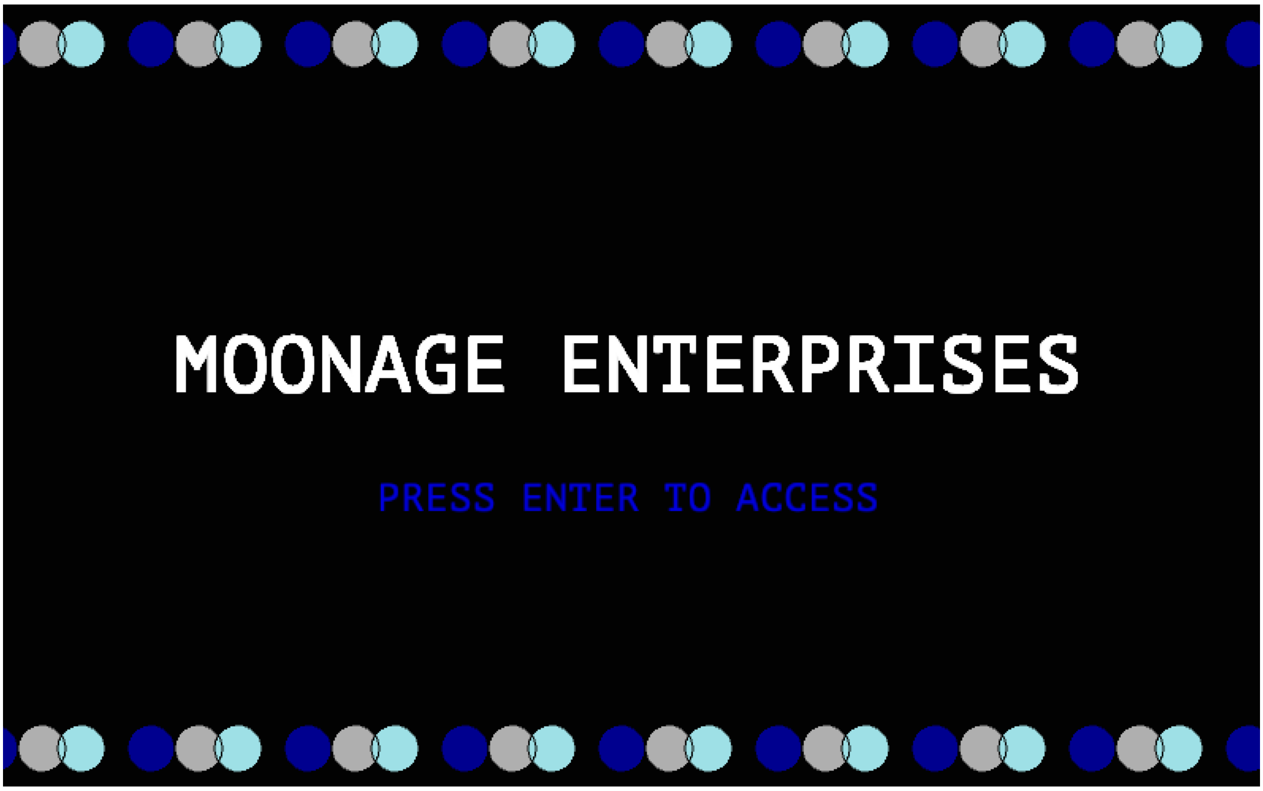
C15902129 Assignment submission: Tuesday, 29 November 2016

Read Me

OOP Assignment - Sci-fi Interface

My assignment is a sci-fi interface created using a number of arcs, grids, rectangles and P-Shapes.

The Front Screen



MOONAGE ENTERPRISES

PRESS ENTER TO ACCESS

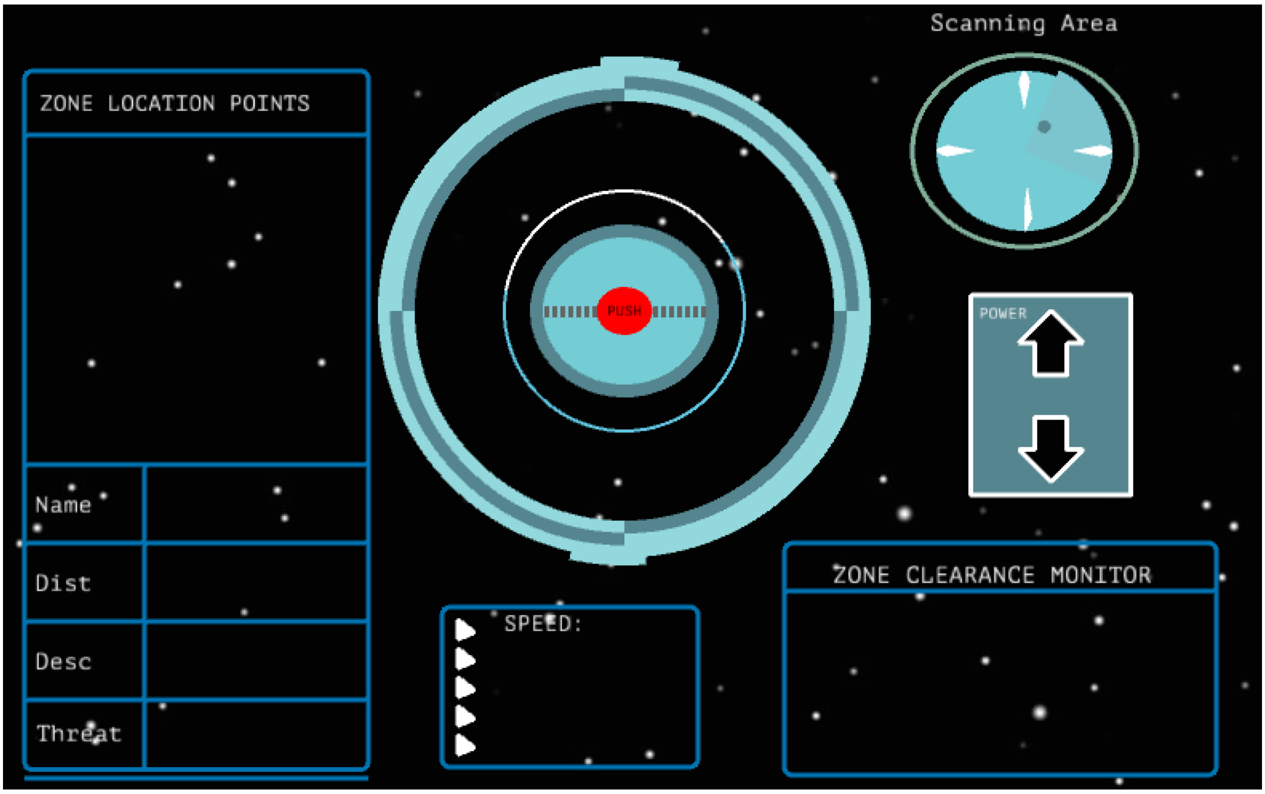
The Front Screen is displayed when the programme is first created, I chose to name this after my favourite Bowie song as I happened to be listening to it during creating the interface for some spacey inspiration.

I used a number of ellipses for this to represent the moon and had them flashing in different colours around my blue, white and grey colour scheme.

All of my **user interaction** can be found under the heading **Action** throughout the ReadMe.

Action: Press “ENTER” or “RETURN” to display main screen

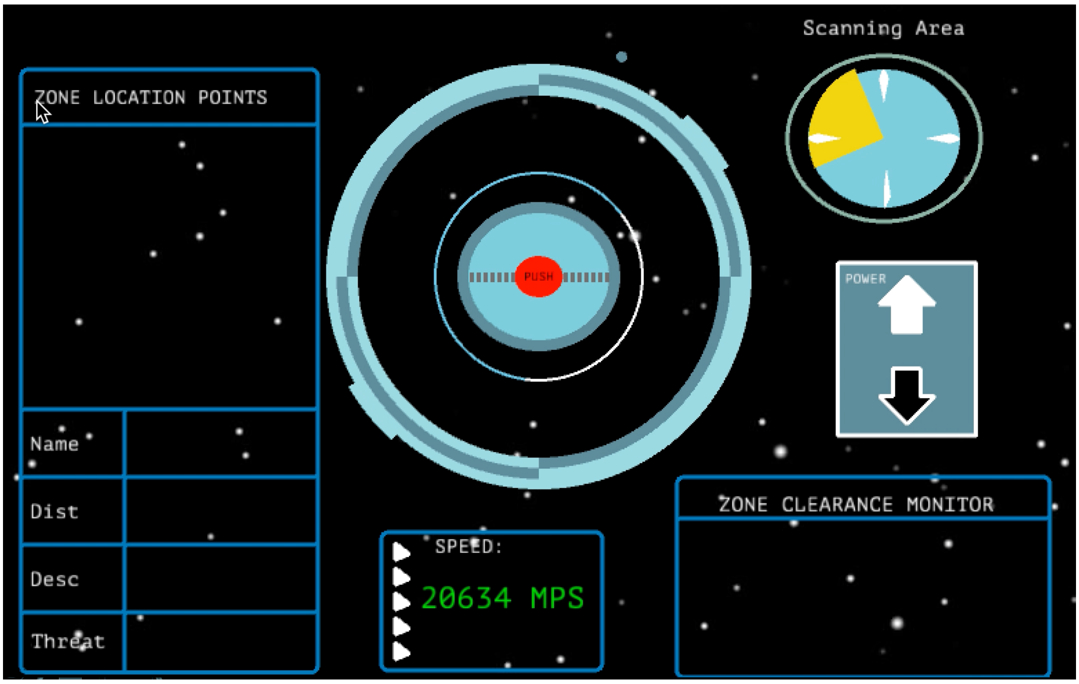
Main Screen



As you enter the main screen, you can hear the mothership sound, this was added using the minim library in processing and from a free clip on www.audiosound.com.

Action: Press “UP” key this is to simulate revving or starting an engine and you will see the speed is clocking up. It also checks the area is clear for take-off in the scanning area dial. Once you feel it’s loaded enough continue to next action.

Demonstration of “UP” Key action



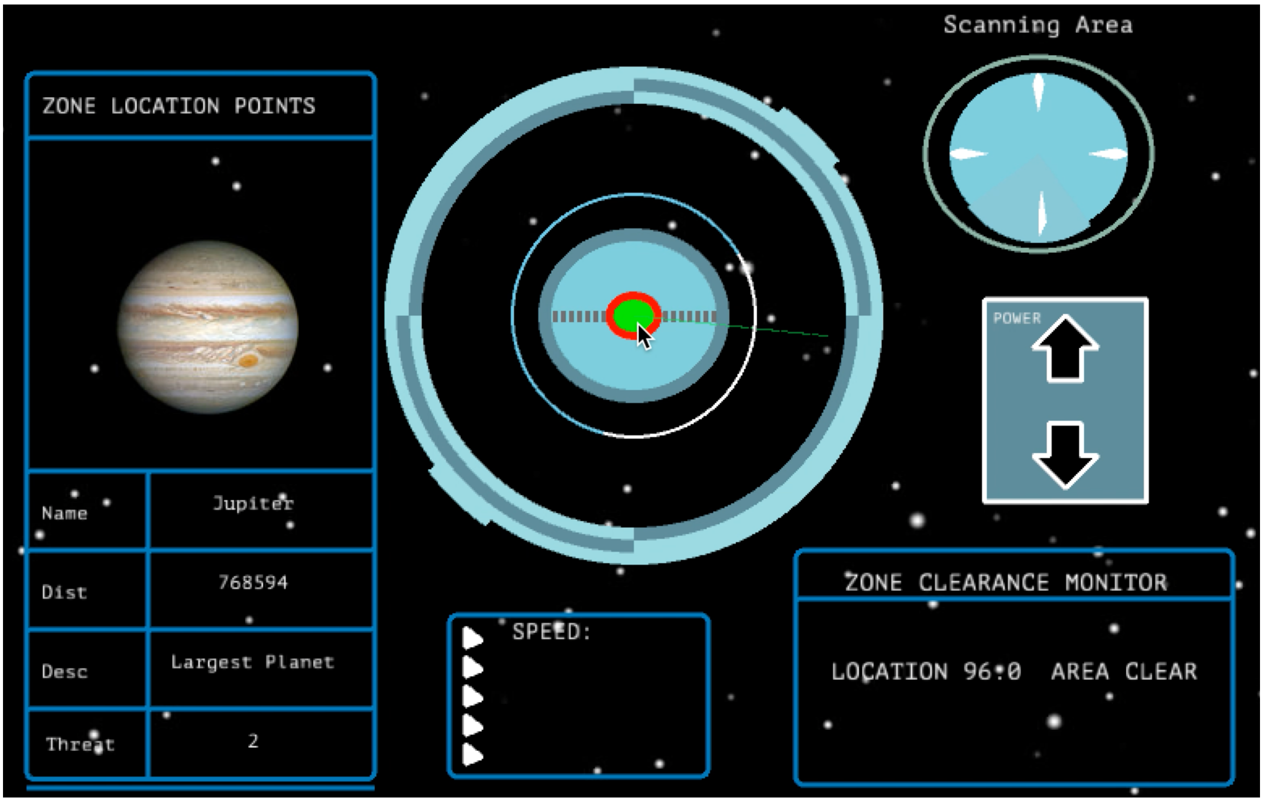
Action: Press “DOWN” key this is to simulate releasing accelerator alongside clutch, you will then hear the noise simulating lift-off for the jet.

Action: Press “LEFT” or “RIGHT” this must be done after “DOWN” for the sonar sound to commence, as the scanning area continues in the background.

Action: Click “PUSH” button in centre of the main space dial, this will show you which planet you are travelling past and also continues to check if the zones are clear for any impending danger.

The dials have been created in the **SpaceDial** class, which meant I could **pushMatrix, translate, rotate and popMatrix**, something you will find throughout my code.

The information on the planets have been **loaded** from an **external file** to demonstrate file input output on the screen. Also demonstrates an **array** of strings.



ZONE LOCATION POINTS

Name	Jupiter
Dist	768594
Desc	Largest Planet
Threat	2

ZONE CLEARANCE MONITOR

LOCATION 96:0 AREA CLEAR

I used the **unit circle** to create my arcs and to simulate the rotation of the two dials.

For the **flickering** in the background, I used inspiration from the youtube tutorial on recreating vintage art (**https://www.youtube.com/watch?v=LaarVR1AOvs**). Whilst this is for shapes, building on the idea of using **trigonometry** to create the shapes with certain movement, I used this to create a flickering of points, as if the background is coming to life.

The **interactivity** has been controlled using **if-statements** and **loops** throughout the project.

My favourite part of the assignment was going from having a screen with basic drawing and watching it come to life with each little piece of interactivity, something which is a new concept this year from what we've previously learnt and all very exciting.