

**Project Deliverable G: Prototyping II & Customer Feedback**

Group E1

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### **Comments about the last prototype:**

When presenting the prototype to the class and client, the client and a former radiation patient expressed some concerns about the flight of the bird. The former patient concluded that when the person is on the bird the group should increase their height so they are able to see the islands and not just the back of the bird. The client also stated that the bird's flight can be created through the use of sinusoidal functions within the Unity3D app. The project manager, Kaleb, stated that the group can add in wind to make it look like the trees are moving in the wind, thus making the game more realistic and enjoyable.

The information gathered from this meeting was critical as it gave the group important information of what to add to the game as well as what they deem as a risk. It was also important due to the advise the client and former patient gave us to enhance the overall quality of the game.

The group used this information to add to the bird's flight route as when creating the flight route the group is using the sinusoidal function to add the route into the game. The group is also adding the mechanism to ensure that when on the bird the individual's view is not obstructed by the back of the bird.

### **Introduction: Why we are doing this test?**

In this prototype, the group is trying to see if the functionality of the game will work. The group will try to add the bird's flying route, as well as the bird's speed and finish the islands the group will be using.

### **Test Objectives Description.**

#### **What are the specific test objectives?**

For this test, the group's objectives are to complete all the scenes and complete the birds flying route around the scenes.

#### **What exactly is being learned or communicated with the prototype?**

We are showing the client a rough idea of what the game will be like for the user. This will include the map (the island), the player's movement, the birds, and the flying mechanism. Testing this will give us more insight as to what is good, what needs improvement, and how we can improve it. With this prototype, the group will also learn if the game is smooth enough to be of use for the cancer patients and see if the risks associated with the game are too much to deal with.

#### **What are the possible types of result?**

The possible types of results are to see if the game is going to be able to be used by the customers and client. This includes if the client feels as if the game can be used by the cancer patients due to their significant health side effects such as increased chance of nausea. Or the

client may be able to help with adding or removing a component to the bird's flight route and speed.

### **How will these results be used to make decisions or select concepts?**

From testing the bird's flight around the scenes the client and or the group will check to see how the game feels. If the game feels smooth and capable of not inducing nausea, the group will continue with the rest of their plans. These plans include adding the ability of the user to choose a certain bird and the user walking up the bridge. If unable to satisfy this criteria te group may be forced to make the bird's flight route very simple and slow.

### **What are the criteria for test success or failure?**

The criteria for a successful test is that we receive feedback on our shortcomings. This is essential as it allows us to fix any critical errors and the best possible game experience for the consumers. A test failure would be if nothing in the game is functional or deemed playable by the cancer patients. If the client can not give any feedback to the game because it is non-operational, we will have a difficult time figuring out our shortcomings and our final product will not be optimized. In the last prototype, the client gave the group important information which allowed us to complete this prototype.

### **What is going on and how it is being done?**

#### **Describe the prototype type and the reason for the selection of this type of prototype.**

The prototype type of our second prototype is primarily about the functionality of the game. We want to test out the functionality of the main mechanics of the game and the environment of the game. The reason for this selection is because the functionality of the mechanics of the game is essential and most important to the overall quality of the game. If the mechanics are not optimized the games final product will also not be optimized.

#### **Describe the testing process in enough detail to allow someone else to build and test the prototype.**

First, the person shall learn how to use the program unity3D by watching youtube videos online or watching videos provided by the client. Then the individual will create an island by creating the outline for the island, then adding trees to the island. With this, the individual can now make a bridge to connect to the island. The individual can now create a bird design. After this, the individual will learn how to insert motion into the game and will insert the bird's flight around the island using this function.

### **What information is being measured?**

The information being measured in this prototype is the bird's flight route and the overall speed of the bird. Due to an increased chance of nausea as explained in previous deliverables the

games speed must be slower due to this fact. The group shall play with the mechanics and see what speed is best suited for the bird's flight route. The bird's flight route must also be simple and not include different changes in the flight's direction also due to this fact.

### **What is being observed and how is it being recorded?**

The group is observing the bird's flight route. From the observation, the group will record what they see when deliberating amongst each other and writing down information in a document if they see that the information is important. The group will deliberate to see how fast the bird's flight should be and the route of the bird's flight. Information about the bird's flight route will be recorded on a graphing program.

### **What materials are required and what is the approximate estimated cost?**

Since this game is completely virtual and the client has the required equipment to test the game (gaming computer, VR headset and controllers), the cost will be just textures that are bought in the unity store. As of the last prototype, the expected purchases are a wood texture, a sand texture, and a grass texture. More textures are needed for this prototype and these include the bird's wings and body. The estimated cost will be set to be about \$45.

### **What work needs to be done (test software, construction, modelling work, research)?**

We currently have two islands created, one tropical, one forest/mountain island. We have the model for the 3D birds and the bridge. At this point, the group still needs to test the software for the bird's flight route and speed. The group also needs to add an in-game soundtrack for the surroundings as well as in-game text and functionality of the controls.

### **When is it happening?**

#### **How long will the test take and what are the dependencies?**

The test length is undetermined as it may take a few minutes or hours. The test depends on the group ability to use unity3D and use the mechanics of unity to create the bird's flight and speed as well as revising it if the group finds it necessary to adjust the speed and route.

#### **A separate test planning Gantt chart can be created to help to make sure that the testing fits with the overall project schedule or it can be defined as part of that schedule.**

As seen in the Deliverable E, the schedule the testing was included as it was apart of the milestones and tasks.

### **When are the results required? What depends on the results of this test in the project plan?**

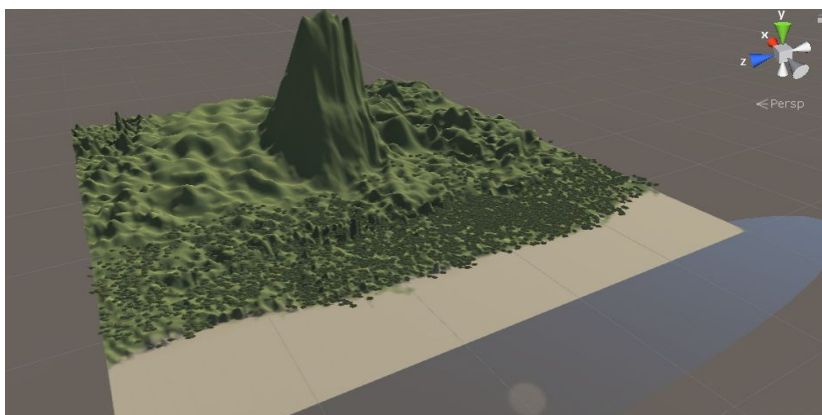
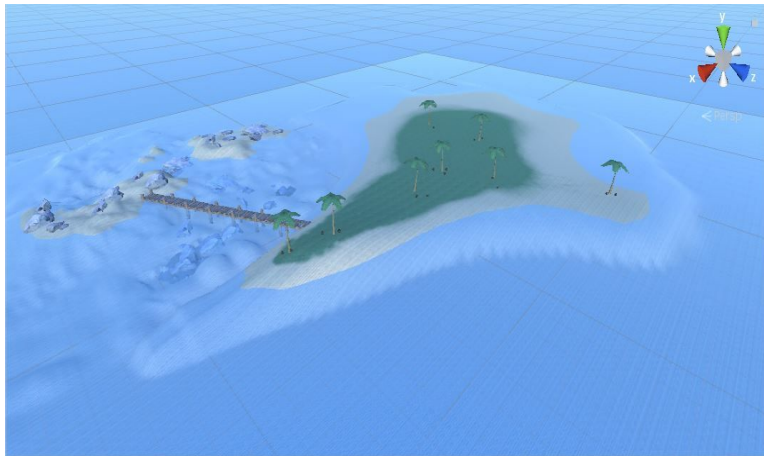
The prototype II results are crucial as the game fully revolves around the bird's ability to fly around the island. The results are required by the end of the week as this is when we decided

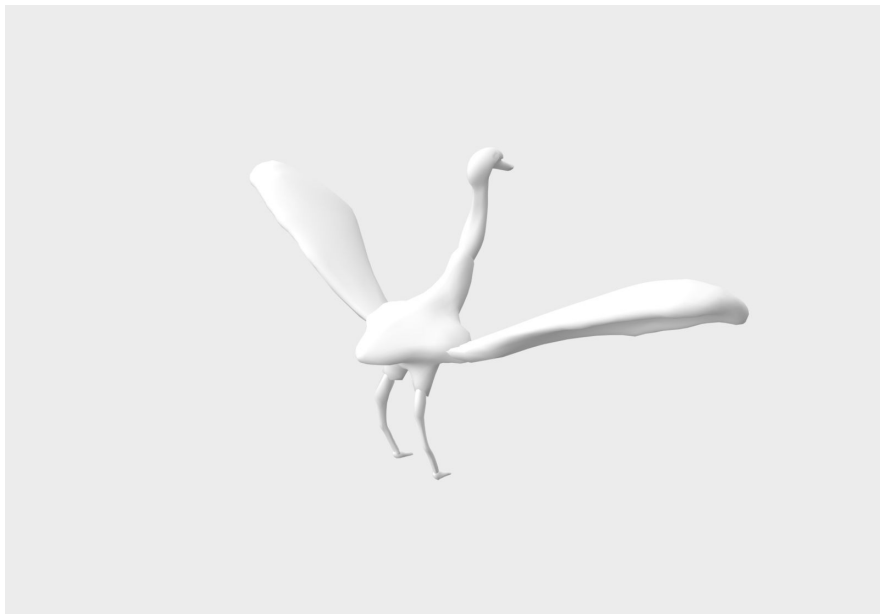
it shall be finished. The rest of the project depends on these results because if the group is unable to execute on the bird's flying route, the group will be unable to finish the rest of the project. This includes adding the person choosing the bird and getting onto the bird.

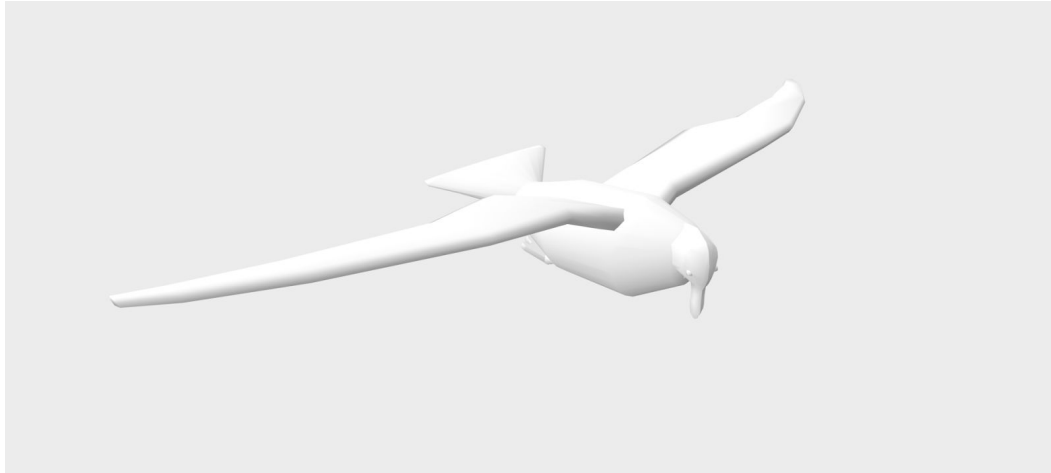
### **Conclusion:**

With the information obtained from the client, the group was able to further enhance the overall quality of the game as the group now knows what shall be implemented into the game to enhance the likelihood of the game being good. This included a way to add the flight route of the bird by using sinusoidal functions as well as adding wind to the game to make the game look and feel more realistic and making sure the user's view is not obstructed when flying on the back of the bird.

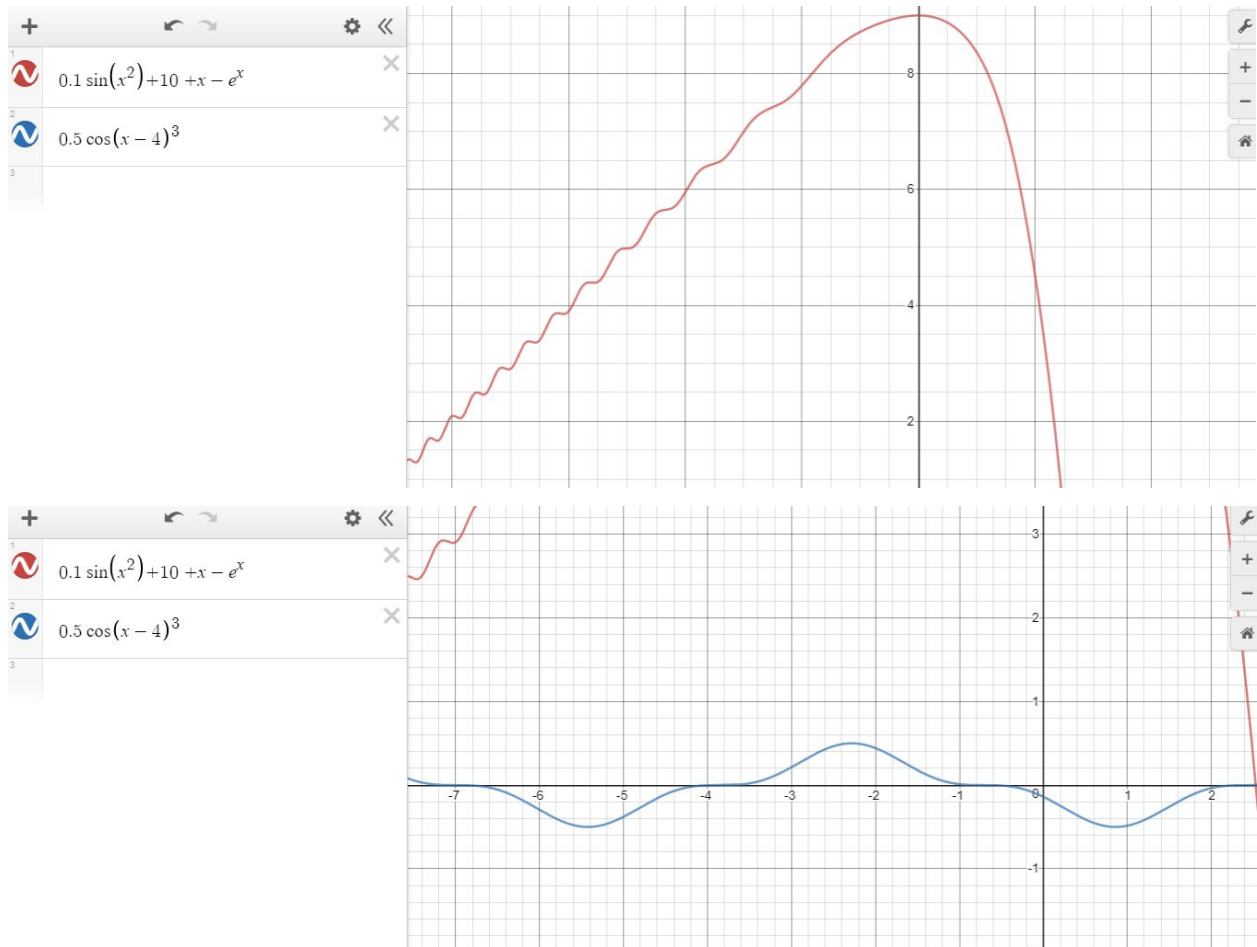
### **Prototype:**







**Flight route:**



**Estimated Cost:**

Item	Cost (\$) *excluding tax*
Sand texture	9.99

Tree textures & bird textures	19.99
Wood textures	7.99
<b>Total Cost (\$) *Including tax*</b>	43