

Game Engineer Simulation

We are looking for exceptional game engineers: you. We've designed this simulation to give you an opportunity to impress us.

Your assignment is simple:

1. Develop a game using our open source tech in 7 days.
2. Write a short reflection on the game development process.

You can submit your work earlier, but if you have extra time, we'd prefer to see a more polished result when the week is over.

Part 1: Make a game!

You should start by downloading and installing our open source HTML5 devkit:

<http://docs.gameclosure.com/guide/install.html>

Feel free to use any art assets you like. You can pull examples from the devkit, or from sites like <http://opengameart.org/>.

Choose one of these two mobile game genres as a starting point for your game:

- Bubble Shooter (more details on the next page)
- Endless Runner (more details on the next page)

Have fun and be creative! Focus on the game screen / gameplay. It doesn't have to be perfectly polished but it should be well designed, bug-free and fun. We'll be reviewing the code as well as the functionality.

Part 2: Reflection

Write a concise and organized reflection on your process developing the game. Consider discussing:

- Did you face any technical challenges while writing the game code? Were there any JavaScript optimizations you found useful while writing the game?
- How did you polish the game? What did you add to make the game more visually appealing or to make the gameplay feel right?
- Did you find anything lacking with the devkit? How would you improve our devkit to make game development easier? What did you like about it?
- Did you have any plans to improve the game further?
- Other thoughts on game development, our tech, or HTML5 in general?

Bubble Shooter

Bubble shooters are a common type of arcade / mobile game. If you're not familiar with the genre, we suggest you spend a small amount of time familiarizing yourself with how these games work by finding examples on Google Play, the Apple App Store, or online. Find at least 2 different implementations so you can compare different approaches.

A functional bubble shooter should at least contain the following elements:

- A hexagonal grid of bubbles
- A ceiling to which the bubbles are attached
- A cannon or similar element from which the bubbles are fired
- Slots to display both the current and the next bubble to be fired
- Firing a bubble that connects with at least 2 other bubbles of the same color creates a match, popping those 3+ connected bubbles
- Any bubbles that become detached from the ceiling and the rest of the bubble grid should be dropped and then popped, so there are never any floating bubbles

Endless Runner

Endless runners are another common type of arcade / mobile game. Find at least 2 examples of runners online or in app stores to use as references before you start.

A functional runner should at least contain the following elements:

- An infinitely scrolling background or parallax
- A running character who can jump
- A scrolling floor or set of platforms on which the character runs
- A score that represents how well the player is performing
- A set of obstacles or pits that cause the player to lose the game
- A set of collectible items or power-ups that help the player stay alive or increase the player's score