

# OUTFITTER

Feasibility Study

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AJC22MCA-2040

**Guide:** Ms. Sruthimol Kurian

**Project Name:** Outfitter

## **System Study**

### **1. Project Overview?**

The project will involve the use of web development technologies, secure database management, and integration of third-party APIs for payment processing and order tracking. The goal is to create an intuitive and visually appealing platform that enhances the overall online tailoring experience for customers, while also providing tools for tailors to efficiently fulfill orders. The development of an online tailoring shop will provide customers with a modern solution for custom clothing orders, combining the convenience of e-commerce with the personalization of traditional tailoring services. This project aligns with the evolving trends in the fashion industry and offers an innovative approach to cater to the preferences of modern consumers.

### **2. To what extend the system is proposed for?**

The proposed system for the "OUTFITTER: Online Tailoring Shop" project appears to be a comprehensive and well-thought-out solution for managing an online tailoring business. It covers a wide range of features and functionalities aimed at providing a seamless experience for both customers and administrators. the proposed system covers the entire spectrum of operations involved in an online tailoring shop, from customer registration to order placement, customization, communication, and management. It also introduces innovative features such as location-based ordering and virtual fabric placement, enhancing the user experience. The integration of payment processing and support for product alterations further extends the system's capabilities. Overall, the proposed system is quite comprehensive and designed to address the needs of both customers and administrators in the online tailoring business.

### **3. Specify the Viewers/Public which is to be involved in the System?**

Customers:

**Primary Users:** These are individuals who visit the online tailoring shop website to order custom clothing items. They interact with the system extensively by creating accounts, browsing the product catalog, customizing products, submitting measurements, uploading reference pictures, placing orders, and communicating with designers, tailors, and administrators for support and inquiries.

Administrators (Tailor Shop Owners):

**Primary Users:** Administrators manage the overall functioning of the online tailoring shop. They use the system to handle incoming orders, update the product catalog, review measurements and customization options, select appropriate fabrics and materials, customize clothing items, communicate with customers regarding design details and measurements, and ensure the quality of tailored garments.

Designers and Tailors:

Primary Users: Designers and tailors are professionals who contribute to the system by creating and updating clothing designs and patterns. They also play a crucial role in the customization and quality control of clothing items. Designers can upload new designs and variations, while tailors tailor the garments according to customer specifications, review measurements, and communicate with customers regarding fitting and alterations.

#### **4. List the Modules included in your System?**

User Management Module:

This module handles user registration, account creation, and profile management for customers, administrators (tailor shop owners), designers, tailors, and other stakeholders.

Product Catalog Module:

The product catalog module manages the display of various clothing styles, designs, and offerings to customers. It includes details such as product names, descriptions, prices, and available customizations.

Customization Module:

This module enables customers to customize their chosen clothing items, including options for fabrics, colors, patterns, and more.

Measurement Submission Module:

Customers can input their measurements directly through this module, or they can choose from standard size options.

Order Placement Module:

This module provides a clear and intuitive order placement process for customers to finalize their orders.

Communication and Customer Support Module:

The communication module facilitates messaging between customers, designers, tailors, and administrators. It supports inquiries, requests for modifications, and general customer support.

Design Upload and Updates Module

Designers upload new clothing designs and patterns to the platform, and they can also update existing designs, adding new variations or options.

#### **5. Identify the users in your project?**

**Customers:**

Customers are the primary users of the system. They visit the online tailoring shop website to order custom clothing items. Their interactions include creating accounts, browsing the product catalog, customizing products, submitting measurements, uploading reference

pictures, placing orders, and communicating with designers, tailors, and administrators for support and inquiries.

### **Administrators (Tailor Shop Owners):**

Administrators are responsible for managing the overall functioning of the online tailoring shop. They use the system to handle incoming orders, update the product catalog, review measurements and customization options, select appropriate fabrics and materials, customize clothing items, communicate with customers regarding design details and measurements, and ensure the quality of tailored garments.

### **Designers and Tailors:**

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## **6. Who owns the system?**

The administrators are the primary users who have ownership and control of the system. They use the system to:

- Manage the product catalog.
- Review and process incoming orders.
- Communicate with customers.
- Customize and tailor clothing items.
- Ensure the quality of tailored garments.
- Coordinate with designers, tailors, and other stakeholders.

As such, the administrators are the owners of the online tailoring shop system and have the authority to make decisions related to its operation and management. They are responsible for ensuring that the system runs smoothly and efficiently to meet the needs of customers and other stakeholders in the online tailoring business.

## **7. Details of person that you have contacted for data collection?**

Ms.Shiji biju

Tailor shop owner

Contact no.:9947908288

**8.Questionnaire to collect details about the project? (min 10 questions, include descriptive answers, attach additional docs (e.g. Bill receipts, certificate models), if any?)**

**1. how it commercially applicable?**

The project leverages the growing trend of e-commerce. Online shopping has seen tremendous growth in recent years, and consumers increasingly prefer the convenience of shopping from their homes. An online tailoring shop aligns with this trend and caters to modern consumers.

**2.technical resources available?**

Hardware: Computers, servers, and other hardware for development and hosting.

Software: Development tools, web development frameworks, content management systems, and design software.

**3. Online Tailoring vs. Traditional Tailoring:**

Advantage: Online tailoring offers unparalleled convenience for customers. They can browse and order custom clothing items from the comfort of their homes, eliminating the need to visit physical tailoring shops.

Tailors in traditional shops can offer expert guidance on style, fabric suitability, and design choices. the choice between online tailoring and traditional tailoring depends on individual preferences and priorities. Online tailoring offers convenience and a wide range of customization options, while traditional tailoring excels in personal interaction, immediate fittings, and craftsmanship. Some customers may prefer one approach over the other based on their specific needs and expectations.

**4. How do you see your role as a tailor in the "OUTFITTER: Online Tailoring Shop" project, as described in the abstract?**

My primary responsibility is to be a customization specialist. I will work closely with customers to understand their unique preferences, including fabric choices, design elements, measurements, and any other customization requests. I will play a crucial role in maintaining the quality standards of the tailored garments. This involves ensuring that the clothing items are crafted with precision, attention to detail, and the highest level of craftsmanship.

**5. What challenges or concerns do you foresee in the online tailoring approach, especially when it comes to providing custom-tailored clothing for customers?**

One of the primary challenges is ensuring the accuracy of measurements submitted by customers. Without in-person fittings, there is a risk of incorrect measurements, which can lead to ill-fitting garments. Effective communication is vital in tailoring, but online platforms may introduce communication barriers. Tailors may struggle to fully understand customer preferences and convey design details, potentially leading to misunderstandings. Customers may have limited knowledge of fabrics and materials, making it challenging for them to

choose the most suitable options. Tailors must guide customers effectively in selecting appropriate materials.

# **Feasibility Study**

## **Feasibility Study**

This examination is a fundamental step in determining whether a project will achieve the organization's objectives considering the resources, time invested in it. It assists the developer in assessing the potential benefits and long-term possibilities of the project. To ascertain the feasibility and worthiness of further analysis, a feasibility study must be conducted for the proposed system. The feasibility study evaluates how the proposed system would impact the organization, its ability to meet customer demands, and the efficient use of resources. Consequently, a feasibility study is typically conducted before proceeding with the development of a new application. The assessment carefully considers various factors, including technical, financial, and operational viability, as outlined in the feasibility study document.

## **Economic Feasibility**

The economic feasibility analysis is a vital step in assessing the viability of the Outfitter online tailoring in terms of cost and time investment. It involves a comprehensive examination of all factors that could impact the project's success. After conducting a thorough cost-benefit analysis, the Outfitter project has been found to be feasible and economical within the pre-assumed budget. The analysis indicates that the potential benefits and revenue generation opportunities of Outfitter align well with the initial investment, making it a financially viable endeavor. A thorough assessment of different cost categories, including computer expenses, software implementation, system analysis, website coding, and database design, was conducted to determine the development cost of the Outfitter migration support application. These costs are one-time expenses that will not recur after the project is completed. By carefully analyzing these cost categories, we can ensure that the development of Outfitter is economically feasible and will lead to a positive return on investment.

## **Technical Feasibility**

In the context of the Outfitter online tailoring shop, technical feasibility refers to the review process that establishes if it is possible to build and implement the product using the technology and resources currently in use. The analysis evaluates the technology used to determine how effective the suggested strategy is. It is essential for detecting and resolving potential project challenges before work is started. Outfitter is created to be user-friendly and self-explanatory, requiring little training. Even new users will find the application to be simple to use, guaranteeing a seamless and simple experience for everyone. Additionally, users may easily access the system, which reduces the cost of using it.

## **Operational Feasibility**

Outfitter's operational feasibility study aims to assess whether the software can effectively address customer facing challenges and user needs. The priority of user requirements will be

determined, and the acceptability of the proposed solution by the software development team will be analysed. User adoption potential will be assessed, emphasizing the need for a user-friendly interface. Organizational satisfaction will be ensured by aligning Outfitter with the organization's objectives. The software development team's competence and available resources will be evaluated. Risk assessment and cost-benefit analysis will be conducted to identify potential obstacles and economic viability. Through these evaluations, Outfitter can be optimized to become a successful online shopping.

## **Feasibility Questions:**

### **Is the Required Technology Available?**

#### **Front-End Technologies:**

**HTML, CSS, Bootstrap:** These are standard front-end technologies for building responsive and visually appealing web interfaces. They are readily available and widely used in web development.

#### **Back-End Technology:**

**Python-Django Framework:** Django is a powerful and widely used Python web framework for building web applications. It provides a robust set of tools for developing secure and scalable web applications, making it a suitable choice for your online tailoring shop.

#### **Server:**

**XAMPP:** XAMPP is a popular, open-source cross-platform web server solution that includes Apache, MySQL, PHP, and Perl. It is commonly used for web development and testing environments. While XAMPP is useful for local development and testing, you may need to consider more robust hosting solutions for production deployment.

#### **Database:**

**MySQL:** MySQL is a widely used open-source relational database management system. It is suitable for storing data related to customer profiles, orders, product catalog, and more. It aligns with your project's requirements.

#### **API Integration:**

**Third-party APIs:** You mentioned the integration of third-party APIs for payment processing and order tracking. This suggests that you can leverage existing payment gateways and order tracking services to enhance your platform's functionality.

The necessary programming languages, frameworks, and tools are available for developing the "OUTFITTER" online tailoring shop. Python-Django for the back end, HTML, CSS, and Bootstrap for the front end, XAMPP for local development, and MySQL for the database are all suitable choices. Additionally, the integration of third-party APIs for essential features like payment processing and order tracking is a practical approach to streamline development. To ensure a successful implementation, it's important to have a skilled development team



familiar with these technologies and to consider scalability and security as the project progresses.

## **Can the project Scale to Handle User Load?**

The project aims to create an online tailoring shop, which can attract a significant user base if executed successfully. Custom clothing services can have a broad appeal, but scalability considerations are crucial due to potential growth in users and orders. HTML, CSS, and Bootstrap are suitable for building responsive and user-friendly interfaces. However, the scalability of the front-end largely depends on how well it's designed and optimized. Ensure that you follow best practices for web development and optimize assets for faster loading times. Implement load balancing to distribute incoming traffic across multiple server instances, ensuring high availability and fault tolerance. Redundancy measures should be in place to minimize downtime. As the project scales, security becomes even more critical. Regularly update and patch your software, employ strong authentication mechanisms, and perform security audits to protect user data and the system from potential threats.

## **Integration with Backend Systems?**

Integration with backend systems is a critical aspect of the "OUTFITTER" online tailoring shop project. It involves connecting various components of your application, such as the web interface, database, and external services, to create a seamless and functional system. Integration with third-party payment gateways (e.g., PayPal, Stripe) is essential to handle secure and efficient online transactions. Ensure that payment processing is integrated securely to protect customer financial data. MySQL is your chosen database system. Make sure it is well-integrated with the back-end code (Python-Django) to efficiently store and retrieve data related to user accounts, orders, product details, and more. a well-planned and executed integration with backend systems is essential for the success of the "OUTFITTER" online tailoring shop project. It ensures that all components of the platform work together seamlessly to provide a user-friendly and efficient experience for both customers and administrators.

## **Security and Data Protection?**

Security and data protection are paramount for any online platform, especially one that handles customer data and financial transactions like the "OUTFITTER" online tailoring shop. Use strong authentication mechanisms to verify the identity of users during login. Implement multi-factor authentication (MFA) for added security. Define and enforce role-based access control to ensure that users (customers, administrators, designers, and tailors) can only access the data and functionalities relevant to their roles. Store user passwords securely using salted and hashed algorithms (e.g., bcrypt). Avoid storing plain-text passwords in the database. Implement logging for all critical actions and security-related events. Set up monitoring to detect unusual or suspicious activities and respond promptly.

## **Support for Different Devices and OS Versions?**

Supporting different devices and operating system (OS) versions is crucial to ensure a wide user base and accessibility for your online tailoring shop project, "OUTFITTER." Implement responsive web design using HTML, CSS, and Bootstrap to ensure that your platform adapts to various screen sizes, including desktops, laptops, tablets, and smartphones. Test your design on different devices to ensure a consistent user experience. Test your website on popular web browsers such as Google Chrome, Mozilla Firefox, Microsoft Edge, Safari, and others. Ensure that the site functions correctly and appears as intended across different browsers. Consider developing mobile applications for iOS and Android platforms to provide a more optimized and user-friendly experience for mobile users. Native or cross-platform app development tools like React Native or Flutter can be used for this purpose. By taking these steps, you can ensure that your online tailoring shop, "OUTFITTER," is accessible and user-friendly across a wide range of devices and operating system versions, providing a positive experience for all users.