Report for INFO263

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PART 1

Our website is composed of a map and a dropdown list, which is created for clients to select traveling routes. Because all of us are not good at art design, our website is presented in a very simple style. However, it does not compromise the functions and usability of the website.

This website is aimed at people who live in Auckland, and it allows them to conveniently track buses which they want to take and save their time for waiting for buses. To finish this task, clients should select the route that they want to take from the dropdown list at first. Once the route is selected, the icons of buses that are available on the route will be displayed automatically on the map. With this function, clients are able to know the locations of buses and the most suitable time for them to go to the bus stop. The map will renew in every 30 seconds. This functionality helps clients to acquire the real-time position of the bus. Besides, when clients click on the bus icon, the information including its route name, route number, bus number, longitude and latitude of the bus will be demonstrated.

On the server-side, the major files are index.php, example\_request.php and map.js. In order to keep the codes well-organised and tidy, codes about map are written in the map.js which includes Google map API to assist demonstrating map on the website. In index.php, the function of written code is importing data from SQL file which provides information of routes. Those codes are one of the most important parts of the project, as they are the fundamental codes for successfully achieving the creation of dropdown list, buses on map and buses information. The connection to database in SQL is realised by using require\_once config.php which stores the information of accessing database. At the same time, names of routes will be displayed in the dropdown list part by importing the data for SQL file, so that it made the codes simpler and reduced the workloads. The major functionality of example\_request.php is call Auckland Transport API. Codes in this file reflect the data from SQL file on the map so that buses on routes and information of selected bus for clients can be demonstrated in real time. Besides, other files in the project such as files in include folder are used to show the header, footer and store the information of the SQL file.

PART 2 Teamwork

Group project is always an ideal way for students to develop their abilities of collaborating with others. In this project, all of the members in the group did not know each other before, so one of the problems that we facing was communicating effectively. We started to do the project on Monday of week 8 and we met at the central library to have a very brief meeting. At that meeting, we just discussed about the purpose of this project and decided to do the project on week 9. What we did on week 8 was reviewing previous tutorials and the content on the text book, because we thought that we could do the project more successfully on the basis of understanding the content of the course.

We began to do the project formally on Tuesday of week 9. Since we deemed that it was difficult to distribute tasks clearly, we decided to do the project together firstly. We met at Law 110 and we demonstrated the map on the website at that day. It looked everything went well, however, a problem came out on next day. We tried to import SQL data into php file. Even though we did import it and make them be shown in the dropdown list as well actually, the problem was all the data was demonstrated under the map on the website. We have to admit that we did not learn well about php and we were not familiar with it at that time. We used several days to try to figure it out (actually it was quite easy to solve this problem) and finally we found that we should put the data into new variables instead of echoing them. Those new variables were necessary at the later stage of this project, for example, demonstrating buses information.

Another thing that impacted us significantly was the leave of one of our group member, Yunnuo Wang. He dropped INFO 263 on week 10. He gave some good suggestions about the project, but unfortunately he had to drop the course because he got illness quite frequently during term two and he felt he could not continue this course anymore. After he left, we realised our workloads will be increased significantly and the quality of our project may decline due to the limited time and lack of one group member.

We felt that we should do our project more quickly, since all of us realised our time is insufficient. Nevertheless, the project was still not completed on week 11, since we had some other assignments to be due at the same time. Meanwhile, we regretted that we did not distribute tasks properly at the beginning, which might facilitate us to finish the project fast. In addition, at the later stage of our assignment such as finishing example requests.php file, we did the task repeatedly as lacking well-organised distribution and that reduced our efficiency. For the lack of well distribution and knowledge, the distribution of each person is not completely equal. Donqi did the most difficult parts of the project and he was the person that guided us to do the project. As we acknowledged, he did at least 50 per cent of the project. Xinyi did about 30 per cent of the project which included writing the report, adding the comment for each file, giving some suggestions and altering some codes. Jingyuan gave some suggestions for the project and altered some codes as well. He may distribute 20 per cent for the project.

As far as we are concerned, this project allows us to practice what we have learnt from the course and improve our abilities of self-studying. Besides, we also learnt what teamwork is and how to do it. Teamwork is an essential part of the education system in western country. Everyone in a team will try to contribute to the project by using the knowledge that they know and learn what they do not know from other team members. Eventually all of us learn the core spirit and principles of team work, even though we did experience some tough time.