

# Prototyping Report

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## Project overview

Event Title: Local Game Jam  
Event Type: Solo Game Jam  
Author: Thomas Østli

Date: 13.12.19 - 15.12.19  
Location: Gjøvik

## Project Title:

PuzzleDungeon

## Project Group:

Thomas Østli

## Role

Designer, Programmer

## Expertise

Beginner

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## Technology

### Development Environment:

Unity and Visual Studio

### Target Platform:

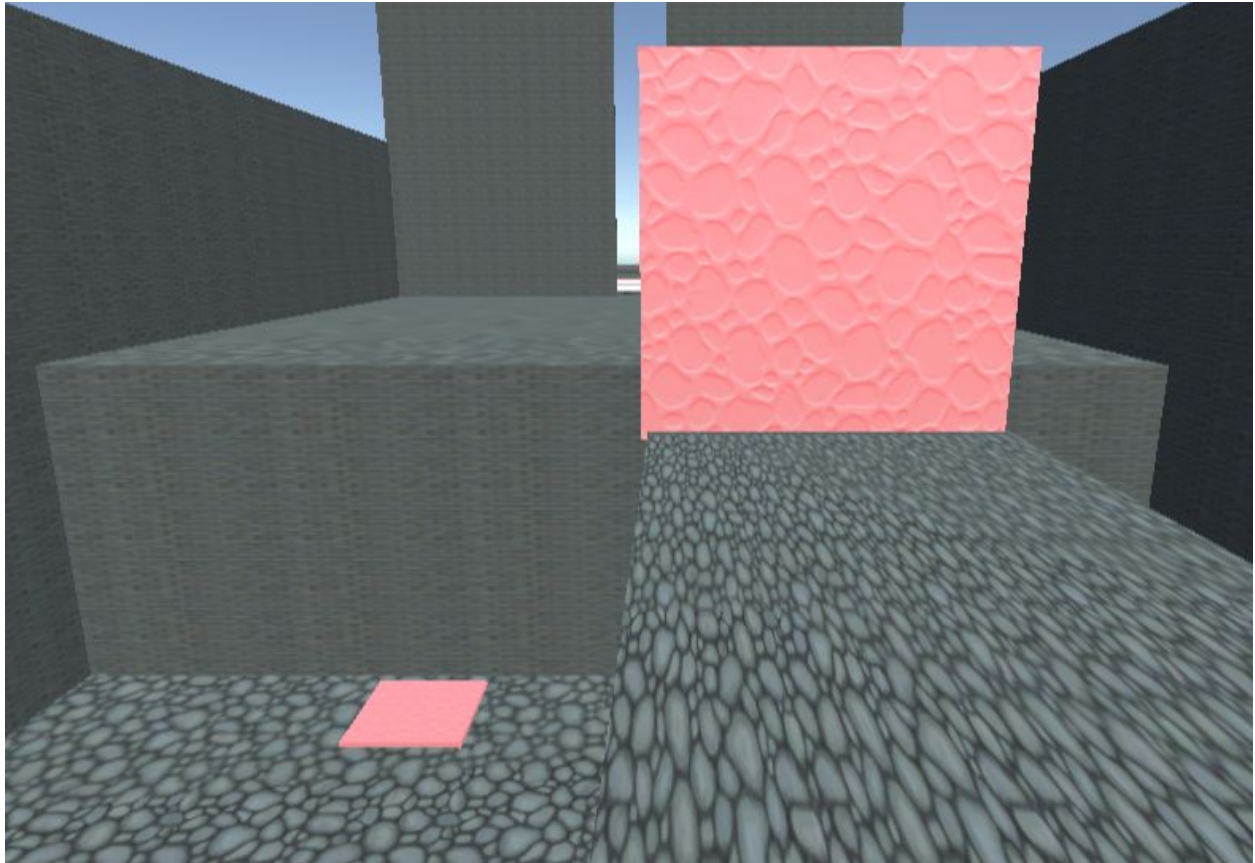
Web based on desktop machines

### Code download/install instructions:

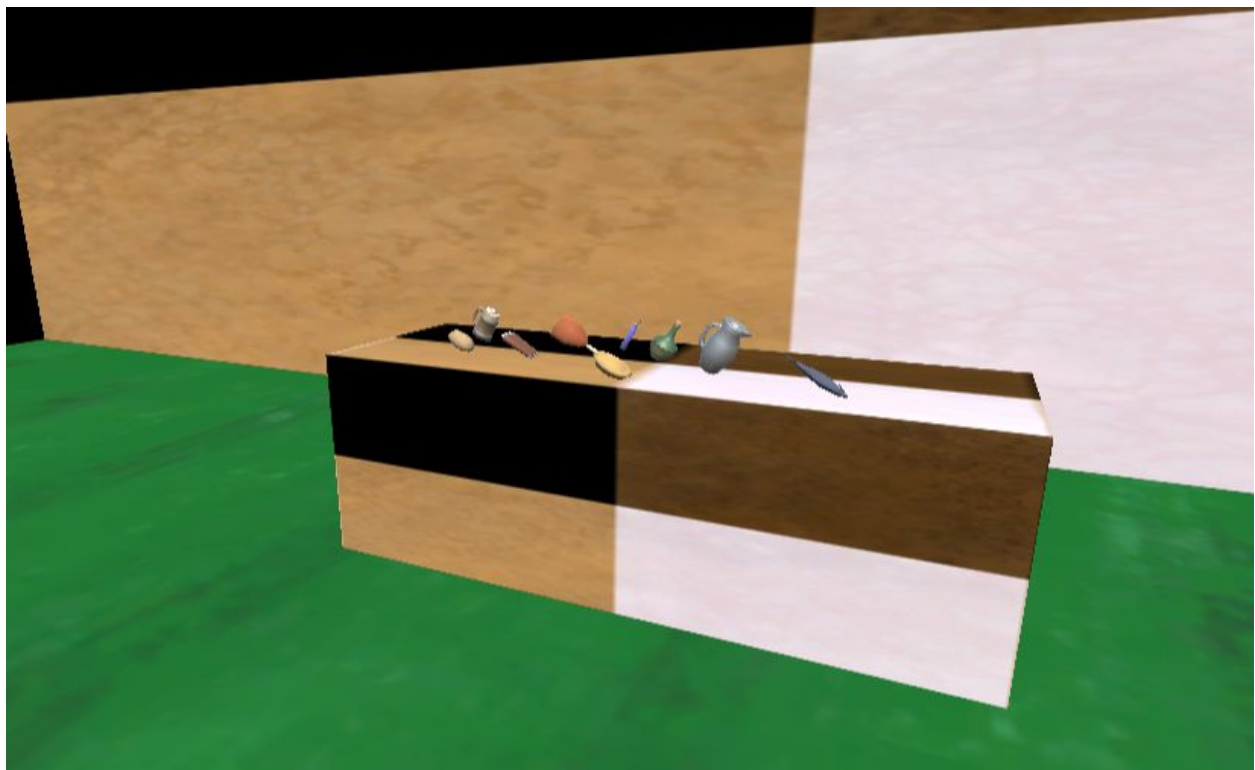
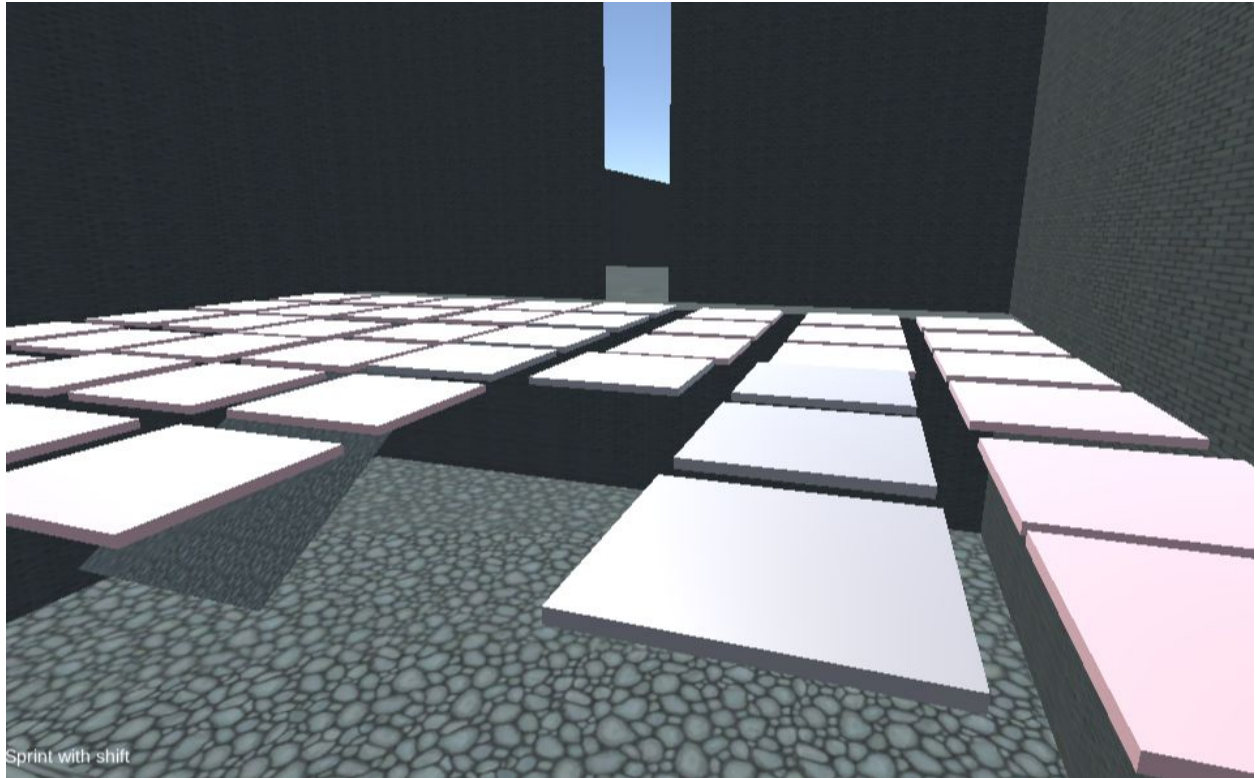
Game: <https://nihnvm.itch.io/puzzledungeon>  
Scripts: <https://github.com/nihnvm/PuzzleDungeon>

## Description

I went with the themes: Puzzle, Dungeon and Adventure. The idea was to create a dungeon for the player to explore, every room would have a small puzzle you'd have to solve to get past it and further into the dungeon, to reach the treasure. The player can move with WASD, steer the camera with one's mouse, is able to jump and can sprint(indefinitely).



The first room one needs to jump on a trigger plate to remove the wall blocking the bridge leading further in, for the second room one must navigate through a series of platforms, some will make you fall to the floor below, while a certain path will hold the player up to, enabling him to pass through the room. After this room I intended to add more puzzles depending how much time I had left, but all i was able to make after this was a long jump, only possible to cross by holding sprint. In the end there's a "treasure room".



### Contribution

Camera movement as a whole. Movement and the sprinting versus walking part also worked very well and are the parts I'm most satisfied with. For the jumping I could've tinkered with it's

values more, producing a more satisfying and intuitive feeling to it but the game is easy to complete with the current settings.

Initially I wanted the bottom floor of the second room with the falling platforms to teleport the player back to the beginning of the dungeon, I'd use the same code I used for teleporting in my previous game jam BallRunner, but I ended up having trouble with the collider first of all, and when that was fixed, recognizing that it actually was the player who touched it, and in the end I couldn't get the teleporter to work with a player as well as it worked with the ball, thus I scrapped it.

I had two ideas for puzzles I wanted to implement, I worked on both but I ended up scrapping both ideas as I couldn't implement it working in time, one was a way to lift and move objects, so in one room one would have to stack crates up high to be able to pass, and another puzzle where one would need to correctly find a way to open a door by clicking on 4-6 different objects in the correct sequence to pass on.

## Reflection

### The Good:

1. Moving felt natural, not clunky or odd, common gamers would've been able to move forward right away, the jumping and sprinting was also quite fluent too, something that perhaps would've been odd compared to other games, was the way one couldn't move or steer in air, but is in my opinion how its supposed to be.
2. Camera and looking around also felt natural and intuitive to do, and is important to get right for such a game. The movement felt right and proper too, implementing jumping and sprinting made a good foundation for a dungeon/adventure first person game.
3. Got to spend time more time on movement and camera, which is something that was solved quite simply in my last game jam.
4. Was fun to work on a game with more potential for depth, coming up with puzzles and obstacles makes for interesting thinking processes and challenges.
5. Eating, sleeping, drinking water and just coffee as opposed to energy drinks helped me stay in decent mental shape, despite the previous jam was just two days before I started on the 3rd one.

### The Bad:

1. Didn't get as far as I wanted, ended up cutting several ideas as I ran out of time, probably due to overscoping a bit with my wishes but with more fluency in Unity I think it could've been done.
2. Spent a lot of time on things I'd accomplished before, for one it should've been achievable to complete the teleporters rather quickly, but through the struggle I learned more about differences in triggers, though I'm still confused about why certain things didn't work like it should've.

3. Doing jams consecutively can be quite draining energy wise, resulting in brain lag and such.

#### **The things that I would do differently are:**

1. I'd wait longer as to have more energy mental energy and "effort" spare, as to make the jam more easy on the mind, and to give more time to digest the previous jam.
2. Skip things I struggled with earlier if I stopped progressing, to reset my head a bit when it comes to a certain subject, enabling more neutrality in thought.
3. Organize the walls and floors better in the Unity hierarchy overview, it got messy near the end and navigating it became a little troublesome. Wasn't much of an issue though.
4. Added a limiter on the sprint as to not make it infinite.

#### **What Changed:**

1. Focused on different parts of game making, spent less time with level design and more time in scripts attempting to add functionality to the game, which made for a different experience than the previous jam.
2. My eating and sleeping habits remained much the same between the two jams but I think ideally I'd go for a healthier diet, as a rule overall.
3. Slightly less organized structure regarding the walls and floors.

#### **Learning reflection:**

Remembered that smooth and intuitive controls of character and camera is important for a game to feel complete and good. Learned that working on something with a bit higher potential and demands than a simple score collecting platformer, was in a way more rewarding. Creating puzzles can be tough but having them work feels good, I might continue working on the prototype to have implemented some puzzles properly in the future.

#### **Conclusion:**

Got to explore different sides of Unity and experience developing other things, where some things worked great and others didn't, goes to show that ideally one'll always wish for having better abilities(training), more time or more people helping out.