

# **PROJECT TITLE: Learning C++ made easier**

## **INTRODUCTION**

### **GOALS:**

- In this project, I would like to build a website which helps the user learn the basics of **C++** programming.

### **BENEFITS TO THE USER:**

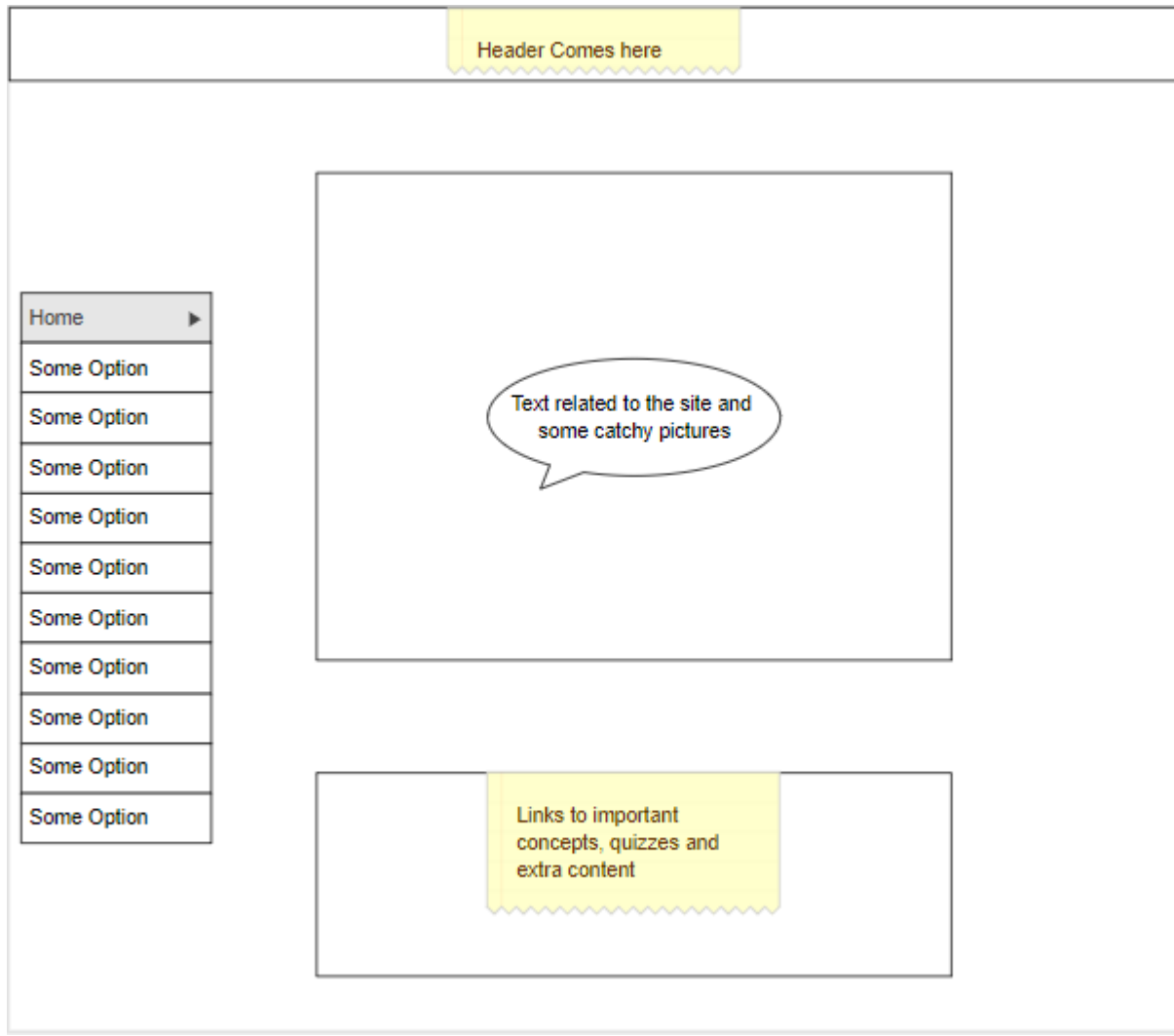
- Get to learn one of the most famous low level programming languages that has its influences in various modern programming languages.
- For a beginner, it can be seen as a first step for becoming a programmer.
- For someone transitioning from high to low level language, it will be helpful to see the similarities and differences.

### **EXPECTED FEATURES:**

- Responsive website.
- Visually appealing.
- Interactive quizzes to gauge to knowledge gained by the users.

## UI Design and Prototype

Most important thing for this application has to be simplicity and ease to use for the learner. They should feel a sense of attractiveness towards the application for better engagement.



I understand that the prototype doesn't look anywhere near attractive but the bigger goal here is to present the simplicity of the site. There would be fewer distractions.

So, the home page will present the user with some options related to various topics, quizzes and extra stuff. Some space in the right (in the prototype) seems to be unused but it might be used for messages by fellow learners, of course the space would be bigger may even warrant a section for itself but such a feature is difficult to implement and may even be dropped if it doesn't function well.

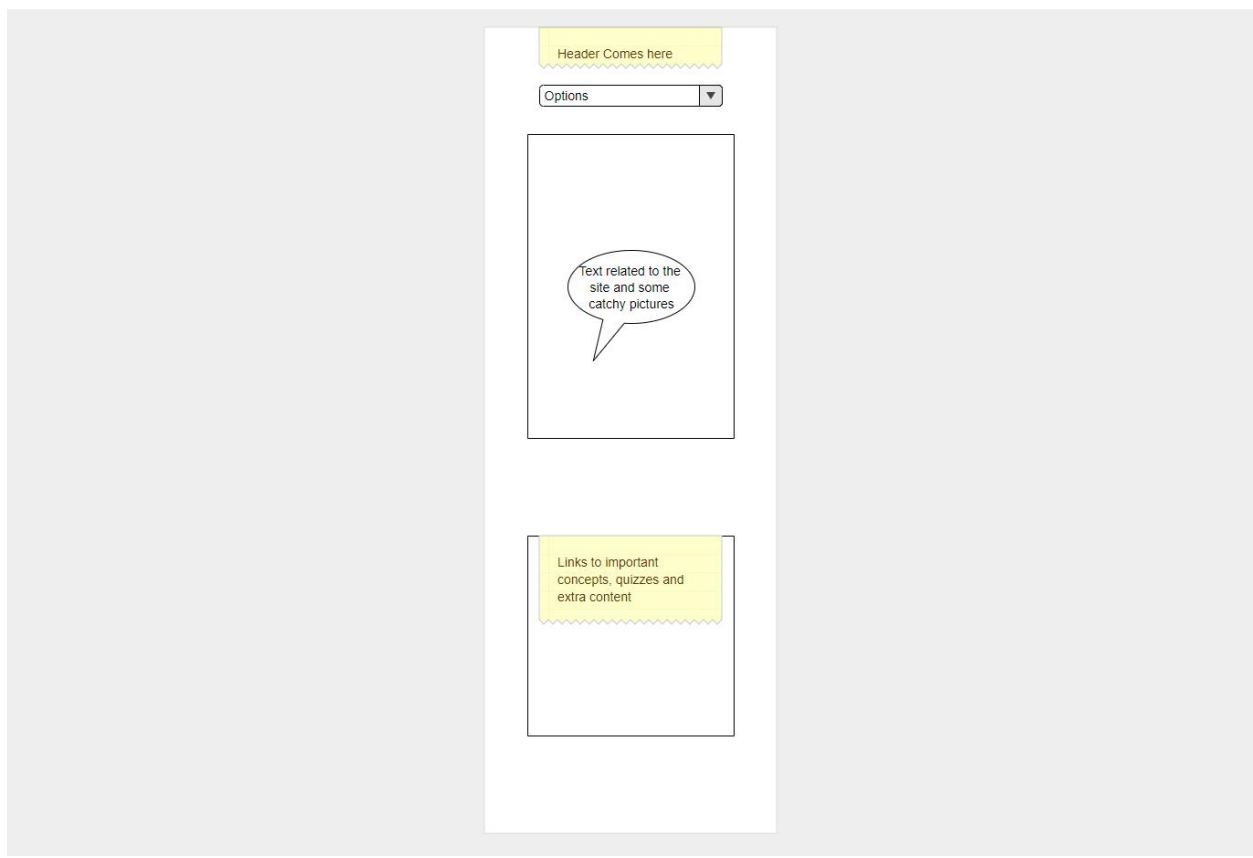


Figure: Home Page

## Navigation Structure

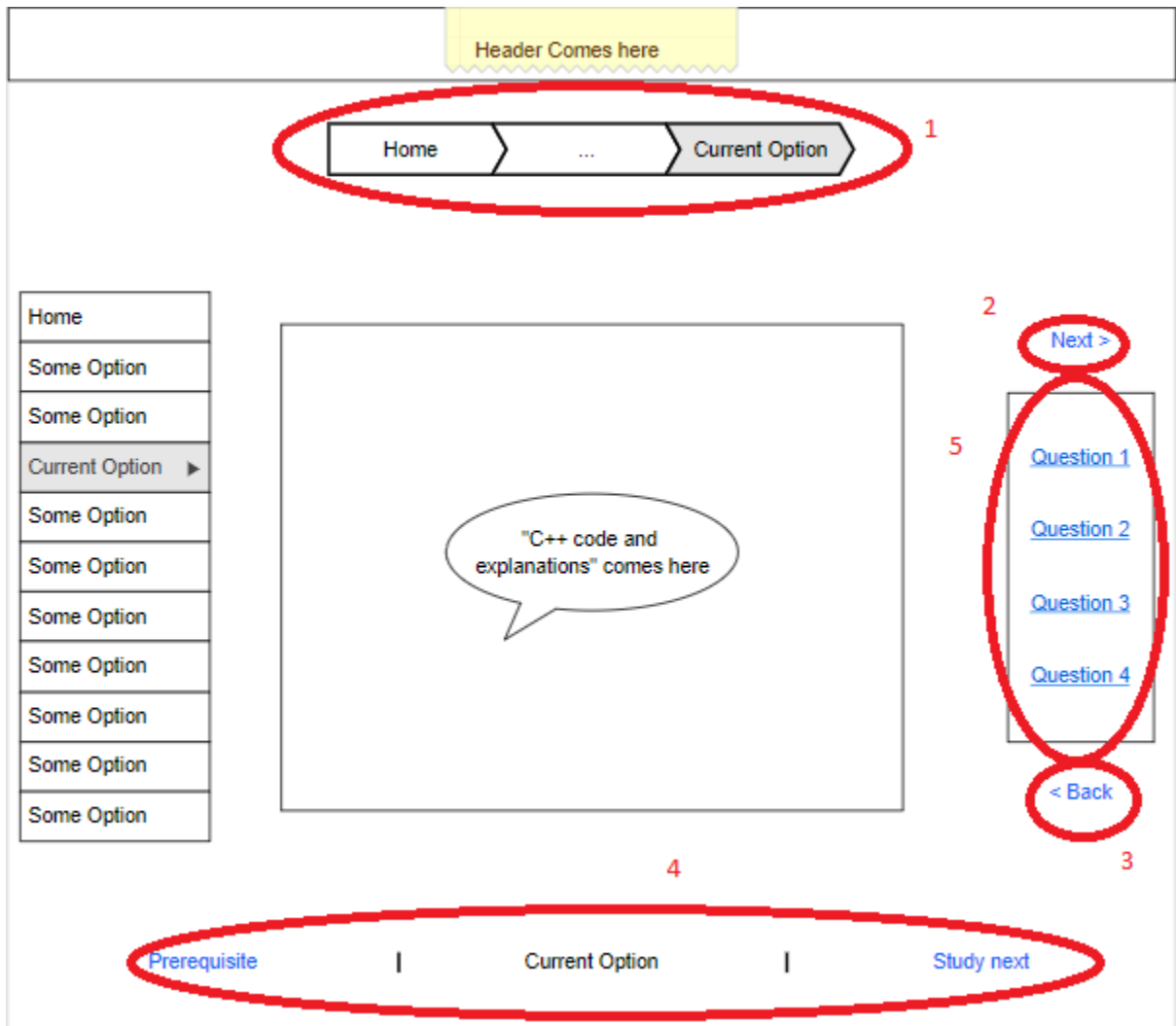
1. **Breadcrumbs** will help the student to select any topic that is part of the chapter/lesson. For example,

Home → Conditional Statements → if-else → Nested if-else

Here, the user can choose any of the topics that are part of the same lesson and backtrack accordingly.

2. **Next** will take the user to the next code snippet of the same topic or to the next topic. If the user is currently at the last section of the last topic, there will be no next button.
3. **Back** will take the user to the previous code snippet of the same topic or to the previous topic. If the user is currently at the first section of the first topic, there will be no back button.
4. These options will guide the user to the lesson that is required in order to understand the current lesson and the lesson that should be taken after the completion of the current lesson.
5. **Questions** will be asked at the end of each lesson, so as to gauge the understanding of the user of the current topic.

The Navigation bar to the left will provide links to all the lessons, quizzes and extra stuff.



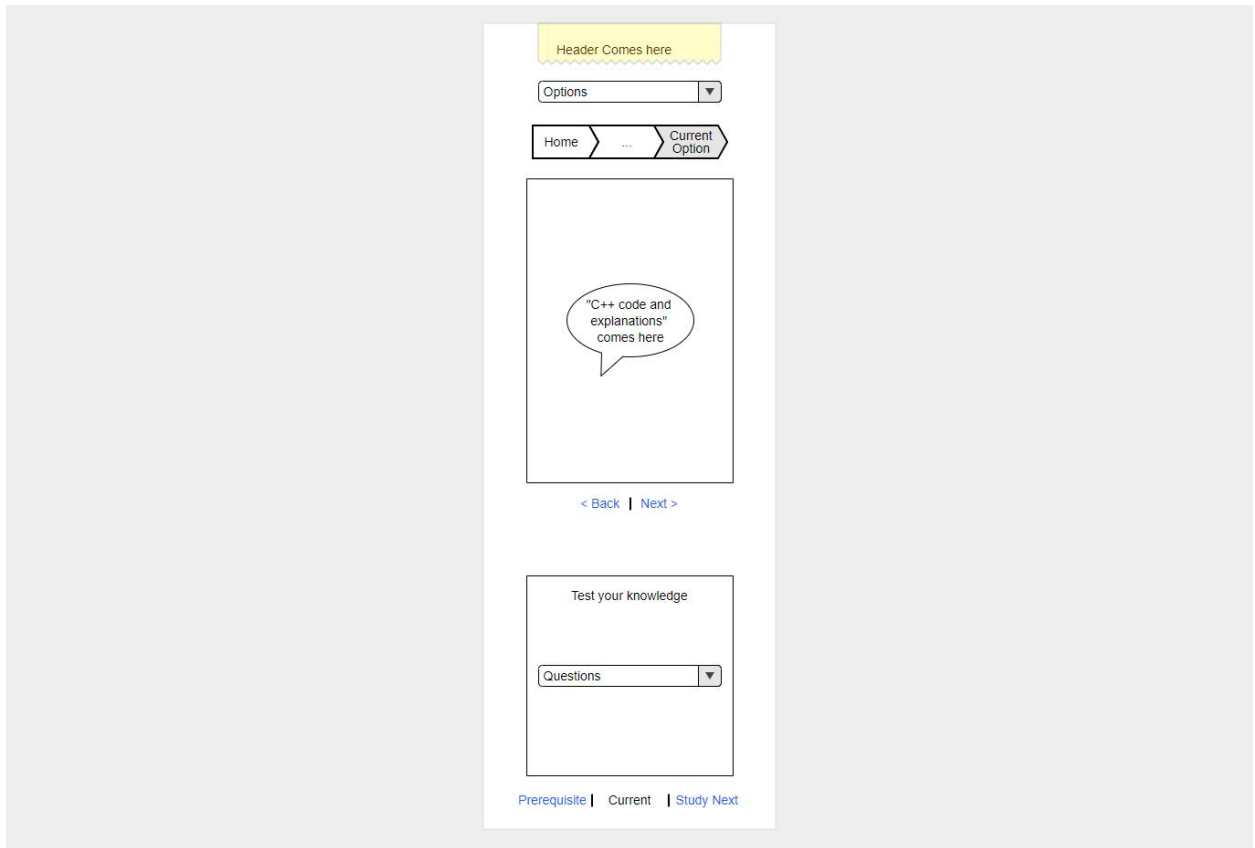


Figure: Other Content Pages

## **Tools Used and References**

- moqups.com (For the UI Design)
- geeksforgeeks.org
- coursera.org
- edx.org