



PROJECT PROPOSAL

DEVELOPMENT A WEBSITE
FOR NOVEL READER AND
WRITER

COMP 1682

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1. Overview

Currently, the community of lovers of novels in the world is thriving. In the community of novels lovers, in addition to a large group of readers, there is also a large part of those who have the need and ability to compose. They often share their works via social networks: Facebook, personal blogs, or some websites instead of publishing their novels by printed version in publishers. According to AskALLi Team (2020), if the book is published by publisher, the authors receive 7.5% of the price of their work. Instead, if they go through publishing platforms like Amazon, Kobo or Apple Books, ... the authors get 70% of the price for each e-book sold. And if they publish themselves on their own websites, they can even get up to 96% of the price per book. And 40% of the best-selling e-books on the Amazon e-commerce site in 2016 were self-published book (AskALLi Team, 2020). Therefore, it can be seen that the need to self-publish their products by the authors is great and this is a suitable market for exploitation.

There are many websites and mobile apps in this area on the market, however, we often only focus on meeting readers' reading needs or author self-publishing needs. So, the project that I will plan to do is to build a website for the community of novel readers and writers. This website will allow users to edit and publish their works or read stories by chapter. In addition, in each chapter, the author can ask readers to pay a fee in the form of coins to be able to read the story. Coins will be redeemed from a deposit or receive a free amount of coins by logging into the website and taking attendance daily. Users can exchange coins to receive money when they reach a certain amount of coins.

To build this website, I can use popular programming languages to develop websites so that I can get support from libraries, frameworks and their developer community. In a survey by Stackoverflow (2020) Top ten most popular programming languages today are: Java Script, HTML / Css, SQL, Python, Java, Bash, C #, PHP, TypeScript and C ++.

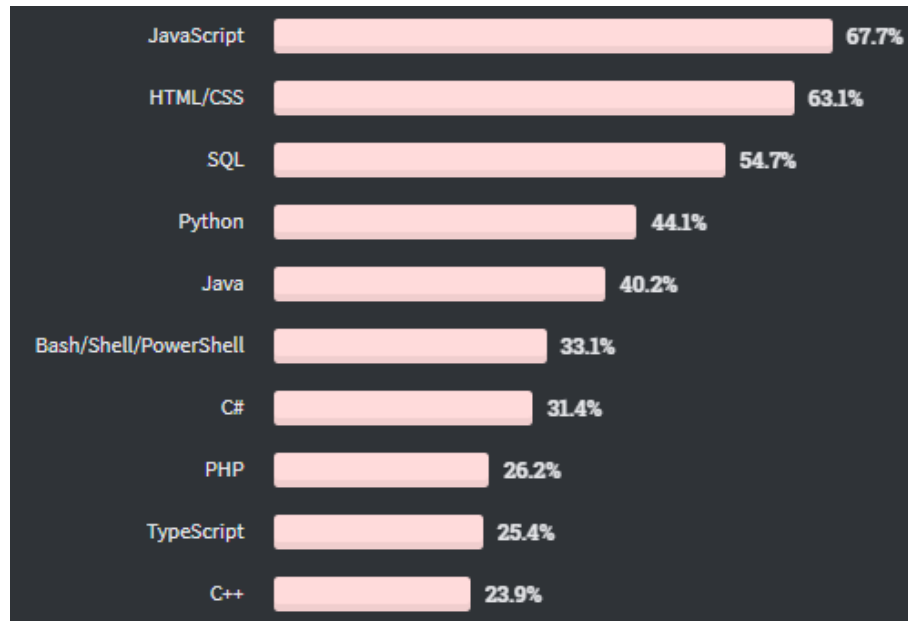


Figure 1: Ranking of popular programming languages (Stackoverflow, 2020)

HTML / CSS are two languages that help to create a framework for the website and structure the elements on the interface of the website to create a separate style for the website (Hai W. and Shouhong W., 2014). So these are two indispensable languages when developing a website. JavaScript, PHP, C #, and Python are backend programming languages for building website operations and connecting to databases (Rasmus Lerdorf, Kevin Tatroe, Bob Kaehms, Ric McGredy, 2002). In addition to facilitate the construction of the website for reading and writing novel, I also need to study about the corresponding frameworks and libraries of those languages.

Besides, I also need to use one of the databases like MySQL, Postgres SQL, SQLite, ... to store data of the website. Because, in a survey by Stackoverflow (2020) they are in top five most popular database today.

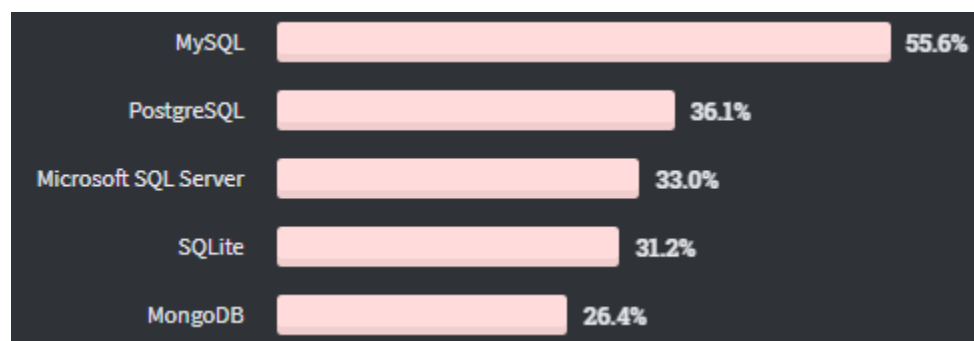


Figure 2: Ranking of popular databases (Stackoverflow, 2020)

The website will include the following features:

- Allows users to read and edit novels. Users can only edit each story chapter on the website and up load them.
- Allows users to recharge and receive coins converted at a specified rate.

In addition, this website will not include the following:

- Support users to compose and read comics
- Allow users to post edited content files on other software or websites such as Microsoft Words, Google docs, Notepad,
- Responsible for the copyright for stories posted by users.

Key phases: website front-end programing language, website back-end programing language, website to read novels, website to publish novels, online payment

2. Aims

The aim is to develop a website dedicated to the community of novel lovers in the world. This site allows users to read and write novels by chapter. In addition, the authors can charge other users to read some of their stories by paying coins and users can get coins by recharging. Once a certain amount of coins is reached, authors can receive redeemable money from the number of coins in their wallet.

3. Objectives

3.1. Objective 1: Gather user trequirements

Activities:

- Research websites and applications that allow reading novels and up load novels existing in the market
- Use these similar products, evaluate them and survey other users within those websites to see what features they expect to use.

Deliverables:

- Synthesizing and listing existing features on those websites and applications, features that the user wants to use.
- Selecting the features that will be available in the website to meet the needs of users and have a competitive advantage over existing websites.

3.2 Objective 2: Determine the technology to be used

Activities:

- Study on web programming languages: HTML, Css, JavaScript, PHP, Java, Python, ... and the corresponding libraries and frameworks.
- Study on database programming languages: MySQL, SQLite, PostgreSQL, ...

Deliverables:

- A report about analyzing, summarizing, comparing web programming languages and identifying the programming languages to be used.
- A report that analyzes, aggregates, and compares the database programming languages and identifies the database programming languages to be used.

3.3 Objective 3: Create project development planning

Activities:

- Determine the time to design systems, databases, interfaces for the website for novel reader and writer
- Determine the time to implement interfaces and features for this website
- Determine the test time for the website for novel reader and writer
- Determine the completion time of relevant documents: website performance assessment report, final report of the website for novel reader and writer

Deliverables:

- A Gantt chart of website development plan for novel writers and readers

3.4 Objective 4: Analysis of user requirements and design

Activities:

- Define the user of the website and the features they are using on website for novel writers and readers (create Use case diagram for this website)
- Create Class diagram of the website for novel writers and readers
- Create database of the website for novel writers and readers
- Create interface sketches of the website for novel writers and readers

Deliverables:

- Use case diagram for the novel reading and writing website
- Class diagram for the novel reading and writing website
- Database for the novel reading and writing website
- Sketches and blueprints of the user interfaces of the novel reading and writing website

3.5 Objective 5: Develop website for novel writers and readers

Activities:

- Implement interfaces: list of novels, novel details, chapter content, novel creation, user information, coin deposit, etc.
- Implement features corresponding to the interfaces of the website for reading and composing novels.

Deliverables:

- Product: Website for reading and composing novels for the novel lover community

3.6 Objective 6: Test website for novel writers and readers

Activities:

- Create Test case for the novel reading and writing website
- Test features and interface according to test case

Deliverables:

- Documentation of Test cases for the novel reading and writing website
- Test results of the novel reading and writing website
- Test results report

3.7 Objective 7: Evaluate the website and complete the final report

Activities

- Analyze and evaluate the strengths and weaknesses of the website and find ways to overcome them
- Write the final report

Deliverables

- The report evaluates performance and future development plans of the novel reading and writing website
- The final report evaluates the project

4. Legal, Social, Ethical and Professional

4.1 Legal

The content of this website is developed by user contributions, so it is difficult to control the issue of copyright of the content of the works posted. At the same time during the development of this website for demo purposes, the developer may use a number of stories, images, ... from other websites and applications. Therefore, this website is completely at risk of facing copyright issues. To solve the problem of copyright for the content in the construction of the website, the developer can use images, story content from open sources, or contact the owner of the content directly to request to get permission to use the content for other purposes or or create the images, content that needs to be used. As for the copyright issue of user-posted works, the solution will be to ask the user to take responsibility for the copyright for the content of the work they up load and when a work has proven to be copyright violation and required removal, the administrator will remove the work from the website.

The second legal issue that the website will likely face is the protection of the safety of users' personal information and online transactions information. These are sensitive information that is very attractive to hackers who can attack websites to steal this information. Therefore, sensitive personal information such as passwords and phone numbers need to be encrypted before being saved to the database. Online transactions will be through a third party that specializes in providing reputable online payment solutions in the market such as VNPay, OnePay, Momo, Paypal, ... to bring the highest convenience and security to user.

4.2 Social

This website is developed towards the community of novel lovers. Since this is a community with a large number of members, the development of this website can also have some influence on society.

On the positive side, this website can encourage users' writing abilities as this is where users can unleash their creativity, practice their writing skills, hone their vocabulary and share perspectives, thoughts, emotions, morality, lifestyle, culture through their works freely. At the same time, they can receive the attention, welcome, suggestions and support from a large number of people with common interests and from there, they can gain the motivation and experience to develop the creative ability in general and using language in particular. In addition, the money that authors can get from the coins users pay to read their works can also be another source of motivation for them to develop themselves, even from the people who like to write stories become professional journalists or writers. Secondly, novels lovers in Vietnam and many countries cannot always ignore novels posted on major Chinese websites and some of novels of writers come from other countries. They are written in the predominantly Chinese and English languages, so someone needs to translate them. Therefore, in addition to promoting the ability to compose, this website also creates opportunities for users to hone and improve their ability to translate foreign languages.

Along with these positive effects, the development of this website can also cause negative effects on society. Firstly, the works are posted on the website can cause users to spend a lot of time using electronic devices such as computers, smartphones to access and read them. If they do not control the time and proper use of these electronic devices, this could have adverse effects on their health. Secondly, the majority of members of the community who love novels are between the ages of 13-25. At this teenage age, their thoughts, thoughts and behaviors are easily affected by stories that are too violent, negative, or content that is too dreamy, unrealistic. maybe in swordplay, horror, ... They may have violent, angry behavior or apply behaviors like some characters in the story to real life.

4.3 Ethical

During the operation, the website may collect some personal information of users such as full name, gender, address, email address, This information is only used for the purpose of analysis and research so that the developer has appropriate updates to the website. User personal information will not be disclosed to third parties.

In addition, the works posted on the website will be stored on the database, all updates and modifications to these works will be done by the account that owns these works.

Administrators only have the right to remove works in case of copyright infringement and this work has been requested to remove. In this case, the account that owns this work will be notified via the registered email.

During the development of the website, the developer can take the content from other websites and applications such as website introduction content, general rules, ..., this can be considered as plagiarism, which is the thing developers should not be acquired. Instead, developers can build their own introductory content and rules to create a highlight for the website and impress users.

4.4 Professional

Firstly, in the process of developing a project in particular and a website in general, project planning and ensuring the completion of the project schedule in accordance with the set plan is an indispensable factor to evaluate the professionalism. At the beginning of the project, the developer should set a plan, time to complete and organize the work in a clear, specific order and regularly monitor and update the progress of the project every week. The project planning and management support tools that developers can use are: Microsoft Project, Trello, etc.

Secondly, website needs to be thoroughly tested according to the test cases before being put into operation. And the process of design, development, and testing all need documents to serve the process of upgrading systems, transferring technology, etc.

Finally, one of the purposes of a website is to make it easy for users to find and access, thus optimizing search rankings on search engine sites like Google. Therefore, when building website interface, developers need to apply ways to optimize search engine (Search Engine Optimization - SEO) such as using heading tags (h1, h2, h3, ...), optimizing meta description tags, etc.

5. Project plan

Project Work breakdown structure (WBS)

Figure below is WBS of novel reading and writing website development project.

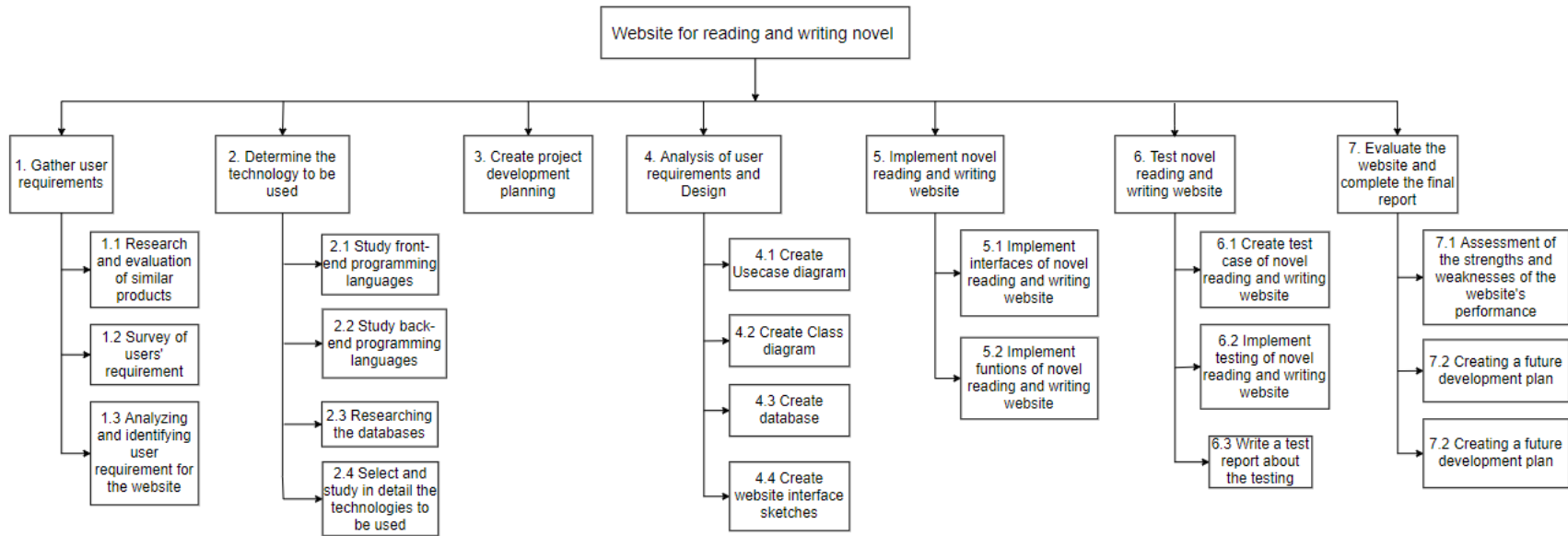


Figure 3: WBS of the project

Project plan:

Task Name	Duration	Start	Finish
1. Gather user requirements	24 days	Mon 03-08-20	Thu 03-09-20
1.1 Research and evaluation of similar products	15 days	Mon 03-08-20	Fri 21-08-20
1.2 Survey of user requirements	5 days	Mon 24-08-20	Fri 28-08-20
1.3 Analyzing and identifying user requirement for the website	4 days	Mon 31-08-20	Thu 03-09-20
2. Determine the technology to be used	41 days	Fri 04-09-20	Fri 30-10-20
2.1 Study front-end programming languages	6 days	Fri 04-09-20	Fri 11-09-20
2.2 Study back-end programming languages	10 days	Mon 14-09-20	Fri 25-09-20
2.3 Research the databases for novel reading and writing website	4 days	Mon 28-09-20	Thu 01-10-20
2.4 Select and study in detail the technologies to be used	21 days	Fri 02-10-20	Fri 30-10-20
3. Create development planning for novel reading and writing website	2 days	Mon 02-11-20	Tue 03-11-20
4. Analysis of user requirements and design for novel reading and writing website	23 days	Wed 04-11-20	Fri 04-12-20
4.1 Create Usecase diagram	3 days	Wed 04-11-20	Fri 06-11-20
4.2 Create Class diagram	5 days	Mon 09-11-20	Fri 13-11-20
4.3 Create database	7 days	Mon 16-11-20	Tue 24-11-20
4.4 Create website interface sketches	8 days	Wed 25-11-20	Fri 04-12-20
5. Implement novel reading and writing website	80 days	Mon 07-12-20	Fri 26-03-21
5.1 Implement interfaces of novel reading and writing website	25 days	Mon 07-12-20	Fri 08-01-21
5.2 Implement funtions of novel reading and writing website	55 days	Mon 11-01-21	Fri 26-03-21
6. Test novel reading and writing website	7 days	Mon 29-03-21	Tue 06-04-21
6.1 Create test case of novel reading and writing website	2 days	Mon 29-03-21	Tue 30-03-21
6.2 Implement testing of novel reading and writing website	3 days	Wed 31-03-21	Fri 02-04-21
6.3 Write a test report about the testing	2 days	Mon 05-04-21	Tue 06-04-21
7. Evaluate the website and complete the final report	18 days	Wed 07-04-21	Fri 30-04-21
7.1 Assessment of the strengths and weaknesses of the website's performance	2 days	Wed 07-04-21	Thu 08-04-21
7.2 Creating a future development plan	2 days	Fri 09-04-21	Mon 12-04-21
7.3 Finalize the final report	14 days	Tue 13-04-21	Fri 30-04-21

Figure 4: Plan of the project

6. Initial references

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