## **Group Diary**

Meeting Minutes #1

Date: 27/3/2015

Time:

## Agenda

- Meeting with new advisor for new project

#### Minutes

- Today we met up with our new advisor to talk about the possible projects that we can work on. The previous project seems too difficult due to the lack of expertise in the game development field. We listed a few possible projects that we are interested in and capable of doing from a list of projects. Two projects that stood out was Body Systems and Car systems, both bring distributed systems project.
- We decided to take on the Car Systems project.

#### Action Item

- Thinking of possible ideas/ways for implementation of software

Meeting Minutes #2

Date: 30/3/2015

## Agenda

- Discussion on the project, Car Systems

#### Minutes

- We discussed how the system would look in terms of its interface. Buttons which surrounds a car represents different parts of the cars, and detailed description is given for each parts.
- For later parts of the project, as we simulate the processes in a car, for example refuelling the car, different parts of the car which are required for the process are shown and a simple animation of sort will show how the process is done.
- The implementation of a quiz to test the users on his knowledge on cars could be implemented in the system.
- Other than learning the processes in a car, the software also aims to teach the users things such as what each dashboard symbol represents and much more.

## Agenda

- Learning of Visual C++
- Requirements
- Presentation

#### Meeting Minutes #3

Date: 2/4/2015

## Agenda

- Review on presentation and prototype

#### Minutes

- Dyalan and Elle showed the prototype they have been working on to Luke.
  Reconfirmation on what program should be used was also directed towards Luke.
  Visual C++ and Qt were both being considered for the development of the project.
  Much more learning would be required for using Qt compared to Visual C++. We decided to stick with Visual C++ for now.
- Kapil then showed Luke the presentation that he has been working on and modified from the previous project. Discussions were brought up on things that might require changing. This allow for further understanding of the project in hand for all of us as a group and how we will soon approach it.

#### Action Item

- Continue development of prototype
- Presentation and requirements

# Kapil Haresh Vigneswaren 4474685

#### 27 March 2015

We had our first meeting with our project supervisor, where we went through the general requriements of the project. At this point, we have discovered that the main expectiation of the project would be to implement some form of information sharing between threads, and when possible, the functionalities should be run with multiple threads.

We also decided that due to our lack of experience with a game engine, it would make sense to work this out in C++, and consider to have little videos (like flash videos) implemented in the functions in order to give the live simulation effect. For example, if a user were to turn on the wipers in the car, the flash video embedded would switch to one with a video of car wipers in operation. However this has not been fully decided at this point in time.

#### 30 March 2015

Over the weekend, I got Dyalan and Hui Jia to begin working on finding out how would visual C++, Visual Basic and Qt help us in the design process of the UI for the program. This was essential as this would allow us to decide which development environment we would be using. We decided the development environment should support the use of C++ as this was a language we commonly knew, and would save us time as we have a lot of features that we have to implement. Plus, implementing threads can get messy, hence at least having a language we know well allows us to have more time to work on getting the features to work.

In the mean time, I worked on the presentation that would be due at the start of week of week 7, which isn't too long from now. At this point I have a first draft of the presentation completed, so that it can be reviewed by the project coordinator. Shien Wee was tasked on trying to see if it would be worth modelling the cars by trying to come out with a model of a car in Lightwave.

We also met up with our project coordinator to get more information regarding the project. For now, we also decided that in addition to a simulation of the car systems, we should also have an infographic section that allows a user to click on a certain "hotspot" of a car like a door mirror or sunroof to be able to get a description of that part. The main goal of this would be to allow users to learn about the various parts of the car. We also went through regarding the types of systems we should simulation in the simulation section of the software. Lastly, we also would be adding a quiz system, to allow us to test the user about their understanding, so that the user would be able to find the sections of the car they should brush up on.

#### 2 April 2015

We met with the project coordinator today to show a low level prototype of the infographic section of the software. We noticed that Visual Basic feels like it is limiting our program's ability as the UI features are rather limited. In regards to this, we would be looking at Visual C++ instead. Qt was considered but the lack of user-friendliness made Visual C++ more appealing.

I managed to get a review on the presentation I prepared and have noted some changes that should be made to the presentation, mainly content and the colour selection. Shien Wee noted that the idea of modelling a car may not be effective in our situation, so we have decided to use a static image of a car instead from a stock photo as our base for the infographic section.

Over the holidays, I would be working on finishing the SRS and the presentation, while the rest of the group begin working on learning Visual C++ and starting to prototype with it.

## 6 April 2015

I have completed all the changes necessary for the presentation and completed the draft of the software requirements document at this point. Since it is now our break, I have emailed a copy of both to our supervisor to get his feedback on both documents. I would be working on the one page summary for our presentation today and will be completing it today. I will be meeting with my group after the holidays to discuss progress.

**Individual Diary** 

Name: Ng Shien Wee

Date: 27/3/2015

We decided to change our projects due to the lack of game developing students among our group. I am a bit disappointed but for the best of the group we shall then work on a new project. We met up with our new advisor today which is Luke to talk about the projects that we can work on. We were shown a long list of projects and we chose the projects that we are interested in and listed them down. After doing so, we then decided which we shall work on. Body Systems and Car System caught our eye and both projects are distributed systems project. We went with Car Systems, that's a good thing as we had a car enthusiast among us and it might make this easier for us.

Date: 30/3/2015

We met up with the supervisor again today. I happen to be a bit late for the meeting for today as I had a lab. After my lab, I went to find out from my group mates on what was discussed today. I found out that I might have to model a car for the project. I'm not too confident with my modelling skills. The things they discussed today were about how the interface would look like and the different features that might be implemented for the system. A car model where each parts will be highlighted when clicked and the part clicked on will be explained in detail for the users. That seens to be what the first stage of the project would be like

Date: 2/4/2015

We met up with the advisor again today. Dyalan and Elle showed the prototype they have been working on to Luke. Software to be used for development was then discussed. We were discussing whether we should be using Qt or Visual C++. It seems the learning curve for Qt would be much higher compared to Visual C++, and seeing how busy we already are, Visual C++ seems like the most appropriate choice. Kapil then showed Luke the presentation that he has been working on, modified from the previous project and got feedback. We all dished out ideas about the presentation. I think it was a great insight on the project that we will be working on. I will be working on development with Elle and Dyalan.

INDIVIDUAL DIARY

Name: YEOH HUI JIA

Date: 27<sup>th</sup> March 2015

We held a meeting with Luke to discuss which project would be suitable for the group.

We listed down a few possibilities which include Car Systems and Body Systems. We

considered the strengths of our group - in terms of our skill sets as well as the major

that each member is taking and found that we could consider taking up a distributed

systems based project, which would be either the car systems or the body systems.

After a brief discussion amongst ourselves, we decided that the car systems would be

an interesting project to take up.

**INDIVIDUAL DIARY** 

Name: YEOH HUI JIA

Date: 30<sup>th</sup> March 2015

We met up once again with Luke to discuss the possible contents of the project since

the description was fairly vague. We pointed out what the user will probably see – which

includes the simulation as to how the fuel is used and how the electrical parts of the car

are connected and which part of the car is connected to the engine and such. We also

brought up the possibility of having a quiz for the users so they can test out their

knowledge. Other essential things related to the car will also be included for the user to

learn (i.e. dashboard symbols).

The points obtained during the meeting will be the foundation of the requirements for

this project.

INDIVIDUAL DIARY

Name: YEOH HUI JIA

Date: 31st March 2015

Both Dyalan and I were left in charge to fiddle around with Microsoft Visual Studio and

test out some basic GUI creation using Visual C++. So far, we have been able to work

on a relatively working GUI using Visual Basic but have come up with little progress

using Visual C++. The functions for Visual Basic is more GUI friendly in terms of its

coding and application while Visual C++ is more friendly in terms of computational and

also we have never done GUI in C++, hence the unfamiliarity with the concept.

Nonetheless, we will be discussing this issue with Luke, our supervisor and the rest of

our group members on which would be more suitable to incorporate with our project.

INDIVIDUAL DIARY

Name: YEOH HUI JIA

Date: 2<sup>nd</sup> April 2015

We held another meeting with Luke and brought up the subject regarding Visual Basic

and Visual C++ and which would be better. Luke advised us that Visual C++ would be a

better choice as it would be difficult to incorporate Visual Basic with the C++ coding that

we will be doing for the simulation. Besides, Kapil, our group leader, did a brief preview

of the presentation slides that we will be using for the planning presentation in week 7 to

Luke. We also discussed the possible approaches for presenting the image of the car

for the learning part of the project – which is either a 3D model or a basic PNG image of

the car. We also looked at the Essential Anatomy 3 app released by 3D4Medical and

Luke mentioned that if we wanted to make the learning part like how they did, we would

have to use a game engine.

#### INDIVIDUAL DIARY

Name: Dyalan Shanmugarajah

UOW ID: 4546167

Date: 27/3/2015

We met up Mr. Luke to discuss the many possible projects which we could choose from. There were many available but not all of them were suited for our specialties. After going through the list of projects, we decided on the car systems topic which seems more suited to us. The overall goal of the chosen assignment was about increasing a user's understanding of the underlying processes which occur within a car as well as to provide information regarding car components. We believe that this assignment would be more suited for us because it uses the implementation of C++ which we are quite familiar with.

#### **INDIVIDUAL DIARY**

Name: Dyalan Shanmugarajah

UOW ID: 4546167

Date: 30/3/2015

Today, we discuss the assignment in detail with our supervisor, Mr. Luke. We discussed how the outlook of the program should be as well as its initial components. We decided on which software to use and to look into to begin coding for this project and we also allocated roles to our group members to complete this project. For me and Elle, our task was to begin learning the GUI part of c++ through Visual c++.

#### **INDIVIDUAL DIARY**

Name: Dyalan Shanmugarajah

UOW ID: 4546167

Date: 2/4/2015

Today we met up with our supervisor Mr. Luke again to show our progress, we came up with a simple mockup model for the first part and also showed the presentation slides which our group leader Kapil Haresh has also completed. Through Mr. Luke's guidance we were able to see the flaws in our ways and were able to correct them easily in the early stages of our project.