

3.2.3 Pseudocode the Game Logic

A common question for new developers is "Where to begin?" A good starting point is to pseudocode the steps. This can help organize our thoughts, outline the objectives, and get the creative juices flowing.

NERD NOTE

Pseudocoding translates human cognition into computer logic. Your inclination and ability to think this way will grow as you gain programming experience.

Our first goal is to identify the different game states and write them as pseudocode comments near the top of the `game.js` file.

PAUSE

How do we win our Robot Gladiators game?

Defeat all the robot enemies.

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The comments might look something like this:

```
// Game States  
// "WIN" - Player robot has defeated all enemy robots  
// "LOSE" - Player robot's health is zero or less
```

Although this step might seem simplistic, jotting down key parameters and game states can help as your program gets more complex. Breaking a step down to smaller substeps can be helpful too. Let's do that now with the "WIN" game state.

In order to "WIN," players must face and defeat each robot. Let's revise the original pseudocode step:

```
// Game States  
// "WIN" - Player robot has defeated all enemy robots  
//   * Fight all enemy robots  
//   * Defeat each enemy robot  
// "LOSE" - Player robot's health is zero or less
```

Next, we can ask ourselves a couple of questions about the steps that get us to "WIN":

1) How do we face a robot? As we demonstrated in the first lesson, we present the `enemyName` in the `fight()` function.

2) Then, how do we defeat that robot? By exchanging attacks in the `fight()` function, the enemy robot's health points are reduced to zero or less.

We also need to determine the "LOSE" game state. Keep in mind that we can check the game's state by using conditionals that check if a robot or player has any health points.

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What is the statement that checks if the robot has any health left?

```
if(enemyHealth <= 0)
```

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Are you ready to start adding some complexity to this game? Let's do it!

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