Technical Design Document (TDD)

**Flight of the Nephilim**

Mike’s Face

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Executive Summary

**Project**

Players will fly a ship through space, attacking and defeating alien ships to collect resources.

### Technical

Programs

The following programs will be required for the creation of Flight of the Nephilim:

|  |  |  |
| --- | --- | --- |
| Program | Purpose | Cost |
| Unity3d | Game Development Environment | $1500 |
| Audition | Sound Creation | 1000 for suite |
| Microsoft Visual Studio | Debugging Environment | Free |
| Photoshop | 2D Image Manipulation | 1000 for suite |
| Maya Lt | 3D Graphics and Animation | 800 |

Market Release

Itch.io and Google play

Time to Completion

The total estimated completion time is around 8 weeks. That includes time for coding, graphics creation, audio editing and bug testing.

estimated Cost of Completion

|  |  |
| --- | --- |
| Software | $9900 |
| 360 Hours Salary | $10500 |
| **Total** | **$20400.00** |

## Hardware and Software

### 2D Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Photoshop | Used to create and edit 2D images and animations. | 1000 for adobe master suite |

### 3D Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Maya lt | Used to create and edit 3D models and animations. | 800 |
| Blender | Used to create and edit 3D models and animations. | Free |

### Sound Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Audition | Used to edit sound effects. | Part of adobe suite |

### Programming Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Microsoft Visual Studio | Used to debug and create code | Free |
| Unity3D | Development Environ-ment. Used to release to multiple platforms. | $1500 |

## Development Plan

### Milestones - Andrew

|  |  |
| --- | --- |
| Date | Milestone |
| 4/7/16 | Basic player movement using unity input manager. |
| 4/21/16 | 2D Smooth Camera Follow |
| 4/21/16 | Bullet shooting |
| 5/5/16 | Power Ups |
|  |  |
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### Milestones - Matt

|  |  |
| --- | --- |
| Date | Milestone |
| 4/7/16 | Base menu |
| 4/7/16 | prepro |
| 4/7/16 - stretch | Input class |
| 4/21 | Input and hud |
| 5/5 | Enemy spawning |
| 5/19 | Random level generation |
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### Milestones - Mike

|  |  |
| --- | --- |
| Date | Milestone |
| 4/7/16 | AI structure, AI framework started in Unity |
| 4/21/16 | AI framework coded and in Unity, Specific AI behavior started |
| 5/5/16 | 2 of 5 specific AI behaviors complete, Start AI cleanup |
| 5/19/16 | 3 of 5 specific AI behaviors complete, AI cleanup Finished |
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### Project Goals

Features

Dual stick controls

Multiple enemies

Mobile gameplay

Sprite graphics

## File Formats

### 2D

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| Filename.png | A spritesheet | .png |
| Filename.Prefab | A finished sprite object prefab | .prefab |

### 3D

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| Filename.Prefab | A finished geometric object prefab | .prefab |

Audio

### 

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| FilenameEffect | A finished sound effect | .wav |
| FilenameMusic | A finished background sound | .mp3 |

### Scripts

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| Filename | A script for an object | .cs |

### Scenes

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| SceneFilename | A scene in Unity3D | .scene |

### Other

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| TDD\_Finished | The completed Technical Design Document | .pdf |

## Asset List

Audio

Sprites

Scenes

Models

Scripts