

DRAW YOUR PATH

מספר הפרויקט - 231408

שם הסדנה – פיתוח משחקים עם Unity

שם המנחה – משה סולאמי

שמות המגישים – יוסף דקה, איסמעיל ג'ובראן ג'בארין

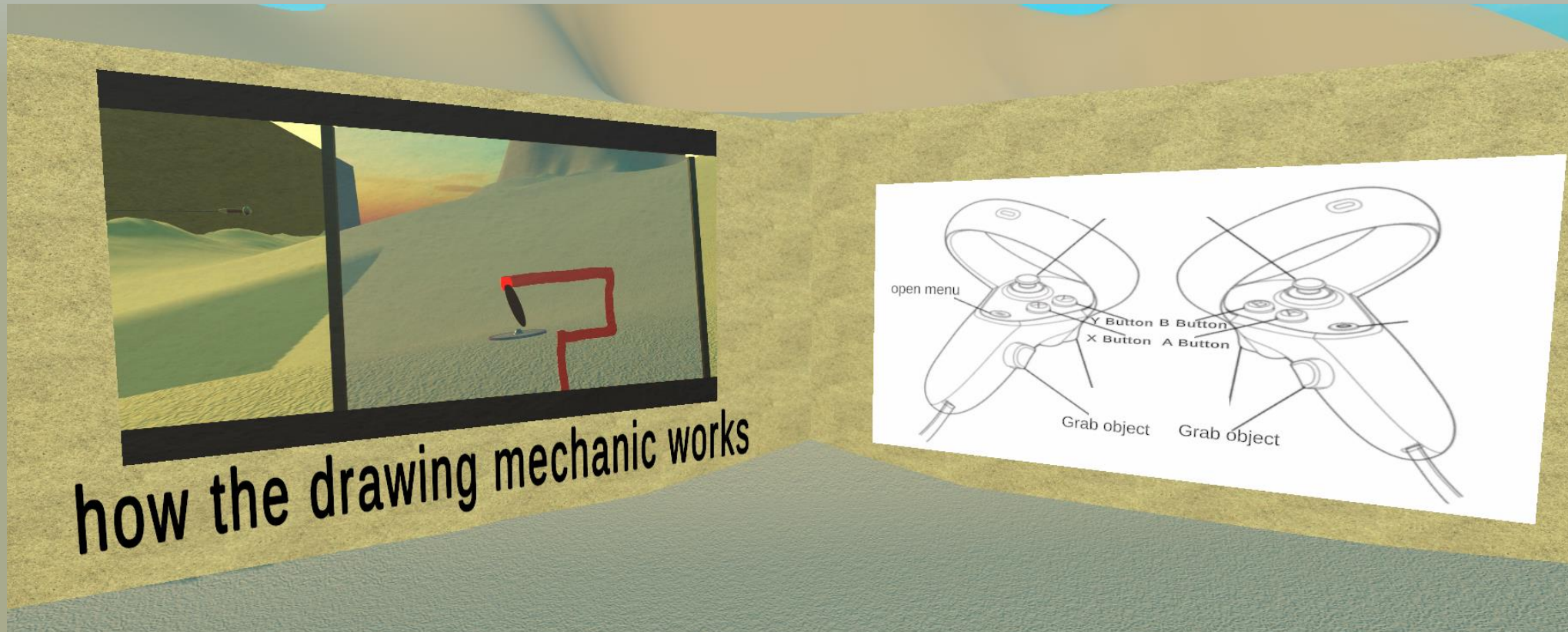
The image shows two large, textured stone obelisks. The one in the foreground is taller and has a rough, weathered surface. The one in the background is shorter and has a smoother surface with some faint markings. They are set against a clear blue sky with a bright sun in the upper right corner, creating a lens flare effect.

Introduction

- An action and adventure VR game developed with Unity which is a powerful tool that simplified our path in making that game
- Your main goal is to retrieve an item in the end of the map, but what's important is the path to retrieving the item

Target audience

- This game was made for people who are into the action and adventure genre
 - No need to have an experience with VR or action/adventure games



An in-game screenshot showing controls at the start of the game

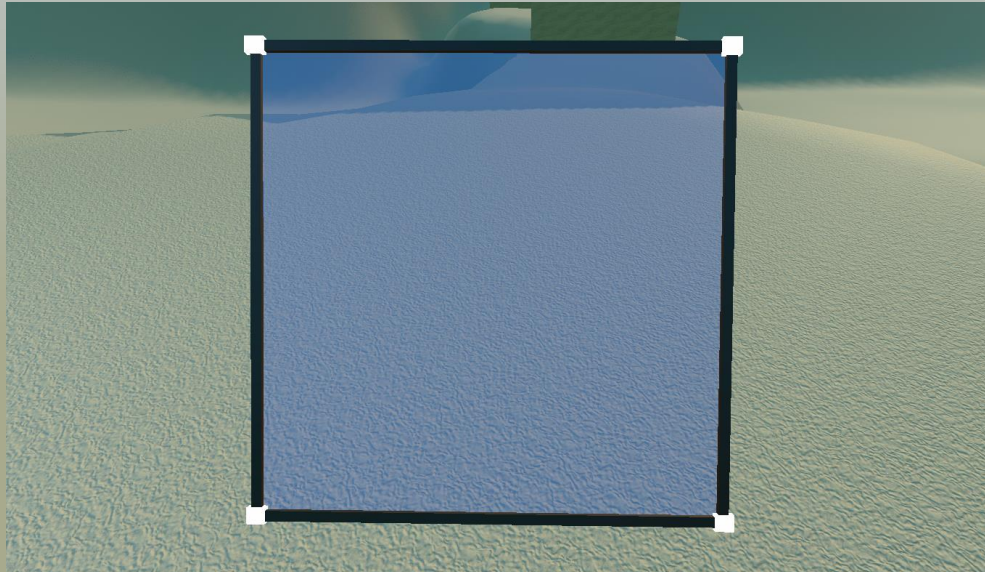
Overview

- The game's main feature is the ability to draw things into existence
- The map is constructed from several interconnected areas
- In each area the player will encounter enemies
- between each area player will have to solve a puzzle in order to move onto the next one
- All these obstacles in the player's playthrough will have to be solved using the drawing feature

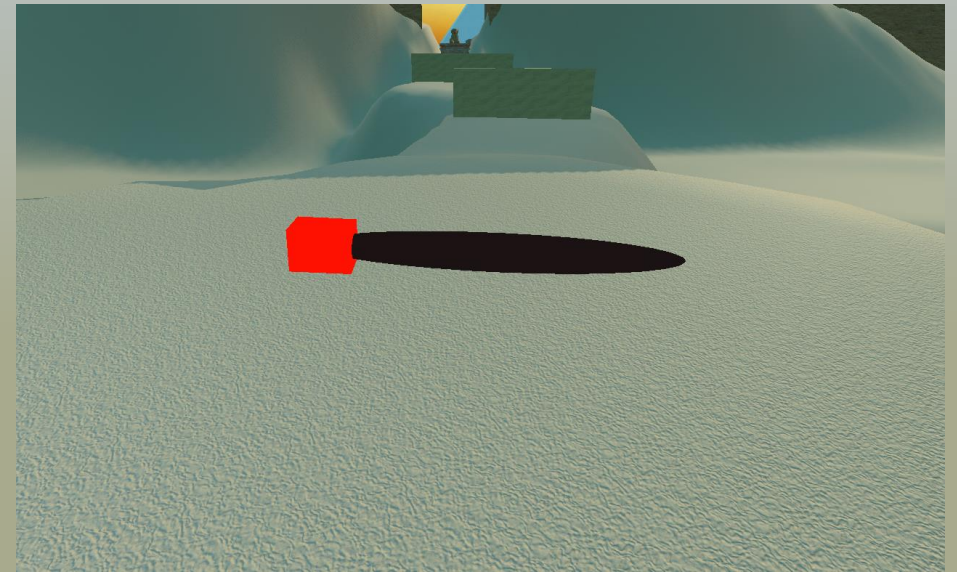
The drawing feature

- The tool which enables you to use the drawing feature is a marker and a draw canvas

The draw canvas



The marker



- You will be provided with a set of items/spells that you will be able to draw and use
- The more accurate your drawing is the more effective the item/spell will be



In-game screenshot, you can look at the set anytime you want during the game

<https://youtu.be/rs2VX241ERs>

Snippet from game

Game Architecture

```
private Texture public void SpawnShield(int pixelHits)
{
    float yRad;
    float xRad;
    float cent;
    float cent;
    int circle;
    m_TotalPix;

    for (int x
    {
        for (i
        {
            fl
            if
            {
            }
        }
    }

    int Durability;
    float accuracy = (float)pixelHits / (float)m_TotalPixelHitAttempt;
    GameObject cloneShield;

    checkNumOfItems();

    if (accuracy <= 0.75)
    {
        Durability = 100;
        cloneShield = Instantiate(Weak, SpawnLocation.position, SpawnLocation.rotation);
    }
    else if (accuracy < 1) ...
    else ...

    cloneShield.GetComponent<Shield>().SetStats(Durability);
    ObjectList.Add(cloneShield);
}
```

as highestYCoord

Summary

- As developers who had no experience in creating 3D games moreover a VR game as the games we developed before the project were played on the console screen, it was nice to have a framework like Unity which offers a wide variety of tools that helped us to create the game we had in mind
- Overall, the game's drawing feature allows the player to interact with the world we built in many ways which will give every player a unique experience