

Team no: 15

Team Members: Kenneth Bradburn, Zach Pearson, Zach Alleman, Jacob Prichard, Keith Wiehe

Project Name: True Stealth

Project Synopsis: A stealth game that uses machine learning and improved AI to give a better experience for players.

Project Description: Stealth games will usually have the same criticism about how the game is only about waiting for guards to follow the same path. This game will address these issues by using AI and machine learning to have the enemies learn the players usual movements to force the player to consider every move they make. The player will now have to plan actual routes and find ways around guards that are more in depth than waiting for guards to just move their route. This game is supposed to give players a new way of experiencing stealth to offer a more risk vs. reward experience. The end result is meant to reinvent how games tackle stealth sections or how games based around stealth should give players more engaging ways to evade enemies by having enemies act more realistic.

Project Milestones:

1st Semester:

Map made with zones and temp assets created. Deadline: 10/30/2020

- To be done by the end of October, this will allow us to get to work on our code for getting player movement and enemy movement.

Demo with reset feature, items, stationary guards. Deadline: 11/30/2020

- The Demo should consist of a possible level 1 and debug test rooms. The test rooms

Demo with working form of AI and pathing for guards. Deadline: 12/30/2020

- This demo should have a floor of the level able to be played with a set of working guards that are able to detect the player

2nd Semester

AI reaching final stages. Deadline: 1/30/2021

Full realize levels or floors: 2/28/2021

Polish with Better Models: 3/15/2021

Completion and publication: 4/5/2021

Project Budget:

Hardware: team personal computers

Software: Unity engine

Estimated Cost:

Needed:	Cost:	Totals:
Unity Teams Advanced (8 months)	\$23 per month	\$184
Unity Asset Store (animations)		\$60
Publishing to Steam (optional)		\$100
	Total:	\$344

Work Plan:

Starting work immediately in October with Unity to get the groundwork for ideas out. Animations will be needed around December so we know if test models are working and what changes will be needed for a final model. Publication to Steam, which is optional would come after the project has been completed. The work plan jobs are subject to change depending on schedule, resources, and need.

Keith Wiehe:

- Back end AI
- Zoning of enemies

Jacob Prichard:

- Front and back design
- Zoning of enemies

Kenneth Bradburn:

- Asset collection and creation
- Game design plans
- Front end design

Zach Pearson:

- Back end design
- Backend AI

Zach Alleman:

- Front and back design
- Testing and improving performance