### Technical Design Document Template

1.0 Revision History

<As you revise the document, list what was changed and when it was changed>

|  |  |
| --- | --- |
| Version | Description |
| 1.0 | Initial document |
| 2.0 | Removal of stretch goals |

2.0 Development Environment

2.1 Game Engine

<Visual Studio 2019>

2.2 IDE

<Visual Studio 2019>

2.3 Source Control procedures

<Github>

2.4 Third Party Libraries

<Raylib>

2.5 Other Software

<2D Pixel art>

3.0 Game Overview

3.1 Technical Goals

<60fps, Working AI>

3.2 Game Objects and Logic

<A list of logical elements in the game, i.e. eat, drink>

3.3 Game Flow

<The player will simply watch a simulation of AI surviving. The player doesn’t do anything except watch>

4.0 Mechanics

4.1 Definite Mechanics

- The AI moves for the closest food when it’s hungry

- The AI moves for the nearest source of water when it’s thirsty

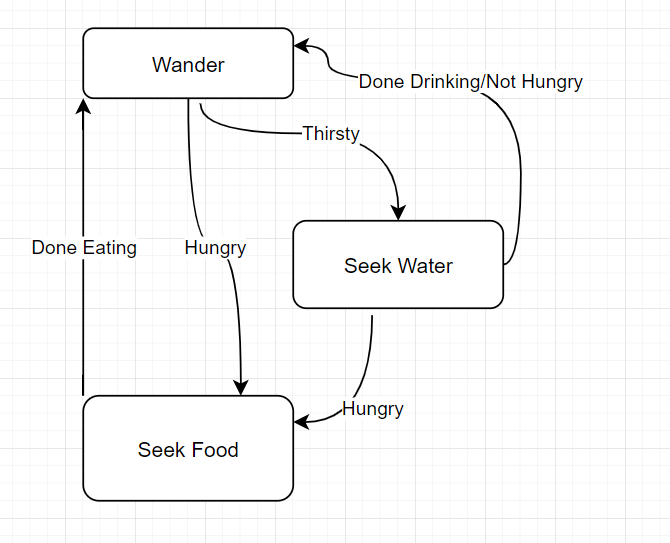
- The AI wanders around when not eating or drinking

5.0 Graphics

<Top-down pixels>

6.0 Artificial Intelligence

Behaviours Flowchart:



7.0 Items

Definite items

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Hunger | Thirst | Description |
| Food | 1 | 0 | Eat food to fill your hunger |
| Water | 0 | 1 | Drink water to refill your thirst |

8.0 Game Flow

9.1 ‘Mission’ / ‘Level’ structure

<One map. It has water acting as an obstacle and has food scattered about>

9.2 Objectives

<The player simply watches the AI do their thing>

9.0 Levels

<Only one level, very basic in design>

10.0 Interface

10.1 Menu

<No menu options, as the player just watches the program play out>

10.2 Camera

<The camera remains still, overlooking the entire map at once>

10.3 Controls

<No controls, as the player isn’t meant to interact with the program>

11.0 Asset List

<List all files needed, along with known attributes >

12.0 Technical Risks

<The project is going to be very small scale and simple in terms of everything, therefore no technical risks>