Book Sharing Tool Project Report
Author: Chenlin Liu   Pengyu Yang   Jingwen Yang

1. Introduction

Because of the sudden outbreak of COVID-19, people had to carry it at home because of the outbreak. As a book-sharing website, this website can help people share their stored books and find the same fans, so that people can socialize during the epidemic and find the same fans.

1.1. Writing purpose

This project summary is mainly a summary of the book-sharing website project. It is hoped that by summarizing the problems we encountered in the development process and the methods we adopted, it will play a certain guiding significance for the future project development.
In order to improve the efficiency of our future development projects and standardize our process.

1.2. Background

Due to the current outbreak of COVID-19, we hope to build a website where people can store and share books to help them learn and socialize with like-minded fans during the outbreak.

2. Real result

2.1. Product
Book sharing website

2.2. Main function
Users log in to their social books portal and add a book to their personal library. They add books with title, author, ISBN, metadata summary, and personal tags. Books can be edited and deleted
Each user has a social section where you can see other users' books.

2.3. Project planning

Job content	schedule	Actual progress
Understand the requirements	2021.02.25-2021.03.05	2021.02.28-2021.03.05
Project detail design	2021.03.05-2021.03.10	2021.03.05-2021.03.12
Project code	2021.03.10-2021.04.10	2021.03.13-2021.04.13
Project completion	2021.04.05-2021.04.14	2021.04.06-2021.04.15
Project presentations	2021.04.16-2021.04.22	

3. Development work evaluation

3.1. Evaluation of work efficiency

In this project, due to the lack of tacit understanding among the team members, the understanding of the project is not very high.

Therefore, in the early stage, the efficiency of the team was very low. The overestimation of their own ability and the unclear workload of the project were the main reasons for the low efficiency.

At the same time, with the progress of the project, the communication between team members is more and more, and the efficiency in the middle and late period has been improved to a certain extent, but it is far from the real level of programmers.

3.2. Evaluation of product quality

(1) User's registration and login function.

(2) Users can add books.

(3) Users can share books.

(4) Change deletion of book information.

All the basic functions mentioned above have been implemented and can run in general, but there is still a lot of work to be done to improve each function. There are still some bugs in each function, and it will take some time to improve these functions.

At the same time, due to our lack of understanding of the needs, there is a lot of waste and repetition, resulting in inefficiency.

3.3. Evaluation of technical methods

1. Database: MongoDB database is used to build the system database model, so as to better store user information and meet the needs. Meanwhile, this method is relatively simple.

2. System development framework： The framework of this system is Bootstrap4 organization, this framework is more practical in the development of some small and medium-sized Web.
   It allows us to manipulate the data as much as we want using the programming language.

3.4. Analysis of the cause of the error

There are several main reasons for our attention：

1. Not familiar with software development process. Because this aspect of knowledge acquisition only staying in the theoretical level, the lack of rational experience.

2. Communication between group members still needs to be improved.
   Because in the middle period of time, due to the intense course learning and the accumulation of various projects, we can concentrate on editing time is not much. The focus on projects has declined.

3. not familiar with Web development technology, only familiar with Bootstrap4 framework. And the details of how the framework is used are not very clear.

3.5. Lessons learned

The project lasted for nearly two months, during which we had a deeper understanding of the project.

The first is the further learning and understanding of Web development.

The comprehensive training follows the course.

At the same time of the course, the teacher only used it for a detailed description.

Including the establishment of the team, the arrangement of the topic, the whole project selection model and so on.

The first stage : Demand analysis stage. Only by fully understanding the needs of users can finish a project with complete functions and good performance be developed.

At this stage, our group actively discussed together, learned the functions of other websites, made records and obtained a lot of reliable materials.

The second stage: project analysis and design stage. The whole project probably spent a lot of effort on this. You need to analyze the objects in your project, then design your database based on them, and a general architecture, to prepare for the next phase.

The third stage: the coding stage. For a long time in the project lifecycle, the logic of the entire system is expressed in code. Among them encountered many problems: unfamiliar with the code, can only slowly explore, so that the quality of the code prepared is not high, code reuse is not high, a lot of problems have not been solved.

The fourth stage: the testing stage. Mainly carry out functional tests on the functions involved in the project, and solve the problems found in time.