reality (VR) devices

How important is it for the game to provide educational content about Ghanaian customs and traditions?

- a) Very important
- b) Important

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- c) Neutral
- d) Not important
- e) Not important at all

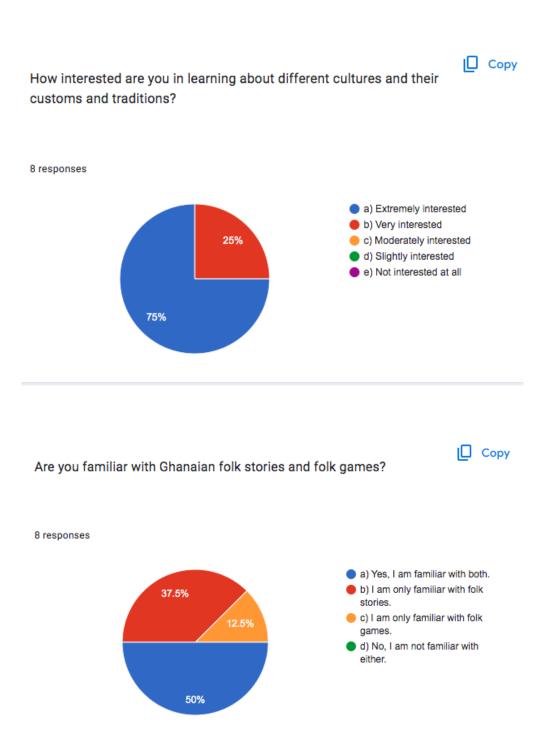
What would motivate you to continue playing and exploring the game?

- a) Unlocking new customization options and abilities
- b) Discovering hidden artifacts and secrets
- c) Progressing in the storyline and quests
- d) Learning more about Ghanaian customs and traditions

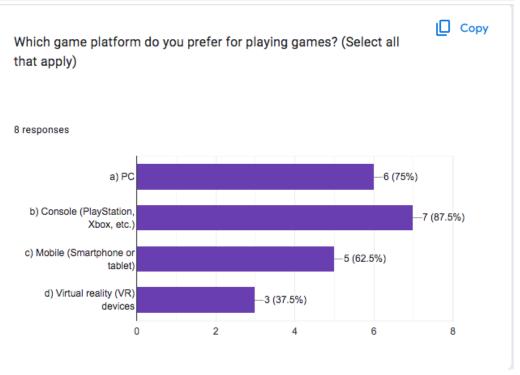
Do you have any suggestions or ideas on how to make the game more appealing and engaging for young people?

Thank you for taking the time to complete this questionnaire. Your feedback is highly appreciated and will contribute to the development of an enjoyable and educational game experience based on Ghanaian folk stories and folk games.

SURVEY RESULTS

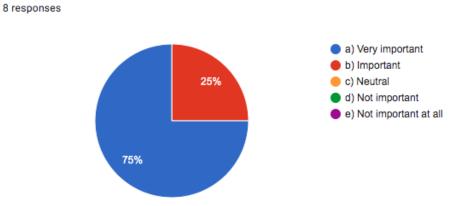


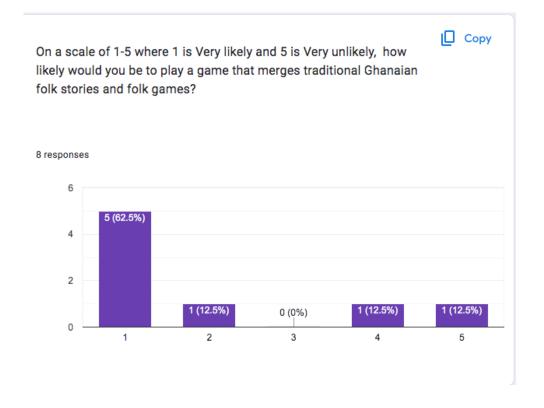
Appendix 2/2



How important is it for the game to provide educational content about Ghanaian customs and traditions?

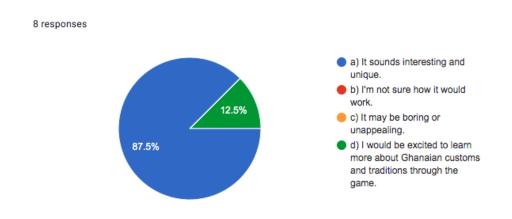


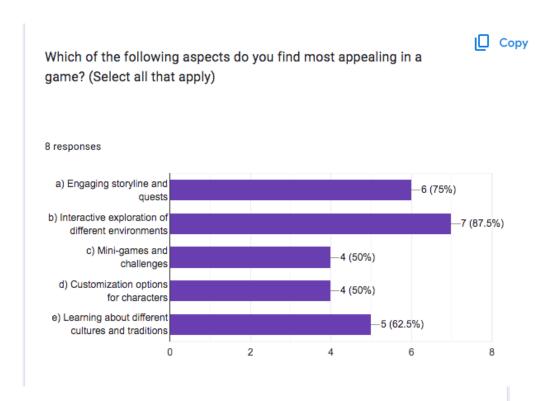




What do you think about merging traditional Ghanaian folk stories and folk games in a game?







Thank you for taking the time to complete this questionnaire. Your feedback is highly appreciated and will contribute to the development of an enjoyable and educational game experience based on Ghanaian folk stories and folk games.



Do you have any suggestions or ideas on how to make the game more appealing and engaging for young people?

6 responses

The game should be programmed to fulfill ethnocentric perceptions of all cultures.

Have to consist of relatable contents in fusion with the traditional culture

The Graphics should be varied since not everyone has a high spec PC, Console or Smartphone.

I think adding diverse skin colours will be great because at a point in time Ghana was colonized which will also make other countries want to play it too while learning our culture and history.

Also adding a typical Ghanaian village setting (trees, houses, mountains etc.) and a few urban setting won't be bad.

There should be a multilingual options to choose from.

Ghanaian music (past and contemporary) including trending music of today shouldn't be missing, the sounds should be captivating.

Attractive Rewards for completing a task.

Easy-to-use interface is optimal because not everyone has a high IQ, [easy, intermediate and hard] options is very necessary.

Fixing in some Ghanaian Curriculum Based Learning will be excellent.

Do you have any suggestions or ideas on how to make the game more appealing and engaging for young people?

6 responses

The game should be set in modern day Ghana

Real life situations must be put in a story form and added to the cane and must also include characters that the are familiar with. When this is done, it will go a long way to bring the game to life and is it ware creat and indelible mark in their heart and mind.

Achievements. Difficulty, Great views from big apartments or hills. Alot different stuff to do with Al.

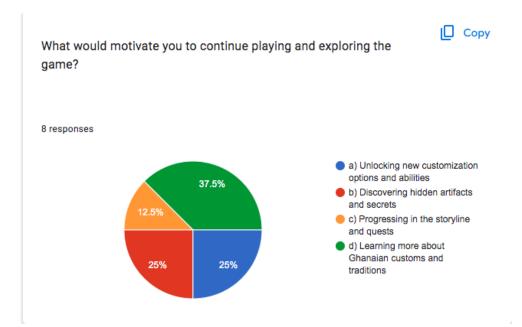
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Appendix 2/7



Appendix 3/1





Appendix 3/2





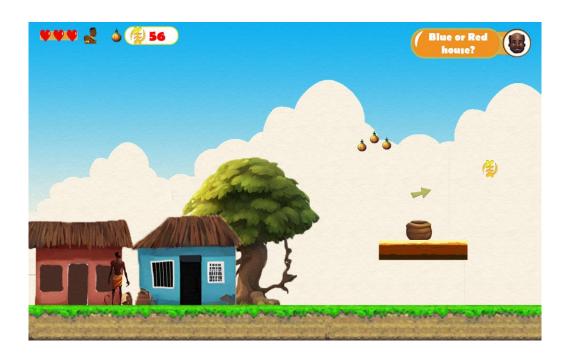






Appendix 3/4





Appendix 3/5

