

Development of an E-commerce Web Application for Sunrob Robotics Inc.

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Abstract

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Title of the thesis Development of an E-commerce Web Application for Sunrob Robotics Inc.		
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Abstract <p>This study aims to support Sunrob Robotics Inc.'s e-commerce expansion by creating a comprehensive web-based platform and corresponding mobile application. The platform's core objective is to enhance sales of technical components and robot applications, while also providing customers with easy access to maintenance services.</p> <p>Emphasizing user-friendly features and robust online payment mechanisms, this research seeks to establish an intuitive e-commerce interface. The platform will integrate standard e-commerce attributes, streamlining product selection, order placement, and management. Leveraging established e-commerce practices and the PHP programming language with WordPress CMS and the WooCommerce plugin, this study adheres to a pragmatic approach.</p> <p>In conclusion, this thesis examines the feasibility of establishing a robust online sales platform, paving the way for future mobile application expansion. By delivering a comprehensive digital experience, Sunrob Robotics Inc. aims to strengthen its market presence and elevate customer satisfaction within the dynamic realm of technical robotics.</p>		
Keywords Webshop, E-Commerce, Robotic, Wordpress, WooCommerce		

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1 Introduction

The chosen thesis topic revolves around the development of a comprehensive e-commerce platform for Sunrob Robotics Inc. This selection stems from the imperative to facilitate the expansion of Sunrob's e-commerce operations by harnessing technological advancements to bolster sales of technical components and robotic applications. In the present business landscape, the integration of online platforms has become paramount, compelling enterprises to optimize their digital footprint and adapt to evolving consumer behaviours.

Sunrob Robotics Inc., established in 2006, has carved a prominent niche in the engineering robotics domain. With offices situated in Lappeenranta, Lahti, and the United States, the company specializes in a diverse array of cutting-edge products encompassing robotics, simulators, PLCs, touch screen applications, and more. The overarching objective of the chosen thesis topic is to propel Sunrob's business paradigm into the digital age, strategically expanding its outreach and attracting a broader customer base through the avenue of an online e-commerce platform.

To address the challenges and seize the opportunities presented by this digital era, the proposed solution pivots on the development of an integrated e-commerce platform. This platform will harness the capabilities of assorted technologies to furnish customers with a seamless online shopping experience. The chosen solution framework encompasses the PHP programming language, the WordPress content management system (CMS), and the WooCommerce e-commerce plugin. The synergetic amalgamation of these technologies constitutes the bedrock of the envisioned platform, poised to streamline sales, elevate customer engagement, and fortify a robust digital presence for Sunrob Robotics Inc.

2 Exploring WordPress, PHP, and Woo Commerce for E-commerce

In the field of e-commerce platform development, wise technology choices form the foundation for building a robust and effective solution. Delving into the investigation of the rationale behind choosing WordPress as the platform, we will shed light on the symbiotic interaction between the PHP programming language and the Woo Commerce plugin so effectively. These analyses refer to the feature descriptions and technical descriptions posted on the WordPress and WooCommerce documentation pages. (WordPress and WooCommerce Documentation)

The embrace of WordPress as the central framework derives from its inherent dynamism and adaptability. Operating as a versatile content management system (CMS), WordPress empowers both developers and content creators. This adaptability seamlessly aligns with the intricate demands of an e-commerce platform. It facilitates the seamless fusion of requisite functionalities and tailored design elements, enabling Sunrob Robotics Inc. to sculpt a distinct digital persona resonating with its offerings and ethos. Moreover, WordPress presents an instinctual user interface, granting non-technical users the capacity to deftly manage content, thereby curtailing the dependence on specialized technical prowess.

The main point of the WordPress ecosystem is entrenched within the PHP programming language, a dynamic scripting medium celebrated for its interoperability. PHP stands as the conduit that breathes vitality into web pages, facilitating real-time data processing and interactive engagements. This symbiotic nexus ensures the responsiveness and captivation of Sunrob Robotics Inc.'s e-commerce platform, amplifying user interaction and holistic satisfaction. Seamlessly fostering communication between PHP and the database, this synergy underpins pivotal functions such as product searches, personalized recommendations, and real-time inventory updates, thus reinforcing the allure of the platform.

A cornerstone within this triad of technological prowess is the Woo Commerce plugin – a colossus in the realm of e-commerce enablement. Woo Commerce dovetails seamlessly with WordPress, elevating the platform from a mere repository of content into a fully-fledged digital marketplace. Its all-encompassing array of features encompasses the oversight of product portfolios, the assurance of secure payment gateways, the streamlined execution of payments, and the facilitation of order fulfilment. The scalability intrinsic to Woo Commerce ensures that Sunrob Robotics Inc. can tailor the platform to suit its distinctive array of products and customer inclinations.

In summation, the harmonious amalgamation of WordPress, PHP, and Woo Commerce stands as a potent triumvirate that undergirds the genesis of a resonant e-commerce platform. Harnessing the collective potential of these technologies, Sunrob Robotics Inc. stands poised to embrace digital transformation, edify distinct brand identities, enrich user interactions, and deftly navigate the intricate terrain of contemporary e-commerce with an aura of sophistication and innovation.

3 Analysis Requirement

The project is to create an online sales platform for Sunrob company. The platform will need to be able to safeguard online data storage, content administration, customer engagement, and sales oversight. It should also be able to process transactions quickly and be compatible with mobile devices. The platform should be scalable to accommodate future project expansion. The high-level deliverables of the project are:

- A functional online sales platform.
- A secure database for storing customer data.
- A content management system for managing product information and marketing materials.
- A customer relationship management (CRM) system for tracking customer interactions.
- A payment processing system for handling online transactions.
- A mobile-friendly user interface.

The tasks for each high-level deliverable are shown in the Figure 1 below. These tasks will need to be further decomposed into smaller, more manageable tasks as the project progresses.

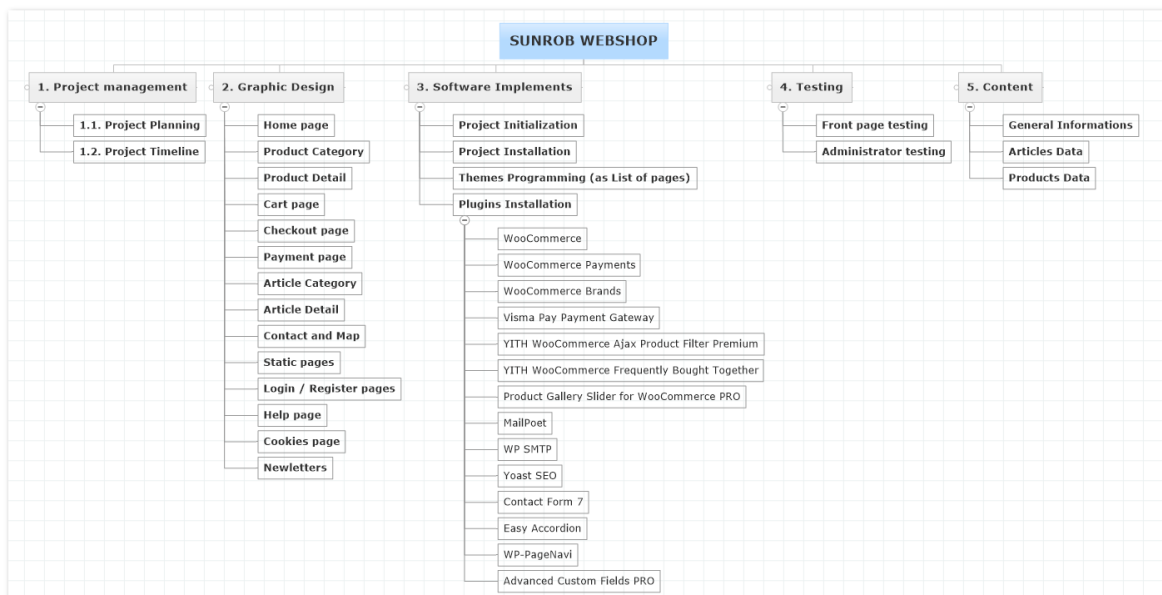


Figure 1. Works Breakdown Structure (WBS)

There are dependencies between some of the tasks. For example, the payment processing system cannot be implemented until the database is created. The project manager will need to create a schedule that takes these dependencies into account.

The project will require a variety of resources, including:

- Hardware (servers, computers, mobile devices)
- Software (database software, Integrated Development Environment software)
- People (developers, designers, testers, project manager)

4 Graphic Design

Utilizing the Figma software, a free tool, the entire website interface was designed. (show the Figure 2 below). However, as design is not the primary focus of this project, reference was made to designs from websites offering WordPress themes. The resultant web interface design essentially fulfils Sunrob's requirements for modernity, user-friendliness, and colour consistency with the Sunrob brand.

Following the comprehensive interface design, the subsequent step involves crafting a prototype. This prototype aids reviewers in grasping the website's operational dynamics upon completion. This version is akin to a static webpage. This phase is pivotal, as the ensuing steps hinge on confirmation and alignment with the company, ensuring that plans progress as intended. Any modifications or changes will be enumerated and implemented. Nevertheless, should any contingencies arise in subsequent phases, they will also be evaluated and adjusted as needed. Therefore, the affirmation and alignment in this phase aim to minimize the extent of alterations.

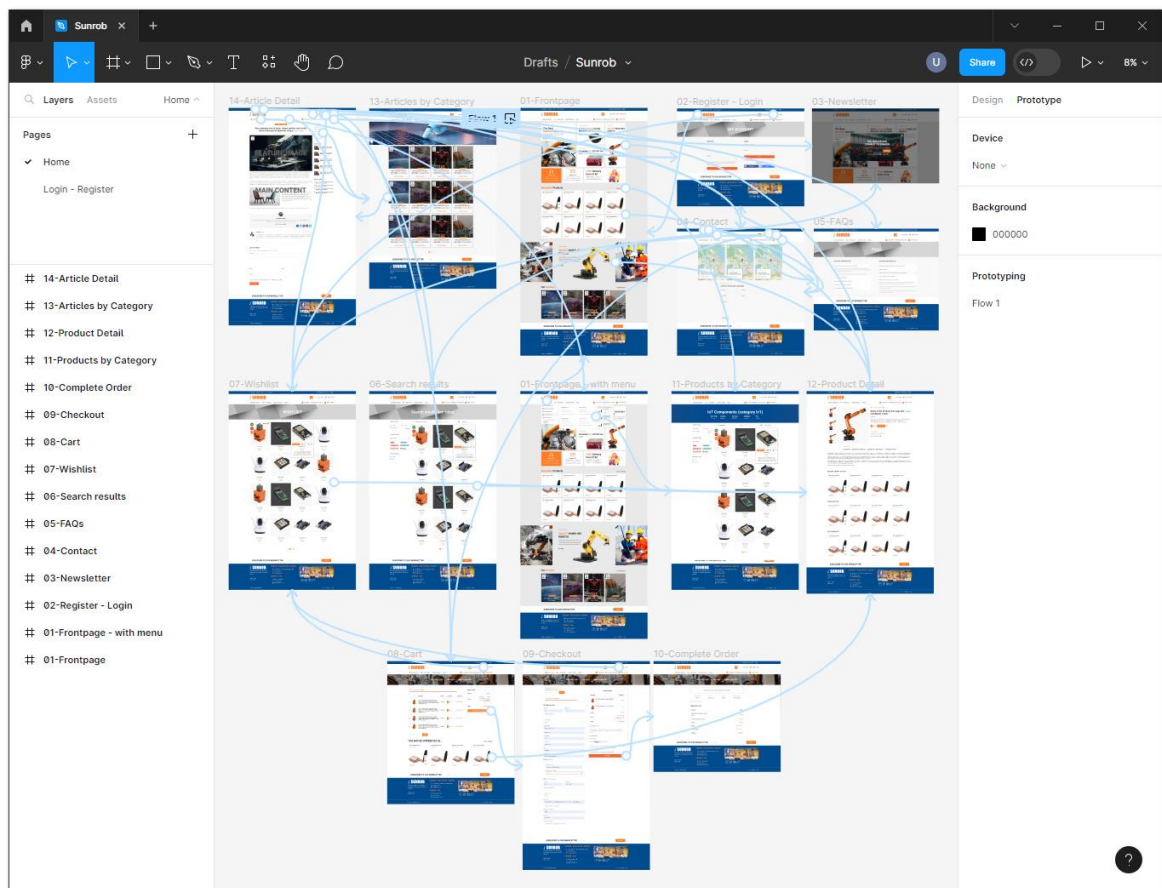


Figure 2. Figma Graphic Design

Below are images of design prototypes: Home page (Figure 3) Contact Page (Figure 4) Product Detail Page (Figure 5) Cart Page (Figure 6) Checkout Page (Figure 7) Article Page (Figure 8)

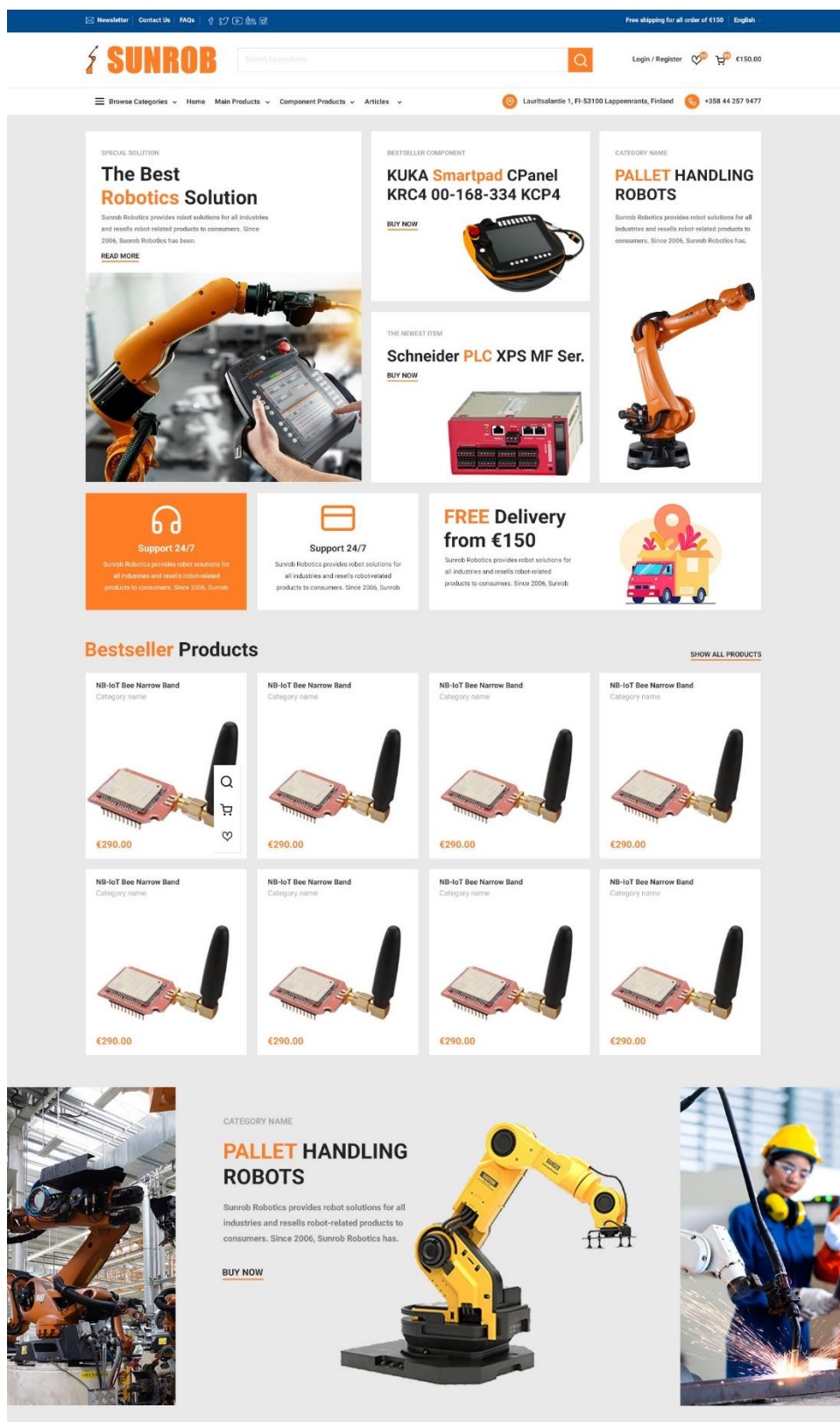


Figure 3. Home page

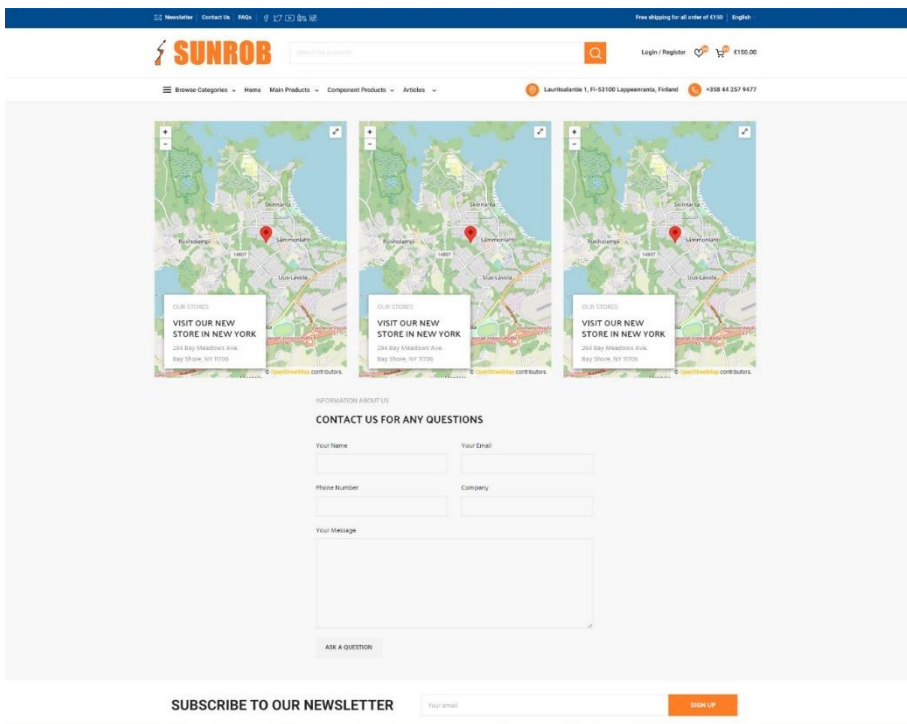


Figure 4. Contact page

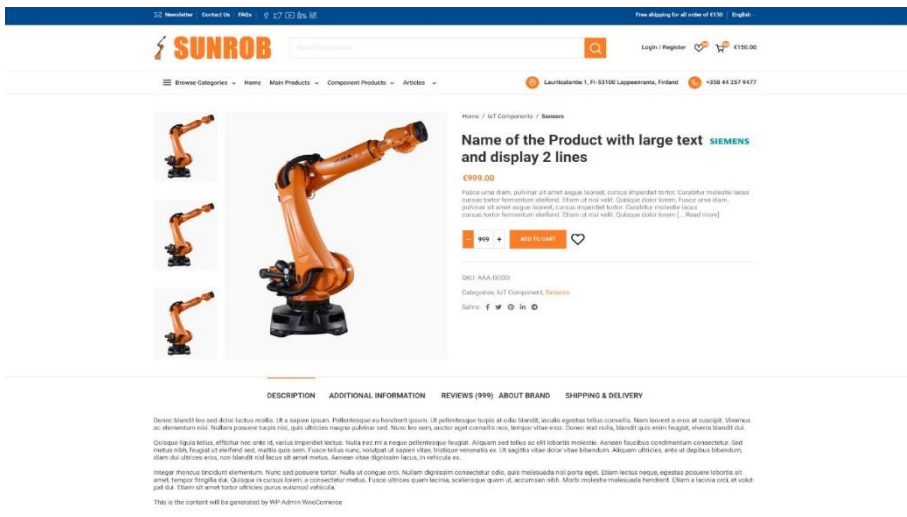


Figure 5. Product detail page

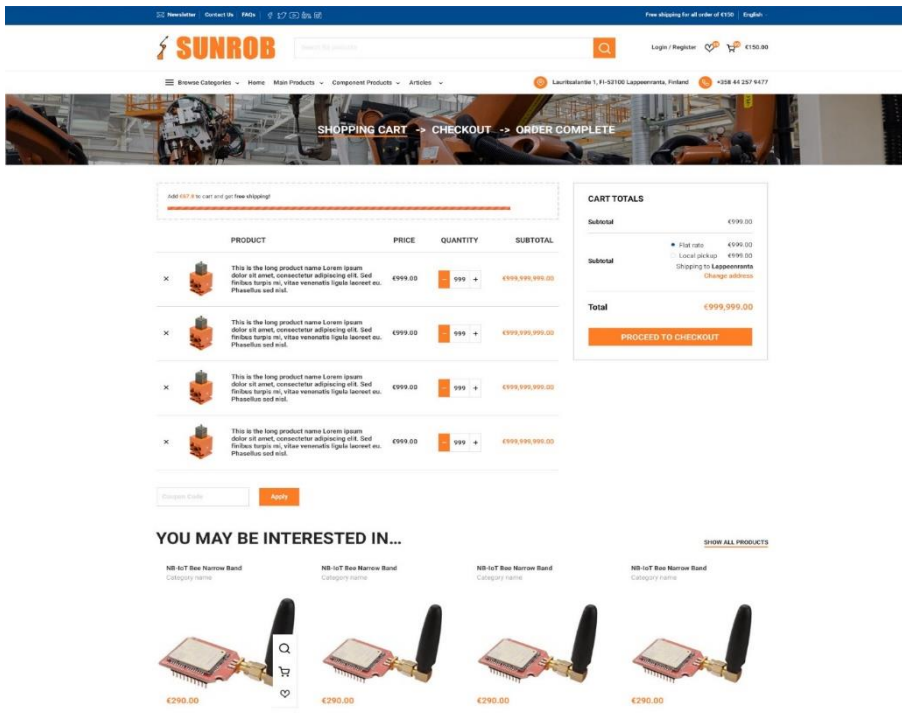


Figure 6. Cart page

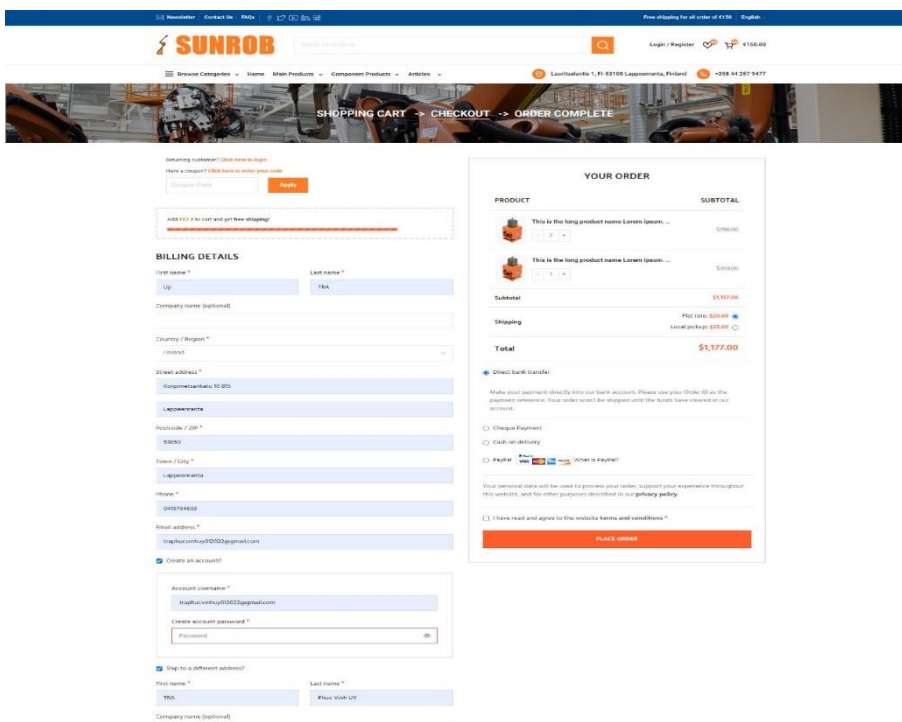


Figure 7. Checkout page

Newsletter Contact Us FAQs
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MAIN CONTENT

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Eric Watson says: April 21, 2017 at 8:21 am

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Figure 8. Article page

5 Software Implementation

5.1 Setting Up the Development Environment

The development environment was established, considering the scale of Sunrob's operations:

While PHP allows direct development in the live environment without frequent update procedures, to minimize risks, the development was initially conducted in a local environment. Deployment to the live environment was planned once the application reached over 90% completion.

The local environment was configured with PHP version 7.3, MySQL version 15.1, and Apache version 2.4.47 on Win64x. These components were integrated using Xampp, an open-source web server software.

5.2 WordPress Installation

The process of installing WordPress involved the following key steps:

- Downloading the latest WordPress package from the official website.
- Uploading the package to the web server using an FTP client or the cPanel file manager.
- Creating a MySQL database and user using cPanel or a similar tool.
- Running the WordPress installation script via a web browser to set up the initial configuration.

5.3 Installation of Essential Plugins

5.3.1 WooCommerce

WooCommerce stands as a robust and extensible e-commerce plugin for WordPress, empowering businesses to transform their websites into dynamic online marketplaces. It serves as a comprehensive toolkit that facilitates the creation, management, and expansion of digital stores, seamlessly integrating with WordPress to offer a unified platform for product presentation, transaction processing, and customer engagement.

The decision to employ WooCommerce stems from its intrinsic capacity to extend WordPress websites into fully functional e-commerce destinations. Its integration is facilitated by its open-source nature and the extensive array of customizable features it brings to the

table. WooCommerce facilitates the presentation of products, catalogue organization, inventory management, order processing, and secure payment handling – all in one seamless package.

At its core, WooCommerce harmonizes the functionalities of a web application and a database management system. It augments the WordPress framework with tailored e-commerce capabilities, essentially building upon the WordPress foundation to enable product creation, categorization, and dynamic product pages. The integration of shopping carts, checkout processes, and payment gateways streamlines the user experience, while administrative features allow for efficient store management.

WooCommerce's extensibility is a hallmark of its design. Leveraging plugins and extensions, businesses can customize and expand their e-commerce operations to match evolving requirements. This scalability is achieved through the vast WooCommerce plugin ecosystem, offering solutions for diverse needs – from advanced shipping options and multilingual support to integrations with analytics tools and marketing platforms.

Furthermore, the modular architecture of WooCommerce enables seamless integration with third-party services and technologies. Businesses can integrate various payment gateways, implement personalized product recommendations, and synchronize inventory management systems. This adaptability ensures that the platform can evolve alongside the growth trajectory of the business, catering to changing market dynamics and customer demands.

In summary, WooCommerce serves as a dynamic bridge between WordPress and e-commerce, enabling businesses to craft robust online stores with ease. Its open-source foundation, seamless integration, customizable features, and scalability collectively empower enterprises to establish a prominent digital presence, offer engaging customer experiences, and foster sustained growth in the ever-evolving realm of online commerce.

5.3.2 WooCommerce Payments

WooCommerce Payments represents a specialized payment gateway solution intricately designed for integration within the WooCommerce e-commerce framework. As an extension of the core WooCommerce platform, WooCommerce Payments streamlines the transactional facet of online retail, providing businesses with a seamless and secure payment processing mechanism.

The rationale behind incorporating WooCommerce Payments lies in its harmonious integration with the broader WooCommerce ecosystem. It offers businesses a comprehensive solution for handling payments, aligning seamlessly with the platform's core functionalities. The advantage of using WooCommerce Payments lies in its ability to eliminate the complexities often associated with third-party payment gateways, thus streamlining the payment process while ensuring compliance with industry security standards.

The operation of WooCommerce Payments involves the convergence of several components – the e-commerce platform, the payment gateway, and secure data transmission protocols. Once a customer proceeds to checkout, WooCommerce Payments takes over the payment processing workflow. It securely captures payment details, facilitating real-time communication with the chosen payment processor. The customer's financial information is encrypted to ensure data security, while authentication processes are executed to prevent fraudulent activities.

The payment gateway then transmits the transaction details to the relevant financial institutions for authorization. Upon successful approval, WooCommerce Payments updates the transaction status within the platform, allowing for seamless order fulfilment and customer communication. Notably, the integration of WooCommerce Payments with WooCommerce ensures a coherent user experience, minimizing friction during the payment process and bolstering customer trust.

In essence, WooCommerce Payments functions as a specialized intermediary that orchestrates the secure exchange of financial information, providing businesses with a reliable and integrated solution for handling online transactions. By eliminating the need for third-party gateways and incorporating payment processing directly within the WooCommerce environment, businesses can enhance user experience, streamline operations, and maintain a secure e-commerce ecosystem.

5.3.3 WooCommerce Brands

WooCommerce Brands serves as a specialized plugin within the WooCommerce framework, devised to optimize product organization and presentation based on brand affiliations. This plugin equips businesses with a systematic approach to categorizing products by their associated brands, elevating the overall shopping experience for customers.

The utilization of WooCommerce Brands is driven by the need to enhance product categorization and navigation within an e-commerce environment. Brands play a pivotal role in consumer decision-making, often influencing purchase choices. By incorporating the Woo-

Commerce Brands plugin, businesses can offer customers a streamlined pathway to explore products associated with their preferred brands, fostering a more intuitive and engaging shopping journey.

The functionality of WooCommerce Brands revolves around the seamless integration of brand-based categorization within the existing product catalogue. Businesses can define and assign brands to individual products, which generates an interconnected framework of brand categorization. Customers can then access a dedicated brand page or use filters to explore products associated with specific brands.

Upon installation, WooCommerce Brands introduces brand taxonomy, which acts as a distinct classification system for products. Brands are treated as specialized terms within this taxonomy, allowing them to be assigned to various products in a hierarchical manner. This facilitates the creation of dedicated brand pages showcasing products from the same brand, enabling customers to explore and compare offerings from their preferred manufacturers.

5.3.4 Visma Pay Payment Gateway

Visma Pay Payment Gateway is a robust online payment service that facilitates seamless and secure payment transactions through the Visma Pay gateway. Renowned as a prominent online payment solution in Finland, Visma Pay empowers businesses to offer efficient and reliable payment options to their customers, thereby enhancing the e-commerce experience.

There are many compelling reasons to choose Visma Pay Payment Gateway, evidenced by its range of features referred in the Visma Pay for WooCommerce technical documentation page:

- **Affordability:** With monthly fees starting at €6.95, Visma Pay provides a cost-effective solution for implementing online payment services.
- **Responsive Checkout:** The payment gateway ensures a seamless payment process across all devices, including mobile devices.
- **Multi-Platform Integration:** Visma Pay's online payment service seamlessly integrates with various online shopping platforms, with simple and free setup.
- **Unified Checkout Experience:** The gateway empowers businesses to embed all payment methods within their online store's checkout page.
- **Recurring Payments:** Customers can securely save payment card details for periodic payments or immediate purchases using tokenization.

- Automated Financial Management: Visma Pay automates reconciliation and financial management tasks, streamlining operations.

The operation of Visma Pay Payment Gateway entails the following steps:

- Integration: Businesses integrate the Visma Pay Payment Gateway with their e-commerce platforms, enabling customers to access the payment functionality.
- Checkout Process: During the checkout process, customers select Visma Pay as their preferred payment method.
- Payment Options: Customers can choose from a variety of payment methods supported by Visma Pay, including credit cards, online banking, and more.
- Secure Data Transfer: Customer payment details are securely transmitted to the Visma Pay gateway using encryption protocols, ensuring data privacy.
- Authorization and Processing: The payment gateway processes the transaction, authorizing the payment and debiting the customer's chosen payment method.
- Transaction Confirmation: Upon successful payment authorization, the customer receives a confirmation of the completed transaction.
- Reconciliation and Reporting: Visma Pay automates the reconciliation of transactions and generates financial reports, simplifying financial management.

5.3.5 YITH WooCommerce Ajax Product Filter Premium

YITH WooCommerce Ajax Product Filter Premium stands as an advanced plugin designed to enhance the product filtering capabilities within WooCommerce-powered online stores. This plugin empowers businesses to optimize their customers' search experiences by providing efficient and interactive product filtering options, elevating the overall usability and satisfaction of the e-commerce platform.

The decision to incorporate YITH WooCommerce Ajax Product Filter Premium is founded on its unique benefits, which cater to both customers and businesses:

- Enhanced User Experience: By enabling precise and real-time product filtering, the plugin empowers customers to swiftly discover products that match their preferences, elevating their shopping experience.

- **Improved Navigation:** The plugin simplifies navigation through large product catalogs, allowing customers to filter products based on various attributes, categories, and custom taxonomies.
- **Efficiency and Speed:** Ajax-based filtering ensures that customers receive instant filter updates without the need for page reloads, minimizing wait times and boosting engagement.
- **Customization:** Businesses can tailor the filter options to align with their product range, offering customers personalized filtering choices for a more targeted search process.
- **Conversion Optimization:** The plugin's efficient filtering process enhances customers' ability to find desired products, potentially leading to increased conversion rates and sales.

5.3.6 YITH WooCommerce Frequently Bought Together

YITH WooCommerce Frequently Bought Together is a specialized plugin designed to enhance cross-selling opportunities within WooCommerce-powered online stores. This plugin intelligently suggests related products that are frequently purchased together, encouraging customers to explore complementary items and potentially increasing their order value.

YITH WooCommerce Frequently Bought Together is motivated by its strategic benefits for both customers and businesses:

- **Enhanced Cross-Selling:** The plugin facilitates the presentation of related products that align with customers' purchase decisions, enhancing the likelihood of them adding additional items to their carts.
- **Increased Average Order Value:** By enticing customers to explore complementary products, the plugin has the potential to elevate the average order value, thereby maximizing revenue opportunities.
- **Streamlined Shopping:** Customers receive relevant product suggestions based on past purchasing behaviour, simplifying their decision-making process and offering a tailored shopping experience.
- **Customer Satisfaction:** By providing customers with valuable product recommendations, the plugin fosters a positive shopping experience, potentially leading to improved customer loyalty and repeat purchases.

5.3.7 Product Gallery Slider for WooCommerce PRO

Product Gallery Slider for WooCommerce PRO is an advanced plugin tailored to enhance the visual presentation of products within WooCommerce-based online stores. This plugin provides a dynamic image gallery slider that showcases products in an interactive and visually appealing manner, offering customers a comprehensive view of the products they are interested in.

5.3.8 MailPoet

MailPoet is a versatile plugin designed to facilitate efficient email marketing and customer communication within WordPress-based websites. This plugin empowers businesses to create, manage, and send email campaigns directly from their WordPress dashboard, streamlining the process of staying connected with customers and subscribers.

MailPoet is rooted in its strategic benefits for both businesses and customers referred in the MailPoet – Newsletters, Email Marketing, and Automation description page: (MailPoet)

- **Simplified Email Marketing:** MailPoet provides an intuitive interface within the familiar WordPress environment, making it easy for businesses to create and manage email campaigns without the need for external platforms.
- **Direct Customer Engagement:** The plugin enables direct communication with customers and subscribers through personalized email campaigns, fostering brand engagement and loyalty.
- **Customization Capabilities:** Businesses can tailor email campaigns to align with their branding and messaging, ensuring consistent and personalized communication with recipients.
- **List Management:** MailPoet offers tools for organizing and managing email lists, segmenting recipients based on various criteria to ensure targeted and relevant communications.
- **Automation:** The plugin supports automated email sequences, allowing businesses to send timely and relevant messages based on customer interactions or specific triggers.

5.3.9 WP SMTP

WP SMTP is a crucial plugin that enhances the email delivery reliability of WordPress websites by configuring the Simple Mail Transfer Protocol (SMTP) server. SMTP is the standard

protocol used for sending emails over the internet, and WP SMTP ensures that emails sent from your website reach their intended recipients' inboxes without being marked as spam or encountering delivery issues.

WP SMTP and WordPress website is driven by its essential benefits for ensuring successful email delivery and communication: (WP SMTP)

- **Avoiding Spam Filters:** By utilizing an SMTP server, emails sent from your website are less likely to be flagged as spam by email service providers, increasing the chances of reaching recipients' inboxes.
- **Enhanced Deliverability:** WP SMTP configures your website to send emails via a reliable SMTP server, reducing the likelihood of emails being lost or delayed during transmission.
- **Credibility and Trust:** Emails sent through a configured SMTP server appear more trustworthy to email recipients, as they follow industry-standard practices for email delivery.
- **Customized Sender Addresses:** With WP SMTP, you can customize the sender email address to match your domain, further enhancing the legitimacy of your emails.
- **Detailed Logging:** The plugin offers logging features that allow you to monitor email delivery status and diagnose any potential issues, ensuring proactive troubleshooting.

5.3.10 Yoast SEO

Yoast SEO is a comprehensive plugin designed to optimize the content of websites for search engines, improving their visibility and search engine ranking. This plugin offers a range of tools and features that empower website owners to implement best practices in on-page SEO, ensuring that their content is more likely to be discovered by users searching for relevant information.

The Yoast SEO works with WordPress website is rooted in its strategic advantages for enhancing online visibility and search engine performance: (Yoast SEO)

- **Improved Search Ranking:** Yoast SEO provides guidance on optimizing content for specific keywords and phrases, increasing the likelihood of higher rankings in search engine results pages (SERPs).

- **Content Optimization:** The plugin offers suggestions for optimizing content elements such as headings, meta descriptions, and internal linking, resulting in improved readability and keyword targeting.
- **Schema Markup:** Yoast SEO enables the implementation of structured data (schema markup), enhancing the presentation of search results with rich snippets, making them more informative and appealing.
- **Readability Analysis:** The plugin evaluates the readability of content, suggesting improvements that contribute to user-friendly and engaging writing styles.
- **XML Sitemaps:** Yoast SEO generates XML sitemaps that aid search engines in indexing website content, ensuring that all relevant pages are included and properly categorized.

5.3.11 Contact Form 7

Contact Form 7 is a versatile plugin designed to streamline the process of creating and managing contact forms on WordPress websites. This plugin empowers website owners to easily integrate interactive and customizable forms that enable users to submit inquiries, feedback, and messages directly from the website interface.

The Contact Form 7 is a useful and important tool in gathering feedback and increasing customer conversions. ([Contact Form 7 Docs](#))

- **Effortless Form Creation:** Contact Form 7 provides a user-friendly interface for designing custom contact forms with a range of input fields, making it easy to gather specific information from users.
- **Enhanced User Engagement:** The plugin enables visitors to interact with the website by submitting inquiries, feedback, or messages without the need for external email clients.
- **Centralized Communication:** Contact Form 7 centralizes customer inquiries within the WordPress dashboard, ensuring that website administrators can manage and respond to messages efficiently.
- **Customization:** The plugin supports the customization of form fields, layout, and styling, allowing website owners to tailor forms to match their brand identity.
- **Spam Prevention:** Contact Form 7 offers built-in spam protection measures, helping to prevent automated bots from submitting fraudulent or irrelevant form entries.

5.3.12 Easy Accordion

Easy Accordion is a plugin designed to enhance user experience by adding interactive accordion-style content sections to WordPress websites. This plugin allows website owners to present information in a compact and organized manner, enabling users to access and explore content through expandable and collapsible panels. (Easy Accordion)

- **Organized Information:** Easy Accordion facilitates the presentation of information in a structured manner, enabling users to access specific sections without overwhelming them with a lengthy page.
- **Improved User Engagement:** The plugin enhances user engagement by allowing visitors to interact with content, expanding and collapsing sections to access relevant information quickly.
- **Space Efficiency:** Easy Accordion optimizes space utilization on webpages, making it suitable for presenting FAQs, product details, instructional content, and more.
- **Enhanced Readability:** Accordion-style content sections enhance readability by allowing users to focus on the sections they are interested in while minimizing distractions.
- **Customization:** The plugin offers customization options for styling, colors, icons, and animations, allowing website owners to match the accordion design with their brand identity.

5.3.13 WP-PageNavi

WP-PageNavi is a plugin designed to enhance navigation on WordPress websites by providing a more user-friendly and visually appealing interface for pagination. This plugin replaces the default pagination links with a customizable navigation system that improves the way users navigate through multiple pages of content. (WP-PageNavi)

- **Enhanced Navigation:** WP-PageNavi offers a more intuitive and streamlined method for users to navigate through pages of content, making it easier for them to access and explore different sections of a website.
- **Improved User Engagement:** The plugin's user-friendly navigation interface encourages users to browse through more pages, leading to increased engagement and a higher likelihood of discovering relevant content.

- Customization: WP-PageNavi allows website owners to customize the appearance of pagination elements, ensuring that the navigation system aligns with the website's overall design and branding.
- Better User Experience: The plugin's modern and visually appealing pagination design contributes to an overall positive user experience, reducing frustration associated with traditional numeric pagination links.
- Responsive Design: WP-PageNavi is designed to be responsive, ensuring that the pagination interface adapts seamlessly to different screen sizes and devices.

5.4 Interface Development

5.4.1 Interface Prototype Analysis

The process of interface prototype analysis involves a comprehensive examination of the prototype's core pages, leading to the development of primary templates that define the structure and layout of the website. This analysis plays a pivotal role in ensuring the cohesiveness, functionality, and user-friendliness of the final web application.

The initial step of the analysis centers around identifying the essential pages within the interface prototype. These key pages often correspond to the main sections of the website, each catering to a specific purpose or user interaction. Examples of such pages may include the homepage, product listing page, individual product pages, shopping cart, checkout process, and user account dashboard. The identification of these pages is critical as they represent the core components of the user journey and overall functionality.

Once the key pages have been identified, the focus shifts to designing the main templates that will serve as the foundation for these pages. A template in this context refers to a standardized layout and structure that will be applied to multiple instances of a specific type of page. For instance, a product listing template will define how products are displayed, including elements such as product images, titles, prices, and brief descriptions.

During the template design phase, various aspects are taken into consideration:

- Consistency: Templates ensure a consistent look and feel across similar pages, reinforcing the website's branding and user experience.
- Responsive Design: Templates are crafted to be responsive, adapting seamlessly to different screen sizes and devices to provide a cohesive experience.

- **User-Centered Layout:** Templates are designed with user interactions in mind, placing important information and actions within easy reach.
- **Visual Hierarchy:** Templates establish a clear visual hierarchy, guiding users' attention to the most relevant content and calls to action.
- **Flexibility:** Templates may offer customization options to accommodate variations within a specific page type.

5.4.2 Interface Programming:

The process of interface programming involves the translation of design concepts into functional and interactive templates, utilizing the coding conventions specific to WordPress and WooCommerce. This critical phase bridges the gap between design and functionality, ensuring that the visual interface seamlessly transforms into a dynamic and responsive web application.

WordPress and WooCommerce, as widely-used platforms, come with established coding conventions that dictate how themes and plugins should be developed. These conventions ensure consistency, maintainability, and compatibility with the core system and future updates. Adhering to these conventions is crucial to avoid conflicts, security vulnerabilities, and compatibility issues.

Responsive design principles are at the core of interface programming. Each template is programmed to adapt fluidly to various screen sizes and devices, guaranteeing an optimal user experience regardless of whether the website is accessed on a desktop, tablet, or smartphone. This involves the use of CSS media queries and flexible layouts to ensure that content is presented coherently and intuitively across different devices.

The programming phase also addresses device compatibility. Templates are coded to render uniformly across various web browsers and operating systems, minimizing discrepancies in appearance and functionality. This compatibility testing is vital to ensure that users have a consistent experience, regardless of the browser or device they are using.

Beyond aesthetics, programming introduces interactivity and functionality to the templates. For instance, in an e-commerce context, this could involve incorporating dynamic product filters, implementing a smooth checkout process, and integrating payment gateways. WordPress offers a rich ecosystem of plugins and APIs that facilitate the implementation of these features without needing to develop everything from scratch.

Interface programming is closely tied to quality assurance and testing. After the initial implementation, rigorous testing is conducted to identify and rectify bugs, inconsistencies, or performance issues. This testing encompasses both functional aspects (ensuring buttons work, forms submit data correctly, etc.) and visual aspects (ensuring consistent spacing, alignment, and typography).

In conclusion, the interface programming phase involves translating design into functionality by adhering to WordPress and WooCommerce coding conventions, implementing responsive design principles, ensuring cross-device compatibility, and adding interactive elements. This meticulous process is fundamental to creating a seamless, visually appealing, and highly functional web application that meets the needs and expectations of users while adhering to industry best practices.

5.4.3 Widget Determination

The phases of Widget Determination and Widget Development involve a strategic approach to enhancing the templates' design and functionalities by selecting and implementing appropriate widgets. Widgets play a pivotal role in enriching user interactions, offering dynamic content, and facilitating a more personalized browsing experience.

Widget determination is the process of selecting the most suitable widgets to complement the design and functionalities of each template. Widgets are modular components that can be easily integrated into predefined sections of a web page. These components range from simple elements like text boxes and images to more complex features such as product sliders, search bars, subscription forms, and social media feeds.

The selection of widgets is based on several factors:

- **Relevance to Template Content:** Widgets are chosen based on their relevance to the specific content and purpose of each template. For instance, a product listing template might include widgets like filters, sorting options, and related products.
- **User Interaction Enhancement:** Widgets are selected to enhance user interactions and provide additional value. This could involve implementing a live chat widget for customer support or a product comparison widget for informed purchasing decisions.
- **Dynamic Content:** Widgets that display dynamic content, such as recent posts, trending products, or best-sellers, are strategically placed to engage users and encourage exploration.

5.4.4 Widget Development

Once the appropriate widgets are determined, the widget development phase involves programming and integrating these components into the templates. Depending on the complexity and customization required, widgets can be built from scratch using HTML, CSS, and JavaScript, or they can be sourced from existing plugins available in the WordPress ecosystem.

Customization and Integration: Widgets are tailored to match the visual design and user experience of the templates. This may involve customizing color schemes, typography, layout, and functionality to seamlessly integrate the widgets into the overall design.

Functionality Enhancement: Widgets are programmed to provide the intended functionality. For instance, a newsletter subscription widget might connect to an email marketing service, while a product slider widget could dynamically pull products from the WooCommerce database.

Testing and Iteration: After development, thorough testing is conducted to ensure that widgets function correctly, align with responsive design principles, and do not introduce any conflicts or performance issues. Any necessary adjustments or refinements are made based on the testing outcomes.

6 Deployment

In the subsequent phase, Deployment, the transition to the live environment is orchestrated. This phase encompasses the implementation of the website onto the designated server, along with the necessary configurations and setups for a seamless online presence.

The initial step involves obtaining the Cpanel account credentials from the company's Sun-rob administrator. Cpanel is the control panel interface for managing the hosting environment. It empowers administrators with the ability to perform various tasks, such as uploading files, creating databases, and managing web-related functionalities.

Working with Cpanel, key activities include:

- **Uploading Source Files:** The website's source code is uploaded to the server using the File Transfer Protocol (FTP). This enables the transfer of files from the local development environment to the live server.
- **Database Management:** Databases are established and populated with data by utilizing phpMyAdmin, a tool within Cpanel. The database stores crucial information required for the website's functionality.
- **Web Account Creation:** Cpanel allows the creation of web accounts, which includes configuring access to databases. This ensures the web application has the necessary permissions to interact with the database seamlessly.
- **Creating a Subdomain:** The subdomain is established and linked to the web application's directory, which is typically the root directory.
- **Domain Pointing:** The subdomain is connected to the web application's location on the server, ensuring a smooth linkage between the domain and the content.

Visma Pay Integration

Receiving the Visma Pay payment account details, the next step is to familiarize oneself with the integration process. This involves studying the integration documentation provided by Visma Pay, outlining the steps required to seamlessly incorporate their payment gateway into the web application. (Visma Pay for Woocommerce)

Configuring for Production

To align the website for production, configurations are adjusted based on the specific production environment. This involves tailoring settings to optimize performance and functionality in the live scenario.

Transition to Main Domain

While the initial launch occurs under the subdomain, such as v1.sunrob.com, the website's destination is the main domain, sunrob.com. Upon successful completion and validation, the website is transitioned to the main domain, signifying its official launch and usage.

In summary, the Deployment phase focuses on the meticulous transfer of the web application from development to the live server. This includes configuring hosting, databases, payment gateways, and domain pointers. By carefully executing these steps, the website's functional readiness is ensured, enabling its availability to users under both a subdomain and, ultimately, the main domain.

7 Summary

The contemporary business landscape has witnessed a transformative shift towards online platforms, propelling companies to harness the power of digitalization to enhance their reach, engage customers, and streamline operations. In response to this dynamic shift, this thesis delves into the development of a comprehensive e-commerce platform and a corresponding mobile application for Sunrob Robotics Inc. This comprehensive undertaking aims to facilitate the expansion of Sunrob's e-commerce operations by leveraging technology to amplify sales of technical components and robotic applications, while also enhancing the customer experience through maintenance service accessibility.

Rationale and Objectives

The core rationale for this thesis is the imperative need for Sunrob Robotics Inc. to establish a digital presence that aligns with contemporary business trends. The primary goal is to empower the company's growth by strategically tapping into the vast potential of e-commerce. The objective is to design and implement a user-friendly, responsive, and feature-rich e-commerce platform that not only elevates the brand but also offers an exceptional shopping experience for customers. Through meticulous planning and execution, this endeavour aspires to drive customer engagement, boost sales, and elevate Sunrob Robotics Inc.'s market presence.

Technological Foundation

The thesis adopts a technology-driven approach by employing WordPress as the foundation for the e-commerce platform. The synergistic integration of WordPress, the PHP programming language, and the WooCommerce plugin forms the crux of the project's architecture. WordPress, renowned for its adaptability, serves as the ideal content management system, providing the necessary flexibility for creating intricate e-commerce functionalities. The PHP scripting language ensures real-time interactions, enriching the user experience, while the WooCommerce plugin transforms the platform into a full-fledged online marketplace, incorporating essential features such as product management, secure payment gateways, and streamlined transactions.

Development Phases

- **Research and Planning:** The inception phase involved comprehensive research and meticulous planning to define the project scope, goals, and roadmap. This phase laid the groundwork for subsequent development.

- **Design and Prototype:** The design phase materialized into a prototype, visually representing the website's structure and layout. User experience considerations were paramount, resulting in a prototype optimized for modern interface paradigms.
- **Programming and Functionality:** The development process translated the prototype into reality. Leveraging WordPress coding conventions, the templates were programmed to ensure responsive design and cross-device compatibility. Widget determination and development added further dimensions of interactivity to the user experience.
- **Integration and Testing:** The integration phase brought together various components and plugins, followed by rigorous testing to identify and rectify potential issues. Compatibility, functionality, and performance were the cornerstones of this phase.
- **Deployment:** The culmination of the project involved the transition to the live environment. This phase encompassed tasks such as server setup, database integration, payment gateway configuration, and domain management, ensuring the website's readiness for public access.

Outcomes and Implications

The completion of this thesis culminates in the realization of a sophisticated e-commerce platform for Sunrob Robotics Inc. The platform empowers customers to explore technical components, robot applications, and maintenance services seamlessly. It positions Sunrob Robotics Inc. on the forefront of technological innovation, fostering customer engagement and bolstering sales. The thesis underscores the transformative impact of digitalization in driving business growth, and it signifies the potential for other companies to leverage e-commerce as a strategic tool for expansion.

Challenges

- **Complexity of Current WordPress Development:** The existing WordPress development landscape posed challenges in aligning it with the business model. Integrating plugins to suit the company's requirements was intricate, demanding careful considerations in implementation.
- **Summer Schedule and Personal Commitments:** The project coincided with the summer season in Finland, affecting availability due to personal commitments and the schedules of children. This personal circumstance significantly impacted the work progress, resulting in a delay of over a month from the original timeline.

- **Unplanned Hosting and Cpanel Usage:** The decision to use the designated server (hostingpalvelu.fi) and employ Cpanel was not initially planned. This led to a considerable amount of time spent on researching and learning the usage of these tools.
- **Data Entry and Content Deficiency:** The company currently offers only three main service packages, with no specific pricing for individual products. This necessitated adjustments in inventory management functionality. Additionally, the website lacked sufficient data, leading to an initial appearance of scarcity. The articles featured primarily images and brief descriptions, affecting the site's content richness. This deficiency has implications for SEO performance as well.

Learning

- **Strategic Planning and Flexibility:** The challenges highlighted the paramount importance of meticulous planning. Future projects should include thorough planning, accounting for personal commitments and external factors, ensuring a more resilient timeline.
- **Early Hosting and Platform Decisions:** The experience underscores the significance of making early decisions about hosting and the platform environment, promoting smoother integration and avoiding unexpected obstacles.
- **Data Integration and Content Strategy:** The importance of accurate and complete data cannot be understated. Future projects should anticipate data challenges and strategize content development to ensure a robust and engaging user experience.
- **SEO and Content Optimization:** The content challenges revealed the pivotal role of content richness in SEO performance. Lessons learned point to the need for a well-rounded content strategy to enhance website visibility and user engagement.

Conclusion

In culmination, the journey through this project has been marked by both accomplishments and hurdles that have shaped a comprehensive understanding of e-commerce platform development. The challenges encountered during various phases, such as intricate interface design and technical intricacies, have not only underscored the significance of meticulous planning and effective communication but have also revealed the essence of adaptive problem-solving in the realm of technology.

This endeavour has proven to be a crucible for acquiring technical proficiency, an invaluable asset not only in the successful completion of this project but also in broader technological pursuits. The challenges posed by the complexity of the existing WordPress development

landscape and personal commitments during the summer have illuminated the importance of strategic planning and flexibility in project management.

The unexpected requirement to learn about unplanned hosting tools and platforms has underscored the significance of early decisions and preparation. The need to address data integration challenges and content strategy for a richer user experience has unveiled the pivotal role of meticulous preparation and comprehensive content development.

Moreover, the content deficiency's impact on SEO performance has underlined the necessity of optimizing content to enhance website visibility and user engagement. These practical challenges, ultimately, offer profound lessons that resonate beyond the confines of this project, guiding the path towards more resilient and insightful technological endeavours.

As the chapters of this project close, the knowledge and wisdom derived from these challenges and triumphs are destined to propel not only this specific e-commerce platform but also future endeavours towards a more refined and successful destination within the ever-evolving landscape of technology and business.

References

WordPress. Documentation web page. Retrieved on 17 August 2023. Available at <https://wordpress.org/documentation>

WooCommerce Documentation. Technical Documentation. Retrieved on 17 August 2023. Available at <https://woocommerce.com/documentation/technical>

Visma Pay for Woocommerce. Technical Documentation. Retrieved on 17 August 2023. Available at <https://wordpress.org/plugins/visma-pay-payment-gateway>

MailPoet – Newsletters, Email Marketing, and Automation. Description. Retrieved on 17 August 2023. Available at <https://wordpress.org/plugins/mailpoet>

WP SMTP. Description. Retrieved on 17 August 2023. Available at <https://wordpress.org/plugins/wp-smtp>

Yoast SEO. Description. Retrieved on 17 August 2023. Available at <https://wordpress.org/plugins/wordpress-seo>

Contact Form 7 Docs. Technical Documentation. Retrieved on 17 August 2023. Available at <https://contactform7.com/docs>

Easy Accordion. Technical Documentation. Retrieved on 17 August 2023. Available at <https://docs.shapedplugin.com/docs/easy-accordion/introduction>

WP-PageNavi. Technical Documentation. Retrieved on 17 August 2023. Available at <https://wordpress.org/plugins/wp-pagenavi>

Appendix. Pages on production

Home page

Home page layout for Sunrob Robotics, featuring navigation, product highlights, and contact information.

Navigation: Home, Contact Us, FAQs, Login / Register, €0.00

Search: Search for products

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Product Highlights:

- Bulk Bag Robot Application:** The Bulk Bag Robot Application offers an innovative and cost-effective solution to automate and semi-automate filling machines. By integrating this robotic system into your existing setup, you can achieve significant cost savings and enhance...
- Pallet Handling Robot:** BESTSELLER COMPONENT
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- Bulk Bag Robot Application

PALLET INDUSTRY PALLET HANDLING ROBOT: The Pallet Handling Robot, developed by Sunrob Robotics, is a cutting-edge solution designed to streamline and optimize pallet handling and palletizing tasks.

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Pallet Handling Robot

Contact Us

The Pallet Handling Robot, developed by Sunrob Robotics, is a cutting-edge solution designed to streamline and optimize pallet handling and palletizing tasks. With its advanced robotic technology, this system enhances productivity and efficiency in warehouse and logistics operations. Whether it's loading and unloading pallets, stacking products on pallets, or transporting them within the facility, the Pallet Handling Robot provides a reliable and automated solution.

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SKU: P0002

Category: [Pallet Industry](#)

Tag: [Special](#)

Brand: [Kuka](#)

DESCRIPTION
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SHIPPING & DELIVERY

The Pallet Handling Robot offers a comprehensive solution for all pallet-related tasks, making it a valuable addition to warehouse and logistics operations. This robotic system is designed to handle various types of pallets, adapting to different sizes and configurations. It can efficiently load and unload products onto pallets, stack them in an organized manner, and transport them within the facility.

The robot is equipped with state-of-the-art sensors and safety features, ensuring smooth and secure operations in a dynamic working environment. Its user-friendly interface allows for easy programming and customization to meet specific pallet handling requirements.

Detailed Technical Specifications:

- Payload Capacity: Depending on the specific model and configuration, the Pallet Handling Robot can handle varying payloads, ranging from a few kilograms to several hundred kilograms.
- Reach: The robot's reach determines its operational range, and it can be customized to accommodate different pallet sizes and stacking heights.
- Speed and Accuracy: The Pallet Handling Robot boasts impressive speed and precision, ensuring swift and accurate pallet handling processes.
- Safety Features: Equipped with advanced safety sensors and protocols, the robot ensures a safe working environment for both operators and nearby personnel.

Sunrob's Pallet Handling Robot is a versatile and reliable solution for optimizing pallet handling operations, enabling businesses to increase productivity, reduce manual labor, and enhance overall efficiency in their warehouse and logistics processes. Contact us today to learn more about how our Pallet Handling Robot can transform your pallet handling operations and streamline your workflow.

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Sunrob Robotics ja Sunrob Packaging osaavat sovettaa alan uusinta tekniikka asiakkaille toimitettavissa robottiratkaisuisissa.

Sunrob Robotics Oy on toiminut asiakas-kohtaisia robottijärjestelmiä avaimet käteen -periaatteella vuodesta 2006 lähtien. Asiakkaina ovat olleet esimerkiksi konepa-jat, kemianteollisuus, elintarviketeollisuus ja puunjalostusteollisuus.

– Toimitamme laitteistot myös erittäin suur-ten kappaleiden robottijärsintään ja robotilla ta myös peikän simulaation robottihankinnan alku suunnitteluun tueksi, toimitusjohtaja **Sami Pörsin** sanoo.

Tämän vuoden alussa Sunrob Robotics sai rinnalleen Sunrob Packaging Oyn, joka on keskittynyt pakkausteollisuuden robottiratkaisuihin. Yritys on kehittänyt uudenlaisen robottiratkaisun suursäkkien käsittelyyn.

– Ratkaisullamme pystytään automaattiseen vanha suursäkkien täyttöasema. Robotti hakee tyhjän säkin ja ripustaa sen täyttökoee sen. Robotti sulkee täyden säkin, joka lähtee kuljettimella eteenpäin. Kaikki tämä tapahtuu ilman operaattoria. Laitteisto vie erittäin vähän lattiapinta-alaa, joten se sopii ahtaisiin kii paikkoihin. Ratkaisumme on myös paljon edullisempi kuin uusi täysautomaattinen täyttöasema.

Pörsin mukaan uutta ratkaisua ei ole vielä juurikaan Suomessa markkinoitu, mutta tila- tapahtuvaan 3D-tulostukseen. Meiltä voi tilauksia siitä on jo saatu ja yksi on jo toimitettu- kin. Markkinointi on aloitettu Saksassa ja se alkaa nyt syksyllä Suomessa ja Ruotsissa.

Sunrob Robotics ja Sunrob Packaging tarjoavat kaikki elinkaari palvelut toimittamalleen robottijärjestelmille. Palvelukokonaisuus sisältää käyttökoulutukset, huollot ja korjaukset sekä uudelleenohjelmoinnit ja muutostyöt.

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