## Stage 1

### Concept

- The Concept for my 3D game is a third person platform
- The hero is an Alien who needs to collect items in order to progress through the game
- The Alien starts with 3 lives and a 4 stage energy bar
- If the alien doesn't eat the food items in the world he will lose energy
- If his energy drops below the last bar he loses a life
- There is a score from 0-4 which represents the spaceship parts the alien needs to collect

## Stage 2

### Level Design

- In Level 1 the alien only needs to stay alive and eat all the food items
- After eating all the food items the alien can run quicker and jump higher
- The entrance to level 2 is up on a box only accessible by full energy jumps
- In Level 2 the alien must also find the spaceship parts as well as eat the food items
- Food items are regenerated after a certain amount of time
- In Level 3 the alien must find the last spaceship parts and the key
- With the key the alien can enter the ship and win the game

### Stage 3

### Implementation

- After showing my concept and design to my lecturer I began work on the game
- There would be a menu screen added to the game at this stage
- Scene0 is menu
- Scene 1 is level 1
- Scene2 is level 2
- Scene3 is level 3
- I created a class diagram and a layout for my code
- Creating all the classes, attributes and potential methods I predicted I needed

### Alien Hunt

#### Player Character

1-Alien – 3<sup>rd</sup> person controller

#### **Energy/Lives**

- 1-Static lives displayed on screen
- 2-Dynamic lives changing as player dies
- 3-Energy bar added with 4 stage health bar, no energy in bar results in lose life
- 4-If player is on last life and no energy in bar then the player dies
- 5-Notify user of low energy
- 6-Sound added when player dies

#### Food

- 1-When food is hit it destroys itself
- 2-Add a notice that user gained energy
- 3-Change the food items available in the HUD
- 4-Generate new food items randomly

#### Key

- 1-When key is hit it destroys itself
- 2-Notify user they have a key
- 3-Key can open spaceship door notice
- 4-Add key to HUD

#### Spaceship Parts

- 1-When part is hit it destroys itself
- 2-When a part is hit it add 1 to parts collected
- 3-Show parts collected in HUD
- 4-show icon for all parts needed

#### Door

- 1-When player walks up to door, open door
- 2-Only when player has key door will open

#### Sounds

- 1-Good sound plays when player eats food
- 2-Bad sound plays when player loses life
- 3-Good sound plays when player collects part
- 4-Badsound plays when player is on last bar of energy
- 5-Good sound plays when player gets key
- 6-Good sound plays when player finishes level

#### Timeline

# Feb 28<sup>th</sup> Concept First Draft

### Feb 29<sup>th</sup> Concept Second Draft

# March 7<sup>th</sup> Rough Sketches

### March 14<sup>th</sup> Design Levels

# March 18<sup>th</sup> Class Diagram

# March 19<sup>th</sup> Doxygen Notation

# March 28<sup>th</sup> Complete Class Code

# April 4<sup>th</sup> Final Revision

# April 7<sup>th</sup> Game Complete