Coins

Mikko Takala

# How to use

The game has very basic controls:

|  |  |
| --- | --- |
| W | Jump |
| A | Move player character left |
| S |  |
| D | Move player character right |
| Mouse 1 (Left click) | Fire a bullet from the player towards the clicked area |

The goal of the game is to collect all the coins in each level, and after collecting them, reaching the goal that is marked by a flag. After reaching the flag the player will be transported to the next level, but only if they have collected all the coins in that level.

# What is missing or could be improved

I managed to break the shooting functionality after the game is restarted after player dies. So the game crashes because according to Godot, the current level does not exist, and therefore the bullet cannot be instantiated as the levels child, even though the level clearly is loaded. Maybe an issue with unloading and loading the level and therefore the engine gets confused?

Not much effort was put into level design, and I find that I’m not very good at it either. Maybe knowing some basic level design principles could have helped made the game feel a bit more like a game than just a showcase of the (simple) mechanics that it consists of.

A level editor with the ability to share levels between players would be a good addition to a game like this that has simple maps.

A more diverse cast of enemy characters would also add some depth to the game world. The enemies could have different behaviours.

The game was created using some free asset pack, and the game could have a better look if the assets were custom created according to some specific design guidelines. I tried to pick the most fitting sprites and backgrounds, but it could always be better with custom made assets.

Animations could be better, and here again custom assets would help a lot.

For the game mechanics, I think I got mostly everything working that I thought would be necessary to call the project a game. There is clear goal to be achieved to ‘win’ a level.

# Testing

I was not aware of how to test Godot scripts or how to do end-to-end testing for a Godot project, but what I did do to debug and test features while developing was using basic things like ‘print’ commands to confirm that specific functions were called, or conditions gave the expected result, code was executed, what variables contained at specific points of execution etc.

The other method was to make changes, run the game and then manually verify if the intended change or feature worked as expected. I found this to be sufficient for a small project like this, but I would expect problems with development, especially when working with a team of several developers and with a bigger, more complex project if there are no automated tests.