**Project Plan**

**Project Description**

The goal of this project is to develop an online bookstore, “CMSC495 6381 Online Book Store”, where customers can purchase books to be delivered to their home. The customer will be able to log into their account, choose one or more books to add to the shopping cart and then complete a purchase from their shopping cart. The graphical user interface (GUI) with which the customer will interact will be simple and easy to navigate. The project will also include a database to house and query the list of books available for purchase. The goal of this project is to design a user-friendly online bookstore where customers can quickly and easily search, choose, and purchase books without being distracted by ads, non-book sale items, or a complicated ordering system.

**System Specification**

* Development platform: Intel Pentium i5 or above, 2 Gigabytes Memory, 50 GB hard disk, Windows 10, Java JDK 8
* Web Server:  Apache Tomcat 8.5
* Operating platform: Any system running Java
* Front-End Tools: HTML, JSP, CSS, JS (Bootstrap)
* Database software: MySQL 8
* Framework: Hibernate

**Case Scenario**

The GUI will include an initial log-in page where the customer will be prompted to enter a username and password. Upon log-in, the customer will be directed to the Home Page, with a list of suggested books and a search option. The customer will be able to search the database by title, author, or genre, and then read a brief description of the book before deciding to purchase it.

When a book is selected from the search results list, a pop-up window will display the book’s information and the customer may choose “Add to Cart” or “Close”. Choosing “Add to Cart” will place the book into the shopping cart and automatically redirect the user back to their list of search results they were looking at. Choosing “Close” will close the pop-up box and take the user back to the list of search results. The user may also back out of the search results list and create a new search from the home page.

The home page will also include a link to the shopping cart. When the customer is ready to purchase the books in their cart, they can navigate to the shopping cart page where they will be prompted to verify their purchase choices, enter their name, address, phone number, and credit card information, and place their order. Upon placing the order, a pop-up box will thank the customer for their purchase and provide an order confirmation number. Closing the pop-up box will redirect the user back to the home page.

**Project Deliverables**

|  |  |  |
| --- | --- | --- |
| **Task name** | **Category** | **Subtask** |
| **Project Plan** | Analysis | Business analysis |
| **Project Design** | Design | Software Analysis |
| **Test Plan** | Design | Test Design |
| **Phase 1 Source** | Code | Bookstore Development |
| **Phase 2 Source** | Code | Bookstore Development |
| **Phase 3 Source** | Code | Bookstore Integration into DB |
| **Final Deliverable** | Code | Software Build/Documentation |

**Risk Management Plan**

This section addresses the risks involved with the project. Its purpose is to identify, analyze, and prioritize risk factors. To mitigate the main risk of the project not meeting deadlines, group members will utilize on-line group forums for communication. Identifying risks at the onset of the project will allow the group to develop best practice solutions to possible risks, saving time and effort during the project.

**Risk Factors**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk ID** | **Probability** | **Description** | **Impact** | **Action** |
| **1** | 30% | All book categories/types are not completed by deadline | Inability to utilize books categorized  which were plan | Familiarize with book category |
| **2** | 20% | Bookstore does not integrate with DB | Difficulty in DB | Familiarize with DB administration |
| **3** | 40% | Testing encounters problems | Incompletion of bookstore system | Try to find error and fix |