

Project Requirements

Functional Requirements (User's View)

When a user accesses our site, they will be presented with a login screen. This screen will allow them to login to their account or create one if they have never used our site before. If a user wishes to create an account, the site will ask for a username, the user's email address, a password, and a retyping of the password. Once this information has been entered, the site will check for the availability of the username, as well as for matching passwords. All of this information will be encrypted so that we are not storing users' sensitive information. The idea behind having an account is to store a user's plans for their schedules, so that they do not have to reenter everything everytime they wish to use our service.

We will divide screen into two. Left half will be used to organize and plan course by semester. So far, we have four semester that will be displayed with class chosen by user with difficulty level display on the left side. With each semester, we will get total of the difficulty level to give user sense of workload they may used. Left half of the screen will be used to display list of all classes with difficulty level along the left side.

Non-Functional Requirements (Developer's View)

Our site will have to parse FCQ data in order to give feedback to users. In order to do this, we will have to have all the FCQ results stored somewhere on the server where the website is being hosted. This will allow us to use SQL to organize and filter the data.

Additionally, we will have to store user data. This will consist of encrypted login info, as well as previous searches and previously picked schedules. Again, an SQL database will probably be best suited for this, as it will make it easier to organize and retrieve everything.

Encrypting user data is important, as they will be providing us with their sensitive data. In order to do so, we will need to figure out what kind of encryption we want to use, as well as implement all the necessary ssl certificates so that our website is truly secure.

The most important part of our site will be the algorithm that will decide which classes user should take. This will take the user's preferences and academic requirements into consideration and will then provide the user with schedule options for the semester that they have chosen. Since the user will be able to provide input about which classes they want to take to the algorithm, we will need to make sure that the algorithm rearranges only those that can be. In other words, it will need to know about prerequisites and corequisites so that it does not give the user a schedule that will not work.