

DEVELOPMENT OF A WEB APPLICATION FOR AN ONLINE BOOKSTORE

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Annotation

This application helps to regulate the activities of bookstores with comprehensive functions, to satisfy customer needs, to make quick and easy decisions, to save time, and to grow the business.

Keywords: An Internet bookstore, Database, Database systems, Online bookstore database.

Intrroduction

An Internet bookstore, or an online bookstore, is a platform that allows you to buy and read books online. These systems include collections of books, e-books, school textbooks, scientific articles and other textual works. Users can find, read and download required books through this platform. A bookstore UML diagram depicts the various components of a system and the relationships between them. Below is an overview:

Class Diagram: This diagram describes a system's classes, properties, operations, and relationships between objects.

Component Diagram: This diagram describes the components of a system and the relationships between them.

Sequence Diagram: This diagram models the interaction of objects based on a time sequence.

Each diagram represents a different aspect of the system and, working together, they describe the overall structure of the system. These diagrams help in understanding, designing and documenting the system.

From the first page, a visitor to the site can get login information about the site, as well as get acquainted with the latest news on the site.

On the first page, books about us are divided into contact sections:



- In the "Books" section, you can choose the books you need.
- "About us" - Through this site, you can order and even rent the book you want without leaving home, so we will deliver the book you need through our delivery service.
- In the "Contact" section, the user can contact the admin, give suggestions, get answers to questions and use personal services.

- "Admin section"

Admin section contents.

- Dashboard. Statistics of books sold, daily and total statistics are carried out Books. Admin can add, edit, delete books, information about sold or not sold, edit by categories.
- Statistics about purchase data are kept.
- News. If there is a detailed description of the product, the name links to the page with the description and is highlighted in some way.

Each item in the list and in the full description of the product has an "Order" button or link, when clicked, a request for the product quantity will appear and the selected product will be added to the cart.

By clicking the "Send order" link, the user will be transferred to a page where all the details of his order are displayed in a table. There are 3 buttons under the table: "Confirm order", "Change registration information". After submitting the order by clicking the "Confirm Order" button, the user should receive the following message: "Your order has been successfully submitted."

Within the framework of the developed website, it is planned to create a multi-level catalog of products, the possibility of online ordering and monitoring the status of orders already made.

Online ordering is done directly on the site. The ordering process consists of several steps.

First, visiting products will display their names and quantities. Then he continues to fill out the form, indicating his personal data (if he did not enter it during registration), after which the created order is sent by e-mail to the pre-arranged mailbox of the project managers.

Order status tracking. When sent, the content of the order is included in the database in the list of separate orders, where the status of this order is changed using the administrator module (for example: "paid", "sent"). There is a controlled option



to notify the customer by email when the situation changes. Any customer can see the status of their order.

Implementation of the program development and initial testing process

You can follow these steps to perform the software development and initial testing process:

- **Definition of Requirements:** This is important for understanding the purpose of the project, how it will create value for users, and the deliverables of the project.
- **Design and prototyping:** In this step, you will develop the basic functionality and interface of the application. It shows how the application works for users and team members.
- **Writing code:** This is the main part of software development. This is where you write the code you need to implement the program's functions.
- **Testing:** In this step, you verify that the program is working correctly. This is important for finding bugs in the program and fixing them.
- **Fix and Iterate:** In this step, you fix the flaws you find and retest the program. This process is repeated until all defects are corrected.
- **Launch the application:** In this step, you make the application available to users. This is important for testing the application in a real environment.

These processes are interdependent and follow each other. This will help to improve the quality of your program. These processes may vary from project to project, but they are all important parts of software development.

You can follow these steps to perform the initial software testing process:

- **Develop a testing strategy:** This defines your testing objectives, testing methods, testing process, and how to evaluate test results.
- **Setting up the test environment:** This requires installing all the tools you need to test your application. This includes operating systems, browsers, software and other tools.
- **Creating test scenarios:** This requires creating test scenarios to test each function of your application.



- Run Tests: Run your test scenarios and record the results.
- Analyze results and find bugs: This requires analyzing your test results and finding bugs in your program.
- Fix the errors and repeat the tests: This requires you to fix the flaws you found and repeat the tests. This process is repeated until all defects are corrected.

These processes are interdependent and follow each other. This will help to improve the quality of your program. These processes may vary from project to project, but they are all important parts of software development.

CONCLUSION

The goal of this project is to improve the sale of bookstores, to develop a simple and interesting program for everyone, and to expand the number of readers, which is currently decreasing. Develop an app that everyone can enjoy and make people feel less burdened.

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