**Individual Diary**

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Date: 10/6/2015

After finalizing the documentation we then begun with the coding of the project. Together we met up in college and brainstormed regarding the implementation of the infographics. We decided to code the infographics into different hierarchies which would make our work much easier and also allowing the infographic component to be dynamically changed with ease. Elle and I were tasked with creating the UI for the infographics while our group member wee was tasked with making the text file editor. Ur group leader Kapil headed back to Malaysia during the break and continued his work from there. Kapil was tasked with coming up with an overall idea of how the simulation would be implemented. While getting the initial work underway with the UI I also worked with Wee to come up with a way to integrate the infographic component which was developed on console with the ui.

Date: 30/7/2015

This would be the last week of the holiday in which we have most of the infographic components already fully developed. However, a few bugs were present in the developed infographics which we had to slowly debug and sort out. The quiz component was also being partially developed. We then proceeded to present our work Luke which suggested that an XML based file reading system would be better to populate the infographics because it is much easier to understand. We considered that as an additional improvement which might be implemented in the future if we have time. Kapil had also returned from Malaysia and came up with methods to implement the fuel and engine system.

Date: 6/8/2015

We proceeded to show Luke what Kapil had come up with during the semester break. We discussed with Luke the many things we considered in the simulation before implementing it such as incorrect fuel types, inclined slopes and also dynamically changing the simulation based on the fuel. We were advised to run the simulation first on the console before integrating it with UI. Luke also advised us to try out using SFML to provide a more dynamic simulation rather than coding everything solely through C++. Our project was also assessed by various lecturers such as Marcus for additional improvements. Marcus suggested that we should incorporate danger situations and how to actually overcome them into our program because they could be vital for drivers to understand the dangers and how to overcome them.

Date: 20/8/2015

A demo of our project was accessed by college assessors to gain feedback regarding what we have done. As stated before the safety features in the infographic would be a valuable addition. Kapil continued working on the simulation and we found out that it is highly difficult to thread the UI as it is already multithreaded. Therefore we decided to thread the simulation separately in SFML rather than Microsoft Windows Form. We also decided to include audio for the radio system if possible.

Date: 27/8/2015

A small portion of the simulation was able to be completed in console. The part in question is the Fuel System. Elle, Wee and I decided to work on the SFML window to get the UI ready for integration with the simulation system Kapil has been working on. Through the use of SFML we did not have to worry about multithreading with windows form and also that SFML has a GUI version called SFGUI which also aids us in making the UI much easier. We then proceeded to try and get SFGUI working for our project.