# Comp 250 - AI Game Component Planning

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1 Introduction

The main focus of this project will be an Artificial Intelligence created for a horror game which will stalk the player, waiting for an opportunity to ambush the player. The AI will follow the player at a distance in a way in which the player should not see the AI. The AI will predict where the player is going and if it predicts the player will go somewhere where they can be ambushed the AI should go to and set up an ambush spot.

2 The game concept

The game revolves around someone trying to get home after being on a train. It's late at night and this person must find their way home. On their way home they get creepy texts from an unknown number. The same person who sends those texts will be following this person around that night, getting ready to ambush and abduct them.
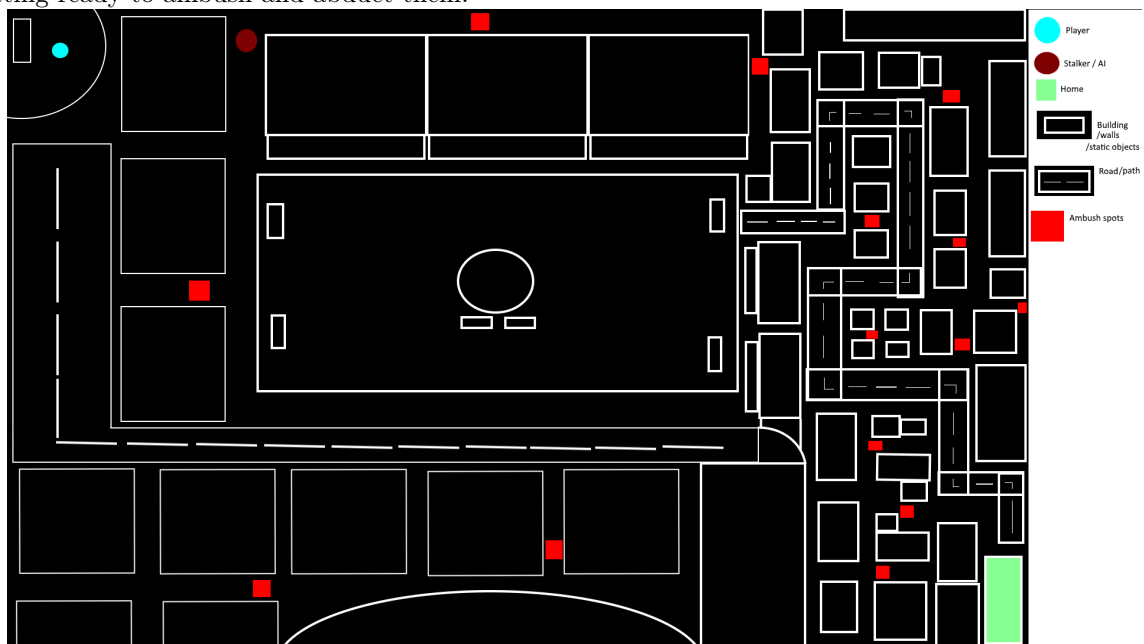

2.1 How it fits the game concept

The AI will be able to follow the player from a distance and set up ambushes for the player. This is key to the game concept as the concept revolves around this unknown person who knows too much about the player and acts in ways to make the player feel uncomfortable and eventually ambush the player. The player's goal being to avoid the AI and make their way home. As such the AI needs to be capable of following the player in a way that will allow them to set up an ambush when possible. The AI will also need to be capable of making the player uncomfortable, by sending weird amounts of information through text messages

2.2 The key requirements for this AI:

This AI will be created using a Finite State Machine, this will allow it to easily swap between different states which will each help the AI to act in different ways.
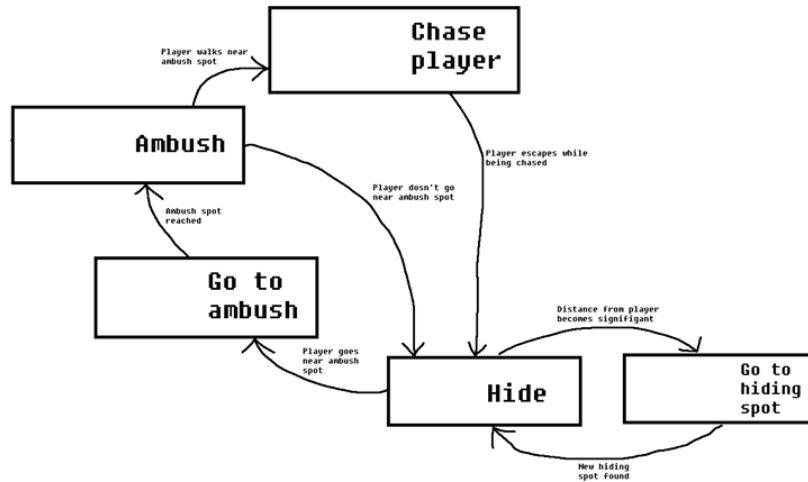
Hence the key requirements will be:

- AI ability to Hide

- AI to go to new hiding spot

- AI to choose a new hiding spot

- AI setup ambush

- AI go to ambush

- AI choose new ambush spot

- Predict player movement

- AI chase the player

- Check for conditions to change to new states: (Distance from player become significant - GoToNewHidingSpot), (New hiding spot found - Hide), (Player predicted to go near ambush spot - GoToAmbush), (Ambush spot reached - Ambush), (Player doesn't go to predicted ambush spot - Hide), (Player walks near ambush spot - ChasePlayer), (Player escapes while being chased - Go to hiding spot)

References