**Project Title:**

An Online Ordering System

Level:

L7

**Prospective Supervisor:**

**Index Terms:**

online ordering, e-commerce, web design

**Description:**

Paperless ordering is more and more popular in take-away and restaurants. In this project, you will design and implement such a paperless system.

**Requirements:**

HTML, CSS, JS, PHP.

**Degree Courses:**

MSc Computer Science (6G7V0007)

MComp(Hons) Computer Science Level 7 (6G7V0007)

Aim

The aim of this project is to develop an efficient and user-friendly online book ordering system that enhances the customer experience and streamlines the book purchasing process. The project seeks to create a robust platform that allows customers to browse a comprehensive book catalog, easily place orders, track shipments, and provide feedback. The overall goal is to provide a seamless online shopping experience for book enthusiasts while maximizing efficiency for the bookstore.

Research Questions:

* What are the key features and functionalities required for an effective online book ordering system?
* How can the user interface and design of the website be optimized to improve the overall customer experience?
* What are the best practices for implementing secure payment gateways and ensuring data privacy in an online book ordering system?
* How can inventory management be efficiently integrated into the system to ensure accurate stock availability and prevent overselling?
* What strategies can be employed to streamline the fulfilment and shipping process, ensuring timely delivery and customer satisfaction?
* How can customer feedback and reviews be incorporated into the system to enhance trust and assist future customers in making informed decisions?
* What measures can be taken to improve the search functionality and recommendation system to assist customers in discovering relevant books?
* How can data analytics be leveraged to gain insights into customer behaviour, preferences, and purchasing patterns to optimize the book ordering system?

By addressing these research questions, the project aims to develop an online book ordering system that not only meets the functional requirements but also provides an exceptional user experience. The project seeks to contribute to the field of e-commerce by exploring best practices, identifying challenges, and proposing solutions to enhance the efficiency and effectiveness of online book ordering systems, ultimately benefiting both the customers and the bookstore.

Objectives

Facilitating Online Transactions

Increasing Sales

Expanding Customer Base

Enhancing Customer Experience

Building Customer Loyalty

Gathering Customer Data and Insights

Improving Operational Efficiency

Learning Outcomes MSc Computer Science

The project will allow the development of the following knowledge and skills:

* The working practice of the software industry, and the typical tools and techniques employed in the software development process.
* The role of computer science in the development of the wider technological community and the relevant ethical and societal issues.
* Analyse, design, and implement algorithms using a range of appropriate languages and/or methodologies.
* Critical thinking and ability to communicate ideas and solutions both in writing and orally to specialist and non-specialist audiences.
* To explore the capabilities of languages such as PHP, HTML, CSS, and JS.
* Exploring the future of these languages in web development and e-commerce.
* Briefly exploring similar languages and frameworks.

Project Description

“Paradise Of Readers” is a website dedicated to selling story books and other forms of literature. The site offers a wide collection of books from great fantasy novels to academic help books. The site also offers user to ability to download some old books from the website itself in pdf format.

The site will have all the basic functionalities as any other E-commerce website like an “Add to Cart Option”.

A Sort Functionality with the options to sort from highest priced books to the lowest priced books and vice versa. To sort book names in the Alphabetical order.

A Search Bar.

Through the website the user can place and process orders, accept payment for the orders, manage shipping and also seek for customer support.

Languages And Tools

* PHP
* HTML
* CSS
* JavaScript
* MySQL
* Bootstrap
* Xampp
* Sublime
* Git hub

A Six-chapter report 10,000 – 12,000 words 12pt 1.5 line 50-60pp

**Chapter 1 Introduction**

1.1 Background <-- ToR  
1.2 Aim and Objectives <-- ToR  
1.3 Organisation of thesis

**Chapter 2 Literature review**

Refer to 20+ Papers, Journals, Articles or websites. A minimum of 20 references is required.

If only 20 papers are referenced, they should be focused on specific are for example.

2.1 1st 5 Papers should be focused on web design and principles.

2.2 2nd 5 Papers should be focused on SQL and NoSQL.

2.3 3rd 5 Papers should be focused on usability evaluation techniques.

2.4 4th 5 Papers should be focused on WordPress.

The papers should be categorized and compared amongst the category they are under.

**Chapter 3 Design**

**3.1 Requirement Analysis and Specification, Discussion and Justification.**

**3.1.1 four key functions related to an online ordering system.**

**3.2 Structural Design**

Site Map must be included  
UML Use Case Sequence  
Diagram + Explanation.

**3.3 Detailed Design (Very Important)**

**3.3.1 Functionality Detailed Design: - Must be explained thoroughly and must have pictures and figures like graphs, umls and more to support design.**

**Component Descriptions: Detailed explanations of each functional component, including its purpose, inputs, outputs, and interactions with other components.**

**Data Flow Diagrams: Visual representations of how data flows between different components, depicting input sources, processing steps, and output destinations.**

**Pseudocode or Algorithmic Descriptions: Step-by-step breakdowns of the logic and algorithms governing the behavior of each functional component.**

**Use Case Scenarios: Detailed use case descriptions that illustrate how users interact with the software to accomplish specific tasks or operations.**

**3.3.2 Usability Detailed Design**  
Storyboards Interface  
3 pages   
9 storyboards page : desktop / ipad / phone (picture of website on desktop, tablet and phone) 3 pictures each needed.

**3.4 Design evaluation   design the right thing**

**Chapter 4 Implementation**

**4.1 functionality implementation**

**Should include code snippets and explanations.**

**4.2 Usability Implementation**

**Should include screenshots of sites and explanations on how to use it.**

**Chapter 5 Software Testing**

**5.1 Testing Methodology Used**

**5.2 Results and Discussion**

**presentation mean/pie chart/histogram/**

**Chapter 6 Conclusion**

**6.1 Achievments**

**6.2 Future work**