

Group 3 - One-Page Statement

Game description:

- **Layout: 2D grid**
 - The player starts the level from the starting point which is represented by the **blue star**.
 - Level layouts are created manually.
- **Objectives:**
 - The player must collect all regular rewards then finish the level by moving on to the ending point, represented by the **red star**.
 - There are walls, enemies, and punishments in their way.
 - The player can also collect bonus rewards to increase their score before finishing the level.
- **Main character:**
 - Controlled by the player using the keyboard.
 - Represented by a stickman. Cannot move through walls.
- **Walls:**
 - A level is surrounded by walls on all four sides.
 - There are two openings for the starting point and ending point.
 - Inside the level, there are series of walls to create a maze-like map.
 - Walls block the movement of players and enemies.
- **Enemies:**
 - Represented by a **snake**. Moves around and tracks the player down.
 - Every tick, the snake moves to an adjacent cell.
 - If it touches the player, the player loses the game.
 - Cannot move through walls. Does not affect rewards or punishments.
- **Punishments:**
 - Represented by a **bomb**, which does not move.
 - If the player touches it, they will lose 50 points as a punishment. If the loss in points makes the score negative, the player will lose.
- **Rewards:**
 - **Gold coins** represent regular rewards. They are worth 10 points.
 - **Green gems** represent bonus rewards. They are worth 15 points. They will periodically appear and disappear on the board.
- **Score:**
 - Denoted in points. Displayed on the left side of the screen.
 - Rewards collected and punishments triggered by the player will change the score.
- **Time:**
 - Denoted in seconds and minutes. Displayed on the left sidebar below the score.
 - Starts from 0:00 and will increase until the player finishes the level or dies.

Overall plan:

- Highlight the requirements of the project and mark them as milestones.
- Implement all milestones and make sure they are functional and bug-free.
 - Implementing one milestone acts as an increment to development. Therefore, the process model we will use is the incremental model.
- After the requirements are done, we can add our own ideas to the game.
 - Ideas include: Level maker, cannons, flying enemies, keys, and doors.