

# Dr. D.Y. Patil Centre for Management & Research (MCA)

# Chikhali, Pune-412114

**SAVITRIBAI PHULE PUNE UNIVERSITY**

**MASTER OF COMPUTER APPLICATION**

## Project Report

**ON**

## Evergreen Book Store Website

Under the guidance of

### Prof . Prajali Patil

**By**

## Aakanksha A Mujumdar

**MCA-II (SEM-IV)**

**Seat No: 122142**

**Year 2023-2024**



**Shikshan Maharshi Dr. D.Y.Patil Shikshan Sanstha’s**

**Dr. D.Y. Patil Centre for Management & Research**

**Newale Vasti, Chikhali, Pune- 412114**

**CERTIFICATE**

**Date:**

**This is to certify that Ms. Aakanksha Avadhut Mujumdar, has successfully completed his/her project work entitled “Evergreen Book Store Website”**

**In partial fulfillment of MCA II year SEM-IV for the year 2023-2024. He / She has worked under guidance and direction of Prof. Prajali Patil.**

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| **Prof. Prajali Patil** | **Prof.(Dr.) Jayshri Patil** | **Dr. Sunil Dhanawade** |
| **Project Guide** | **HOD, DYPCMR** | **DIRECTOR, DYPCMR** |

# ACKNOWLEDGEMENT

I consider it a privilege to express a few words of gratitude and respect to all who guided and inspired me in successful completion of this project. I acknowledge my profound indebtedness and extend my deep sense of gratitude to my Project Guide **Prof. Prajali Patil** for sharing their knowledge and experience and providing valuable guidance, profound advice and encouragement that has led to successful completion of this project.

I would like to thank **Dr. Sunil Dhanawade sir**, Director DYPCMR, and **Dr. Jayshri Patil mam,** HOD**,** DYPCMR for their guidance and unflinching support throughout the phase of my Project Submission.

### Aakanksha A Mujumdar

### MCA II SEM IV

**DYPCMR**

**Company Certificate**

# Declaration by Student

I, **Aakanksha Avadhut Mujumdar** the undersigned solemnly declare that the project report is based on my own work carried out during the course of **“Master in Computer Applications”** study under the supervision of **Prof. Prajali Patil** I assert the statements made and conclusions drawn are an outcome of my work. I further certify that

1. The work contained in the report is original and has been done by me under the general supervision of my supervisor.
2. The work has not been submitted to any other Institution for any other degree/diploma/certificate in this university or any other University of India or abroad.
3. I have followed the guidelines provided by the SPPU University while writing the report.

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**INTRODUCTION**

* 1. **Company Profile**
  2. **Introduction of the Project :**

Discover a world of literary wonders at Evergreen Book Store, where technology meets literature to create an immersive and seamless reading experience. Oure website is meticulously crafted using Java technologies such as Spring Boot, Hibernate, Servlets, and JSP, supported by the power of JSTL (JavaServer Pages Standard Tag Library). This robust technological foundation ensures a smooth and efficient browsing experience for book enthusiast.

At Evergreen Book Store, we invite you to explore a diverse collection of literary treasures, engage with a user-friendly interface, and enjoy the seamless integration of technology and literature. Weather you are casual reader or a dedicated bookworm, our platform is designed to enhance your reading journey and make discovering new books a delightful experience.

**Embark on literary adventure with Evergreen Book Store - Where every page turns into a new Chapter of discovery!**

**OBJECTIVES**

1. **Enhance User Experience:** The primary objective of the Evergreen Book Store is to provide users with a seamless and enjoyable online shopping experience. This involves creating an intuitive and user-friendly interface that allows customers to easily navigate through the website, discover new books, and make hassle-free purchases. Features such as personalized recommendations, user reviews, and efficient search functionality contribute to an enhanced user experience.
2. **Efficient Book Management and Ordering:** Another key objective is to streamline the management of the book catalogue and ordering process. The website should provide administrators with a robust backend system, powered by technologies like Spring Boot and Hibernate, to efficiently manage book details, inventory, and order processing. This includes real-time updates on stock levels, secure payment processing, and order tracking to ensure timely delivery of purchased books.
   1. **Existing System and Need for System**

**1.3.1 Overview**

The existing system of Evergreen Bookstore comprises a Java-based web application developed using JSP, Servlet, HTML, CSS, JavaScript, jQuery, and JSP Standard Tag Library (JSTL). The system utilizes a MySQL database for storing data related to books, customers, orders, and transactions.

**1.3.2 Components**

**1. Frontend components:**

* **HTML**: Provides the structure of web pages.
* **CSS**: Styles the HTML elements for better presentation.
* **JavaScript**: Adds interactivity to the web pages.
* **jQuery**: Simplifies DOM manipulation and AJAX requests.

**2. Backend Components:**

* **Java:** Core programming language for server-side logic.
* **JSP** **(JavaServer Pages):** Dynamic web pages with Java code embedded within HTML.
* **Servlet**: Handles client requests, processes data, and generates responses.
* **JSTL** **(JavaServer Pages Standard Tag Library):** Provides a set of tags for JSP to simplify web development.

**3.Database:**

* **MySQL:** Relational database management system (RDBMS) used for data storage.

**1.3.3 Functionality**

The existing system facilitates the following functionalities:

* User authentication and authorization.
* Browse books by category, author, or title.
* Search functionality for finding specific books.
* Add books to the shopping cart.
* View and manage the shopping cart.
* Place orders and complete transactions.
* Admin functionalities such as managing inventory, adding new books.

**1.3 Need For System**

**1.3.1 Business Requirements:**

* **Enhanced User Experience:** Improve the user interface for a more intuitive and engaging shopping experience.
* **Scalability:** Design a scalable architecture to accommodate a growing number of users and transactions.
* **Mobile Compatibility:** Ensure compatibility across various devices, including smartphones and tablets.
* **Security:** Implement robust security measures to safeguard customer data and prevent security breaches.
* **Performance Optimization:** Optimize system performance to minimize response times and enhance overall efficiency.

**1.3.2 Technical Requirements:**

* **Modernized Technology Stack:** Update technology stack to leverage modern frameworks and libraries for improved development efficiency and maintainability.
* **API Integration**: Integrate with third-party APIs for features such as payment processing, shipping, and book recommendations.
* **Automated Testing:** Implement automated testing frameworks to ensure software quality and reduce the risk of regressions.
* **Documentation:**Maintain comprehensive documentation covering system architecture, APIs, database schema, and deployment procedures for ease of maintenance and future enhancements.
  1. **Scope of System**
     1. **Enhanced User Experience**
* Design an intuitive and visually appealing user interface (UI) to facilitate easy navigation and seamless browsing of books.
* Implement features such as advanced search, book recommendations, and personalized user recommendations to enhance user engagement.
* Optimize the shopping cart and checkout process for a smooth and frictionless purchasing experience.
  + 1. **Scalability**
* Architect a scalable system capable of handling a large number of concurrent users and a growing volume of transactions.
* Employ cloud-based infrastructure and distributed computing techniques to accommodate increased load and ensure high availability.
  + 1. **Mobile Compatibility**
* Develop a responsive design that adapts to various screen sizes and resolutions, ensuring a consistent user experience across desktop and mobile devices.
* Utilize mobile-first design principles to prioritize mobile usability and performance.

**1.4.4 Security:**

* Implement robust security measures to protect sensitive user data, including encryption of data in transit and at rest.
* Guard against common security threats such as SQL injection, cross-site scripting (XSS), and cross-site request forgery (CSRF).
* Enforce proper authentication and authorization mechanisms to control access to sensitive functionalities and data.
  + 1. **Performance Optimization:**
* Optimize front-end and back-end performance to minimize page load times and response times.
* Utilize caching mechanisms, CDN (Content Delivery Network) integration, and efficient database queries to improve overall system performance.