Raw notes (first meeting):

* The client, DR Goldrick owns a restaurant and is losing customers to the internet café that is nearby. To combat this, he would like to implement a touchscreen game that customers can play while they are waiting for their food.
* The game must include a high score board, where score will be uploaded and can be sorted different ways such as per day, year etc.
* The game must address a wide audience, keeping it easy to pick up and play while also remaining attractive to experienced players
* The client was thinking of a ‘space invaders’ type game, where the difficulty progresses as you continue.

Business name: Restaurant at the end of the universe  
Client contact: DR Goldrick

Completion date: This project will be carried out in a modular approach; starting on the 17th of May and finishing on the 20th June.

Additional meetings: Meetings are to be planned weekly, discussing any issues that may arise from developing the software.

Budget: ask in next meeting

Key objectives: The owner of the end of the universe wishes to have a tablet-based game that customers can play while they are waiting for their food, drinks etc. This game should attract all audiences, keeping the game is to play while also having a competitive element. The game will get harder as it progresses, having a high score board which can be sorted in different ways.

Marketing objectives and target audience: This game will be marketed for all members of the audience, including people who have never played a game before while keeping a competitive element for the skilled players

Ethical, legal and social issues:

* Offensive nature:

The game will be available for all customers of the restaurant, due to this any element of violence, offensive language or sexual content are not to be included.

* Wide range of players:

Due to the wide range of players we will experience experienced and unexperienced customers who wish to play the game. To accommodate for all skills levels, the game will be easy to learn before slowing progressing into the more challenging difficulty. An instructions page will also be added

* Customers with visual impairments:

Some customers that have visual impairments will wish to play the game. In order to help their visibility, bright colours will be introduced on collision blocks to make them stand out more.

* Software licencing:

The software that I will be creating for your business needs to be listed under a software licence. The software that I will provide for you falls under the category of a proprietary licence This licence type allows you to use the software, however you are not able to re-sell, alter or recreate. Details of this licence will be further stated within the EULA separate document). This will protect you and myself from being liable from events that may arise.

* Inappropriate names:

When saving your high score within the game the user will be able to pick any name they like. This is an ethical/ social issue as they may use inappropriate names when saving their high score. In order to combat this, I will create a text document full of inappropriate names that the software will check against in order to see whether the name entered by the user is appropriate.

Proposed game name: Racing at the End of the universe!

Purpose and function: Racing at the End of the universe will be a 2d racing game where users will control a car to move left and right using touchscreen buttons. The car will be placed on a continuous road, dodging cars that are coming against it. Each time a car is passed a point will be added to the score, eventually ending when the player hits an oncoming car. These scores will be kept in a high score board, which will be sorted by top 5 overall and daily scores. Racing at the End of the universe will initially start off easy, difficulty will then be increased with more cars and a faster speed.

Format: This game will be programmed in a python, using the Pygame module. Using the modular approach, each sprint will be worked on and uploaded to GitHub. Each of the four sprints will have individual goals, which will be completed and documented before moving to the next.

Design Project plan:

Sprint 1:

* Experimentation of design, what works, what doesn’t ?

Sprint 2:

* Menu screens added
* Basic game development with little graphics
* Playable gameplay
* Any major gameplay clashes documented and resolved

Sprint 3:

* Add progressive difficulty to the game
* Add a score which is updated when a car is passed
* Add a variety of enemy cars with different hit boxes and speed

Sprint 4:

* High score board developed
* Any additional gameplay errors corrected

Sprint 5:

* Graphics introduced for all models
* Cutscene introduction
* Finalisation of any details

Attachments: Racing to the end of the universe will contain multiple graphics, sounds and cutscenes throughout the game. These attachments can be found within the media folder. The following list contains all the extra attachments:

Background Highscore.png: Background graphic for the highscore menu.

Background Main.png: Background graphic for the main menu, this also includes the title at the top of the screen so that we don’t have to display text within the code.

Background Road.png: Background graphic for the road, this is moved down the screen in a loop creating the illusion of an endless road.

Highscores.txt: Text document containing the overall highscores of players. Data is separated by tabs and is in the following order; name, score, date. If this document is missing a new one will be created when the score is saved.

Name check.txt: Contains all inappropriate names that are checked against when saving within the game. The names are listed as lower case and are separated by tabs.

Todays Highscores.txt: Text document containing the daily highscores of players. Data is separated by tabs and is in the following order; name, score, date. If this document is missing a new one will be created when the score is saved.

Enemy 0 – 6.png: Graphics for the enemy car, all varying in size (size is not set in code), cars are different colours in order to determine between them.

Left.png: Graphic for the left arrow button in game.

Left highlight.png: Graphic for the left button when mouse is hovering over it within the game.

Right.png: Graphic for the right arrow button in game.

Right highlight.png: Graphic for the right button when mouse is hovering over it within the game.

Red car.png: Graphic for the main player car within the game; this graphic is displayed when the car is travelling straight.

Red car left.png: Graphic for the main player car within the game; this graphic is displayed when the car is travelling left.

Red car right.png: Graphic for the main player car within the game; this graphic is displayed when the car is travelling right.

**Python modules (files):** There are three modues that have different purposes within the entire code. Each module contains a variety of functions and classes that are defined within the code. Here is a brief description of each muddle and a list of functions/classes:

racingToTheEndOfTheUniverse.py: This is the main module that controls all of the processes. Here you will mainly find the code that controls which screen to display as well as the main game loop that then references to other classes as well as initial start-up procedures such as loading images.

* Game (class)

Mods.py: Within this module you will find majority of the classes/ functions that are referred to from the main module. Global variables are not passed from the main module, so they need to be passed when creating an object within a class.

* Button (class)
* arrowButton (class)
* player (class)
* rTxt (function)
* Ecar (class)
* checkScore (function)

Highscores.py: Within this module you will find the class that is referred to when dealing with high scores. This includes methods such as rendering, sorting and appending high scores.

* highscore (class)

**Licence agreement:** Racing to the end of the universe will sold to your business under the proprietary software licence. See the separately attached document for more information on the proprietary licence, Eula and intellectual property.