The University of Newcastle

School of Information and Physical Sciences

CompSci and InfoTech Work Integrated Learning

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Project Plan

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FreshmenGuide (reformat later)

1. Background

Also known as "The Future Academy", PSB Academy is a private education institute located in Singapore. Adopting a performance-based approach to education, PSB offers various types of programs such as: Certificates, Diplomas, Bachelors and Master's among its six schools. With over 13,000 students from all walks of life, PSB is also a multicultural and social hub (PSB Academy, n.d.).

Our objective is to help guide the university's local and international freshmen through some of its internal administrative processes. Some examples include: Signing up for school accounts and classes.

Our motivation for this project stems from our own personal experiences as former freshmen of the university. During the time where most of us were still new to the university, we felt lost completing respective administrative processes. Some of us were unsure about locations of campus facilities while others were confused by the navigation of university websites. As such, we decided to create a summary guide website to help other freshmen avoid facing similar issues.

At other companies and institutes, a general approach is to create articles containing various types of media accompanied by descriptions depicting how the processes are carried out. Some examples of such media include: video guides, image guides, animations and infographic guides.

We want to consolidate a list of relevant guides into a simple website where it is easily accessible for other freshmen. With our 6 month timeframe, it is feasible to complete this project provided that our team has the adequate skills necessary.

2. Aims

Our aim for this project is to help the freshman of university looking for any information around campus by using our web application. Many universities store their information in different web applications. Sometimes it confuses the freshman as they are new to the environment of the online platform of university.

One of our goals is to make our freshmen feel that our web application is easy to use and make them feel that our web application helps them in many ways. We want them to have a great user experience since they are enjoying our user interface. The goals of our web applications are

- Assist freshman to adapt to the campus environment quickly
- Provide a useful information for the freshman
- Make a web application that is fun for the freshman student
- Keep our web application updated to the current trend.

We will keep enhancing our web application since the world keeps changing. To keep updating our web application to the current trend is important to make our web application interesting to the eye of the freshman. The vision that we aim is actually to have students using our website to communicate with the admin easier. This objective can be achieved with the support of all staff in university, students and lecturers.

Most universities in the world just use their web application for an upcoming student who wants to enroll in their university. When the students have enrolled, most of them don't use the web application anymore since they think the web application doesn't store the information they need for their enrollment. For example, we want our web application to be similar to Harvard web application. We want it to be neat and always informative. We will always do research to know the update of the information we have to put for our freshman and we will try to make something that other universities don't have in their web application. We will do constant research for this.

3. Methods and Activities

The first step that we undertook in this project was to gather more information about this project by doing some research where we want to have a clear grasp of the aim and primary goals for our website to meet the needs of our target audience. Different websites offer different functionalities to visitors, hence we figured that we need to use the various skills that we learned in our studies to meet our objectives.

After we have finished the research, we then created a work breakdown structure for the team. This will serve as a planning tool to help our team to plan, define and organize with the deliverables. We first look through the specifications and identify the deliverables and identify the strengths of each team member to decide who is suitable to meet each deliverable as we believe in the ability of each member to do his/her part.

The next step was to do planning. We figured that before we can start the coding process or working on the finalized design, we need to gain approval from our lecturer that everything appears good before we can move on to the next stage of development. A wireframe or mock-up is developed in this instance, from the wireframe, we can specify what items to be placed on the page and where they will be placed.

Once the wireframe is approved, we then move on to the design phase where this is to allow us to get an impression of the final product. We decide on which color palette to use so that it looks attractive to students. Once our color palette is decided, we then move on to do a website layout with the colors, logos, images and the data which is hard-coded in this case. We let our lecturer review the layout to get his feedback and we will make some improvement based on the feedback he gave us.

Our next step was to proceed on to coding, for the data, we need to store it in a SQL database as the database cannot be viewed since HTML is a front-end language. If the planned page needs to access data from a SQL database, we know that it must be written in a language like ASP or PHP. We enter the data acquired before into the database and categorise it when the database and web page are generated.

When we finished with the development of all pages of the website, we moved on to the testing phase. During the testing, we had to verify that every single link should link to a page and that none of the links is broken and that everything from the database should be loaded correctly and not missing.

4. Ethics, intellectual property and confidentiality considerations

Ethical considerations of web development include Inclusivity, Accessibility, Security and Privacy, and Professionalism.

Firstly, the web application should be inclusive to all its users. It should be developed such that its respective layouts and controls are easy to understand and use by users (W3C Web Accessibility Initiative, n.d.). Additionally, all texts and media used in the application has to be human readable (Scott, n.d.). The web application may also include a language translator to cater for its international users. Other considerations such as providing a clean interface and clear navigations can be incorporated into the web application to be inclusive towards users with cognitive disabilities (University of Washington, 2022).

The web application should also be accessible to its users. This means that the web application should be responsive and made available on as many platforms as possible such as mobile devices, computers and handheld tablets. It should also have good web performance to allow delivery of content to users as soon as possible. (Scott, n.d.).

As part of the Privacy Act (Australian Government, n.d.), the web application is also expected to be secure to protect the privacy and data of its users. The application must adopt security practices such as using HTTPS protocols and data encryption. In addition, users must be made aware about any form of data collection and data processing through the website's privacy policy. Furthermore, administrators viewing this information should remain respectful towards their users and not mock them for any data collected that's related to them (Scott, n.d.). Any administrator, developer or personnel involved with data collection and processing should not attempt to sell any user data to third parties.

Lastly, while developing the web application, developers must adhere to the highest professional standard. All codes produced in the project must be credited if it is referenced and as much as possible, developers should make their code original. Additionally, all media and material used must not violate any copyright and infringement laws.

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