Tech Project: AI System

Overview

You will be given a sample game in which the artificial intelligence (AI) has not yet been implemented. Your challenge is to implement an AI system that gives the player a high-quality user experience.

Objectives

This assignment will help you achieve these learning objectives.

1. Apply user experience design and game development fundamentals to digital prototypes.
2. Analyze game implementations, such as mechanics, controls, and cameras, to improve their design.
3. Create digital prototypes that demonstrate engaging design concepts.

Requirements

Your submission must meet these requirements.

- You must use the provided sample game.
- Provide a list of the precise AI features that you implemented.
- You must implement an AI system with one or more of the following features.
  - The AI moves.
  - The AI interacts with features of the game world, such as horizontal boundaries, vertical boundaries, walls, and platforms.
  - The AI reacts to what the player does in a realistic manner.
  - The AI behaves in a way that produces an aesthetically-pleasing experience.
- You only need to implement the AI system. Do not create any additional artwork or features.
- Your prototype must be functional and clearly demonstrate the implemented features. Features which are not working or cannot be verified will not earn credit.

Rubric

Your submission will be graded according to this rubric. Any submission that is late, incomplete, or of very poor quality will earn an F grade.

Requirement	Excellent	Good	Attempted
AI Movement is restricted by world features	Works in all cases with no exceptions detected	Works in most cases, but exceptions detected	Attempted, but does not work well in most cases
AI autonomously navigates the map	Works in all cases with no exceptions detected	Works in most cases, but exceptions detected	Attempted, but does not work well in most cases
AI reacts to player actions	Works in all cases with no exceptions detected	Works in most cases, but exceptions detected	Attempted, but does not work well in most cases
Successful implementation of advanced AI feature	Works in all cases with no exceptions detected	Works in most cases, but exceptions detected	Attempted, but does not work well in most cases