

**Software Construction & Development Lab**

**Semester Project Proposal**

**Urban Stitch**

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**Class and Section:** BSSE-5A

**Submitted to:** Sir Waqas Ahmed

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Urban Stitch

Project Proposal

Version 1

**Introduction:**

In the digital age, having an online presence is essential for businesses of all sizes. The fashion industry is no exception, and a well-designed clothing website can significantly enhance brand visibility and increase sales. We propose the development of a clothing website that will showcase our fashion products, provide an exceptional shopping experience, and establish a strong online presence. We will utilize HTML, CSS, and JavaScript for development and Visual Studio as the primary development environment. . This website will cater to the needs of online shoppers, providing a seamless and secure shopping experience.

**Problems:**

* Slow Website Loading Times
* Poor Mobile Responsiveness
* Complicated Navigation
* No live chat option.

**Solutions:**

* Implement caching mechanisms, optimize images and code, use Content Delivery Networks (CDNs), and choose a reliable hosting provider to ensure fast loading times.
* Utilize responsive design techniques to ensure that the website adapts seamlessly to various screen sizes and devices, improving the mobile user experience.
* Design an intuitive navigation menu with clear categories, filters, and search functionality to help users easily find products.
* Live chat option.

**Technologies and Tools:**

**Language:**

- HTML, CSS, and JavaScript

**Version Control:**

- Git for code management.

**Development Tool:**

- Visual Studio

**Design Patterns:**

To achieve a robust and scalable website, we will implement the following design patterns:

* **MVC (Model-View-Controller):** This design pattern will separate the application into three interconnected components, enhancing maintainability and scalability.
* **Singleton Pattern:** We will use the Singleton pattern for database connections and other resource management to ensure efficiency and avoid resource conflicts.
* **Factory Pattern:** Implementing the Factory pattern for product creation will enable easy extensibility for future product additions.
* **Observer Pattern:** To manage events and user interactions efficiently, we will use the Observer pattern to decouple event producers from consumers.

**Work Distribution:**

To ensure the successful execution of this project, we propose the following work distribution temporarily:

|  |  |
| --- | --- |
| Front end development | Bisma ikram |
| Back-end development | Iffat iman |
| Design and UX | Bisma ikram and iffat iman |

**Overview:**

In summary, our proposal outlines the development of a clothing website to address our current challenges and enhance our online presence. With a user-friendly interface, efficient e-commerce functionality, and personalized shopping experiences, we aim to attract and retain customers while staying competitive in the fashion industry.

We are excited about the potential of this project and believe it will significantly benefit our brand.