

Project Name

XX.XX.20XX

**─**

Your Name

# 

# Changelog

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| --- | --- | --- |
| **Version** | **Date** | **Changes** |
| 1.0.0 | XX/XX/20XX | Initial Setup |
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# Contents

[Changelog 2](#_Toc1)

[Contents 3](#_Toc2)

[Introduction 4](#_Toc3)

[Rationale 4](#_Toc4)

[Background 4](#_Toc5)

[Terminology 4](#_Toc6)

[Proposed Design 4](#_Toc7)

[Non-Goals 4](#_Toc8)

[Software and Hardware Requirements 4](#_Toc9)

[System Architecture 5](#_Toc10)

[Data types 5](#_Toc11)

[Interface/API/Namespaces Definitions 5](#_Toc12)

[Which namespaces (Includes) did you include in your project? 5](#_Toc13)

[What functionality did each namespace provide to your code? 5](#_Toc14)

[Risks 5](#_Toc15)

[Alternatives 5](#_Toc16)

[Pseudocode 5](#_Toc17)

[System Pseudocode 5](#_Toc18)

[Evaluation 5](#_Toc19)

[Reflection 5](#_Toc20)

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# Introduction

In the TDD. Which namespaces (Includes) did you include in your project, What functionality did each namespace provide to your code.

## Rationale

I am trying to demonstrate my ability to utilize the AI NavMesh components in Unity to allow multiple Ai agents to navigate a maze in unique ways.

## Background

This document and the related project have been created primarily for the purpose of meeting the requirements outlined for AI skills assessment for TAFE Certificate 4 in ICT Game Programming.

## Terminology

/ If the document uses any special words or terms, list them here. For example, what does Agent mean? What does Area Modifier mean? This section is for terms you will use fill this in after you make your document. /

## Proposed Design

I intend for one AI agent to take the place normally filled by the player as the “Hero” character. This hero will have to navigate to the end of the level or maze whilst being chased by a boss “Ogre” agent, also avoiding other Ai agents patrolling the area (these will be spiders).

## Non-Goals

I would like the project to result in a completed game loop, despite there being no actual player input. One of the Ai agents will stand jn for the player and complete the level.

## Software and Hardware Requirements

Hardware requirements should be fairly minimal. I would expect not much higher than unity3D requirements of windows 7 wit x64 and Sse2 capable CPU and DirectX10 GPU.

# System Architecture

## Data types

/ Describe the main data types you will be using and how they work. /

## Interface/API/Namespaces Definitions

/ Describe the various components and libraries you will be using that are inbuilt into unity. For example, GameObject, Image, SceneManagement, UnityEngine…etc. Link the Unity API Manual to show where to find information on those elements. /

### Which namespaces (Includes) did you include in your project and what functionality did each namespace provide to your code?

**UnityEngine**

Adds basic unity classes such as GameObject, ScriptableObject etc.

**UnityEngine.AI**

Adds Navmesh agent class, used to control AI agents.

**UnityEngine.UI**

Adds canvas functionality used to display UI elements in game.

**System.Threading.Tasks**

Used to create asynchronous method or function (alternative to Coroutine)

**System.Collections**

Adds IEnumerator which is required for coroutine. Both asynchronous methods and coroutines used in different parts of project.

## Risks

/ If there are any risks or unknowns, list them here. Also, if there is additional research to be done, mention that as well. /

## Alternatives

N/A

# Pseudocode

## System Pseudocode

/ Written plan of the code and how you are going to write it in English. This is where you expand from what you were given in the brief. /

# Evaluation

## Reflection

/Provide a self-reflection on your performance. /