

# Halfbrick Gameplay Programmer Test

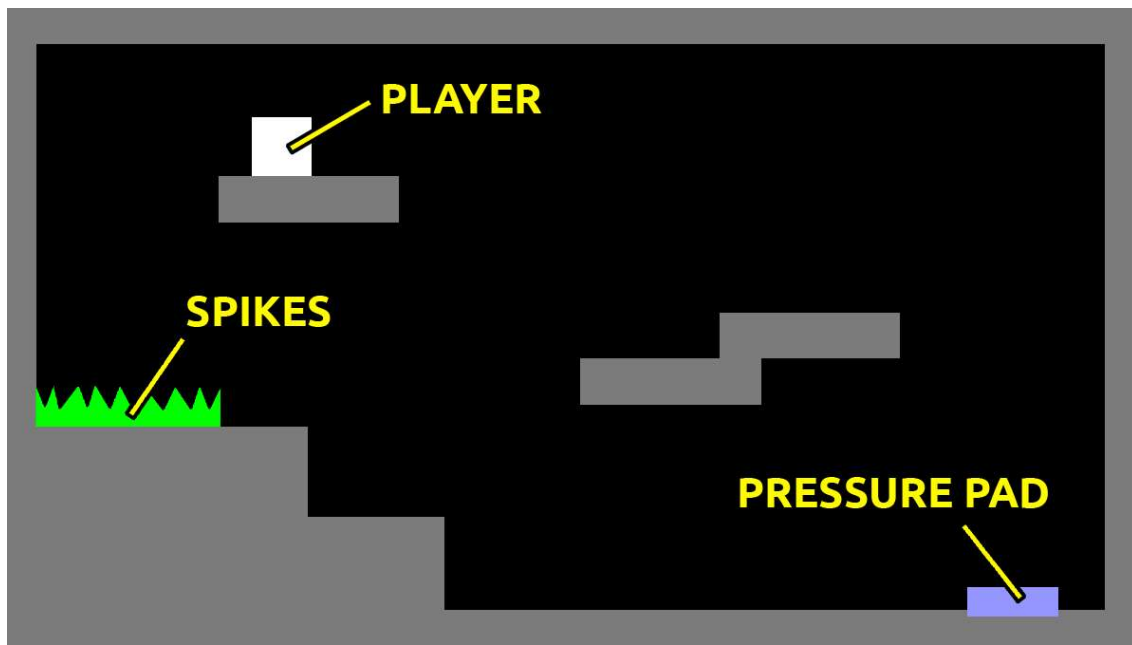
Halfbrick is seeking gameplay programmers with a sense of creativity and flair in their gameplay implementations.

In this test you are tasked with making changes to an existing Unity game project. We are looking for gameplay changes that adhere to the given directions but are also **fun** and **feel good to play**.

This test is about the outcome of your code, not the quality of the code itself.

## Unity Project Overview

The supplied Unity project is a simple 2D platform game:



### Player:

The player character is controlled using the keyboard arrow keys (LEFT and RIGHT to move, UP to jump)

The player has a variable jump height. Pressing and holding the UP key will cause the player to jump higher than a short tap of the key.

### Spikes & Pressure Pad

These objects do not currently do anything other than change colour when the player touches them. As you may have already guessed, you'll be making changes to them as part of the tasks below.

## Task One: Player Movement

Make the player character feel "**heavy**".

How you make the character feel heavy is entirely up to your interpretation. There's no right or wrong answer. It's all about how well you can execute on your chosen direction.

Think of it this way: New players should immediately get the impression that the character they are controlling is made of some sort of heavy or dense material. The way the character moves and interacts with the environment, the way the controls feel etc. should all reinforce this notion,

Restrictions:

- Keep the controls the same and maintain a variable jump height
- The character must still be able to jump between any platforms they can currently jump between
- Do not modify the level layout
- You can keep the player as a white square if you want

## Task Two: Spikes

Make the spikes feel "**dangerous**".

Again, how you accomplish this is up to you. Make whatever changes you think is needed to make the spikes feel dangerous.

A player should be able to tell that they don't want to touch the spikes, and if they do touch the spikes, they should get visceral feedback that they are to be avoided in the future.

## Task Three: Pressure Pad

Make the Pressure Pad into a fun and interactive "**bouncy**" object. Like a trampoline, jump pad, or spring pad etc.

The player should have fun using the pad! As opposed to the spikes which are a very negative experience for the player, the pressure pad should be a very enjoyable and positive thing to interact with.

The player should be able to use the pad to reach the high platform nearby.

## Returning the Test

Please zip the Unity project and upload it using the link in this email as a single .zip file as well as sending a PC (or Mac) build (we do not need the "Library" folder, you can exclude that).

Also feel free to also provide a brief description of the changes you made for each task and your reasoning behind making the changes. However, this is not necessary. You may want your test to "speak for itself" and that's fine too!

## Frequency Asked Questions

### **What sort of code quality are you expecting?**

This test is about the outcome, not the code. There are other tests in the hiring process for code quality. Think of this test as rapid prototyping. Feel free to hack it together however you want. We are NOT expecting well written or well-commented code. In fact, nobody may even read your code!

### **Can I use third party scripts, plugins, or assets?**

Sure! Feel free to use any additional assets or scripts you want from the internet or the Unity asset store. As long as we are able to run the project when we receive it.

### **Which version of Unity should I use?**

The test was created in Unity 2018.2.2f1. However, feel free to use any version of Unity you want. It's a very simple project and should import successfully into newer versions of Unity. But if you have trouble let us know.

### **Can I use sound effects?**

You can if you want, but we discourage it. We'd like the focus to be on visuals and game feel.

### **I have some questions, who can I contact during the duration of the test?**

Please send through any questions through to the person who emailed you this test. If they're unable to answer your questions they will forward them to the appropriate people.