Virtual Reality Experience For DIU Permanent Campus

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

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APPROVAL

This Project titled "**Virtual reality experience for DIU permanent campus**", submitted by **Md. Naeem Aziz, M. Saeid Hasan Ovi, and Abdullah Al Faisal** to the Department of Computer Science and Engineering, Daffodil International University has been permitted as favorable for the partial completion of the prerequisites for the degree of Bachelor of Science in Computer Science and Engineering and advocates for its genre and substance. The presentation has been held on 15th January 2021.

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DECLARATION

We hereby declare that this project has been done by us under the supervision of **Mr. Ohidujjaman, Lecturer (Senior Scale), Department of CSE** Daffodil International University. We also notified that neither this project nor any section of this project has been applied somewhere else for the honor of any degree or diploma.

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ACKNOWLEDGEMENT

"All praises are due to Almighty God"

First, we express our deep-felt applaud and gratitude to All-powerful God for the heavenly benediction that makes it feasible for completing the final year project successfully.

We grateful and wish our deep encumbrances to Our Supervisor **Mr. Ohidujjaman, Lecturer (Senior Scale)**, Department of CSE Daffodil International University, Dhaka. Rooted wisdom & sharp eagerness of our supervisor in the field of "Virtual Reality" to carry out this project. It was possible to complete this project with his infinite patience, scholarly conduct, relentless encouragement, persistent and energetic observation, approximate criticism, helpful consultation, reading a lot of inferior manuscripts, and correcting them at every time.

We wish to express our sincere appreciation to **Mr. Ohidujjaman, Mr. Md. Mahfujur Rahman**, and Head, Department of CSE, for their conducive assistance to complete our project and also to other faculty members and all staff of the CSE department of Daffodil International University.

We would like to give thanks to our coursemates at Daffodil International University, Who took part in this conversation while fulfilling the course work.

Finally, we have to accept our parents' continuous support and patients with due regard.

ABSTRACT

Our project Virtual Reality Experience for DIU Permanent Campus. Virtual reality (VR) is a simulated system that can be or vary from the physical world. VR can give birth to new storytelling styles and emotionally strong experiences. But VR creation is seen as intimidating: it is costly and requires both special hardware and skills. Multi-projected environments are used by these systems to generate convincing images and other sensations that can simulate the physical existence of a user in a simulated world. A Person has the opportunity to look around the artificial world using virtual reality equipment, moving around in it, and interacting with virtual features or products. Our project is based on Virtual Reality. We put our beloved varsity Daffodil International university's permanent campus into virtual Reality. By this, anyone who has this project, can see and can imagine himself in Daffodil International University's permanent campus by using VR Box. We replace real-world Daffodil International University with the artificial. For doing these activities we have used C#, JavaScript in Unity3D by Windows Operating System. We have to use VR Box and an Android Phone. We think that it will be an effective software for the university.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Virtual reality defines as a synthetic environment that can be or totally vary from the physical world or entirely diverse from it. Our project is based on Virtual Reality. We put our beloved varsity Daffodil International university's permanent campus into virtual Reality. By this, anyone who has this project, can see and can imagine himself in Daffodil International University's permanent campus by using VR Box. The first time we have that idea of making a virtual reality project of our varsity because I want to see my varsity even when I am far away from my varsity. That how we start to make that project. Many students come to Daffodil Varsity permanent campus just to see pictures of varsity and many people never come to see varsity but willing to see it. The Project will help to give them clear knowledge about our varsity area. They can enjoy the area with a VR box and can take the realistic feel of it from anywhere.

Figure1.1.1: Normal View

This is the VR mode where one can use the VR box and then enjoy the sight of the varsity with the help of that project. They can also change the path if they wish for it. That's how the project activities. It's really helpful and enjoyable for the people who have a keen interest in Virtual Reality and on our varsity campus.

1.2 Project Motivation

We are doing this project because we are Motivated by it. The motivations are:

· We are keen interested in IoT and Virtual reality.
· We wanted to do something by which we can feel our varsity from anywhere.
· We believe we can do creative and loveable things related to our varsity in this sector.
· We want to create our varsity artificial environment and virtual reality is the best choice for it.
· We have a great mentor who motivates us to do something related to our varsity and virtual reality.

1.3 Benefits of Project

- One can get a realistic sense of a scene and the objects by it.
- Build a meaningful and unforgettable experience.
- Due to in-depth, concentrated interactions, no noise or distraction from the outside, deeper levels of understanding, and learning.
- Easy to use.
- New students can easily know about the varsity by using this.
- Easy to maintain and handle any android devices.
- In VR, you can step close to and pick up an object to see the structure and materials.
- You can also look at it from various angles and connect with it as though it were real.

1.4 Objectives

Our Objectives are:

· To replace real-world Daffodil International University with the artificial.
· To give the new people who never come to Daffodil permanent campus a view of our campus.
· To feel our Varsity anytime from anywhere.
· To overcome more problems related to it.
· To achieve skills and experience.

Summary

In this chapter, my goals come clear. In this chapter, I have described probably every common subject about our project and we followed that.

CHAPTER 2

BACKGROUND

2.1 Introduction

In this virtual reality project, we use unity3D which is a cross-platform game engine, this is where we develop the project and construct code for the backend, 360 Camera to capture images and use Photoshop to design and develop User Interface for the front end.

Figure2.1.1: Design in Unity3D

2.1.1 Introduction to the Development platform

This project is based on virtual reality which is mainly developed in Unity3D. We have to import GoogleVR SDK, NDK, and JDK in the Unity3D. Those are development kits. We use programming languages which are JavaScript and C#.

2.2 Related Works

There are some virtual reality projects which are similar to our project. Some of those are:

2.2.1 WebVR Experiments:

WebVR experiments are a series of cool projects that were developed using a reactor by Nikolaus Graf. A 3D forest is the most notable of these projects. You have to use a VR headset, for example, Gear VR or Oculus Rift, for the full experience. By using detailed 3D modeling as well as computer graphics, Graf has done some very impressive work here. Animations and moving objects are yet to be included, but as soon as possible, he plans to do all of that. He has made his project open source. Check it out here for a complete overview of the code, and contributions are also, welcome. You can also try out the 3D forest demo of Graf here. In React Amsterdam, he also made a video guide for this demo. Link of this Project:

https://nikgraf.github.io/webvr-experiments/HelloWorld/v3/

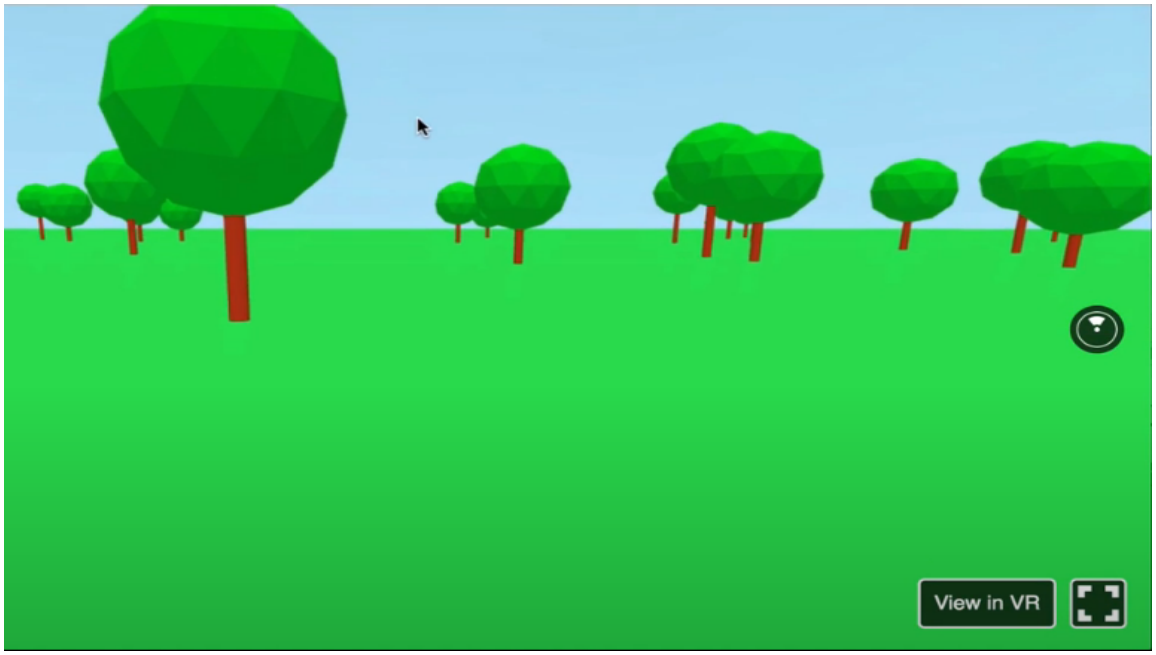


Figure2.2.1: Related work 1

2.2.2 Earth-Moon VR: With the idea, earth-moon VR a person named: Esteban Herrera, definitely felt a special kind of need to contribute to the VR culture. Earth-moon VR was developed with React VR and uses the principle of cube mapping (a form of environment mapping that uses with the idea, earth-moon or a person named: Esteban Herrera, definitely felt a special kind of need to contribute to the VR culture. Earth-moon

VR was developed with React VR and uses the principle of solid figure mapping (a shape of atmosphere mapping that conducts the six faces of a cube as the design mode) to render the Earth and the Moon's 3D models, although not a true replica of the Earth-Moon system. Herrera also wrote a cool article in which he discusses the principles of 3D modeling as well as how this project was created from scratch. You can check out Herrera's article as well as the "earth-moon VR" project on GitHub (https://github.com/eh3rrera/earth-moon-vr) for a more detailed walkthrough of earth-moon VR and an overview of the interactive demo.

Figure2.2.2: Related work 2

2.3 Comparative studies:

Most of the virtual reality projects are quite the same. But the concept and visual scene of the environment is different. Our project is also different than all others. Those apps are not that easy to use but our project is easy to use and the environment is different. So, anyone can use the app so easily. Anyone can understand our projects so easily but others were not that easy to use. We work with 360 pictures but most of them work with 360 videos. So, I think ours a friendly project and supportive one to know the details about the specific environment. The people who want to see and know about the place from other places can easily interact with the project and will be lost in the world of virtual reality.

2.4 Scope

The project's scope is to provide users with several services in a very short period. It provides describable information and a view of the environment. The main purpose of this project is for new students and new peoples. They can easily understand and take knowledge of the place before coming. They will also know the name of all the areas and academic buildings. Those are the main scope of our projects.

2.5 Challenges

The main problems in the world of virtual reality are developing better systems of monitoring, seeking more natural ways of allowing, Interacting with users in a virtual world, and reducing the time it takes for virtual spaces to create. Though there are a couple of businesses of the monitoring system that have been around since the earliest virtual reality Days. Similarly, there are not many companies that are directly working on input devices for applications. Initially intended for another discipline, most VR developers have to rely on and adapt technology, and they have to hope that the company manufacturing the technology will remain in business. As for the development of virtual worlds, a believable virtual environment can take a long time to create - the more realistic the environment, the longer it takes to render it. It might take more than a year for a team of programmers to accurately replicate a true room in virtual space.
There were some other challenges. Those are:

· Motion sickness problem. Adjust and set the perfect motion.

· Prevent acceleration.

· No unintended gestures.

· Avoid fixed-view items.

· Avoid products with fixed views

· Often observe the movement of the consumer.

CHAPTER 3

REQUIREMENT AND SPECIFICATION

3.1 Introduction

We described here Hardware requirements, Software requirements, and analysis procedure. We also discuss here the use-case model of the project, some other models, and design specifications.

3.2 Hardware Requirements:

This part catalogs the least requisites for the Unity platform to be built and run. Depending on the project's complexity, actual performance and rendering quality can differ.

Requirements(At List)	Windows	Android
Operating System (Version)	Windows 7(Service Pack 1+) & Windows 10, 64-bit.	4.4 (API 19)+
CPU	X64 architecture with SSE2	ARMv7 with Neon Support (32-bit) or ARM64
Graphics API	DX10 to DX12 with GPUs.	OpenGL ES 2.0+, OpenGL embedded system 3.0+.
Additional Requirements	Hardware vendor supported drivers (officially)	1GB+ RAM

3.2.1 Project use requirement: Anyone with an android Phone version 4.4 or upper then that can use this project.

3.3 Software requirements:

To build the project we need some software. Those are:

• Photoshop
• Instra 360 oneX
• Unity3D (development engine)
• GoogleVR SDK, NDK
• C#
• Visual Studio
• JavaScript

3.4 Use Case Diagram

Use case charts consist of performing artists, instances of use, and their relations. The graph is used to illustrate an application's framework/subsystem. The basic utility of a system is captured by a solitary use case map. Use case charts are used to assemble a framework's specifications, including internal and external consequences. For the most part, certain prerequisites are systemic necessities. Therefore, when a system breaks down to assemble its functions, use cases are ready and performers are differentiated. This Diagram case of use is a graphic representation of the relationship between the elements of virtual reality experience for DIU permanent campus project. Figure-3.4.1 is this mentioned diagram of our project.

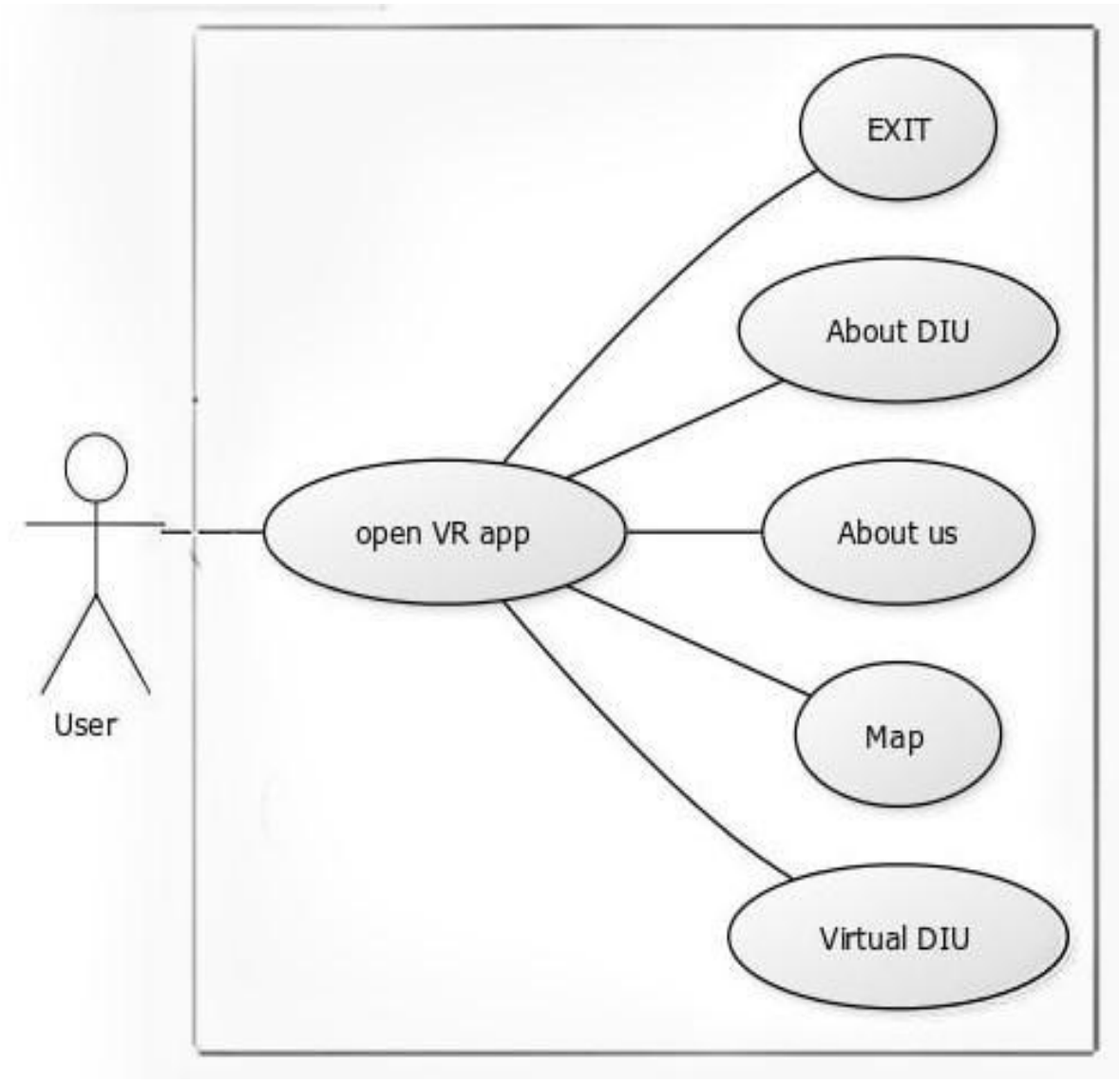


Figure 3.4.1: Use Case Diagram of our project**.**

3.4.1 Description of Use Case Model

Actors: The Actor of the system is the User.

Use Cases:

Based on the management system's functionalities and priorities, we have clarified the collection of use cases.

System User Entity:

Use cases of the System User are Virtual DIU, Map, About us, About DIU, Exit. In the home skin, there's some action for the user. User firstly will see the User Interface. They will see some action buttons like Virtual DIU, Map, About us, About DIU, Exit. If they want to see the DIU view in a virtual reality system they have to click on the button of Virtual DIU. If they want to exit then they have to simply click on the exit button.

3.5 Data Flow Diagram

A data flow diagram is a way of describing a stream of data via a medium or procedure (usually an information system). The DFD also offers details toward every subsistence's entry and performance and the procedure itself. There is no monitoring flow for the mentioned diagram, no decision rules, and no loops. Navigate to Hop Jump to scan. Data flow diagram for data collection, data flow, interface, and features. The mentioned diagram is a way of describing the drift of a processor device data (usually an information system). This diagram also gives us the details about each entity's entry and performance and the procedure itself. In this mentioned diagram, we see the user who uses the project has some actions he has to choose from, and then the user can enjoy any action they want. If a user wants to know about us then they can. They can also learn about the main environment and enjoy the main environment. They can see the environment map and if they want to sign out from the project, they just have to click exit. That's the process and data flow diagrams description for that project.

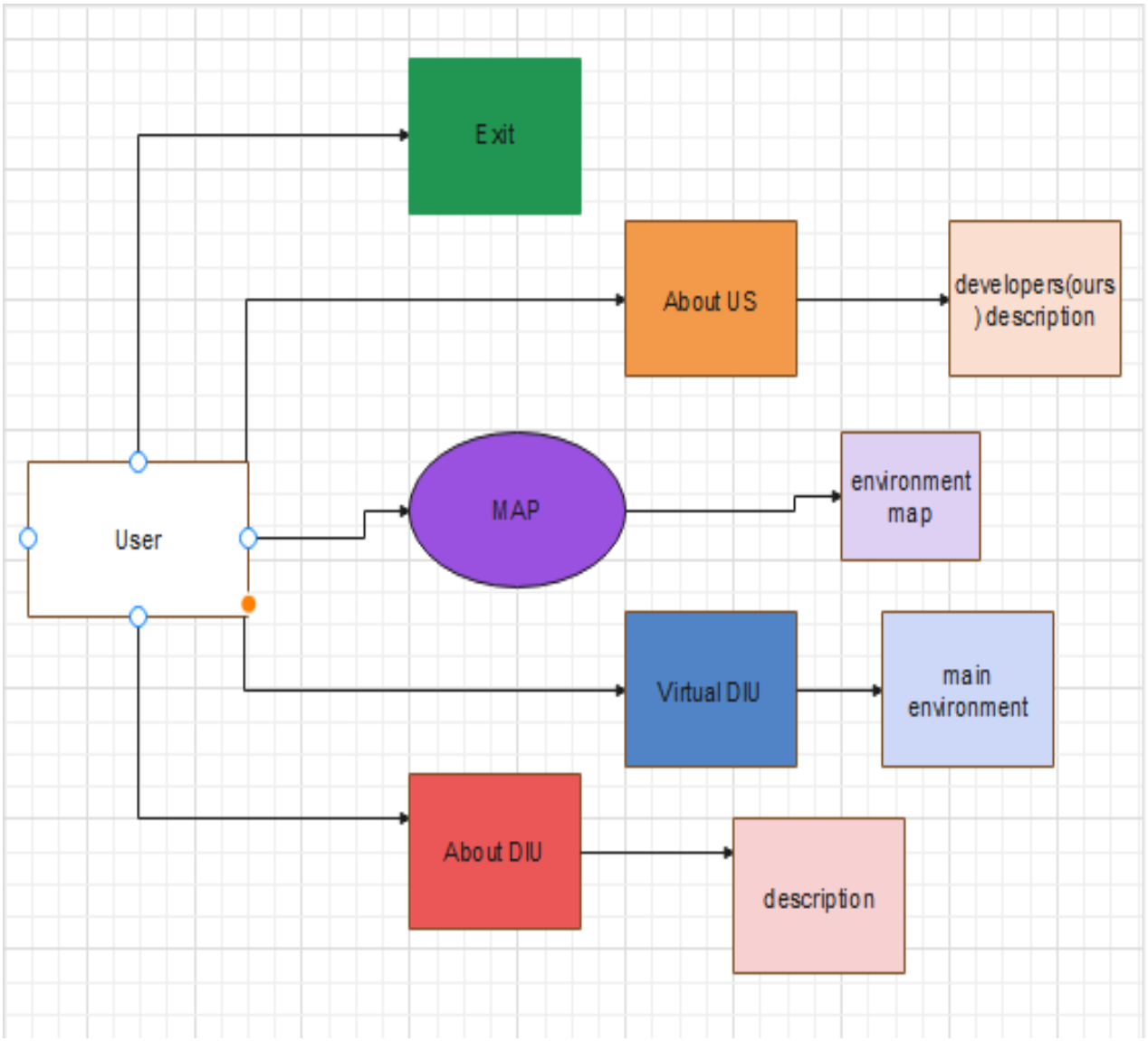


Figure3.5.1: Data flow diagram of our project

That's the data flow system of our project. There is only one actor and the actor is the user. It's a clear-cut representation of our virtual reality project. It's very much understandable and user friendly. That's also an advantage of it. DFD is best to understand any kind of project easily.

3.6 Simulation Process of the system

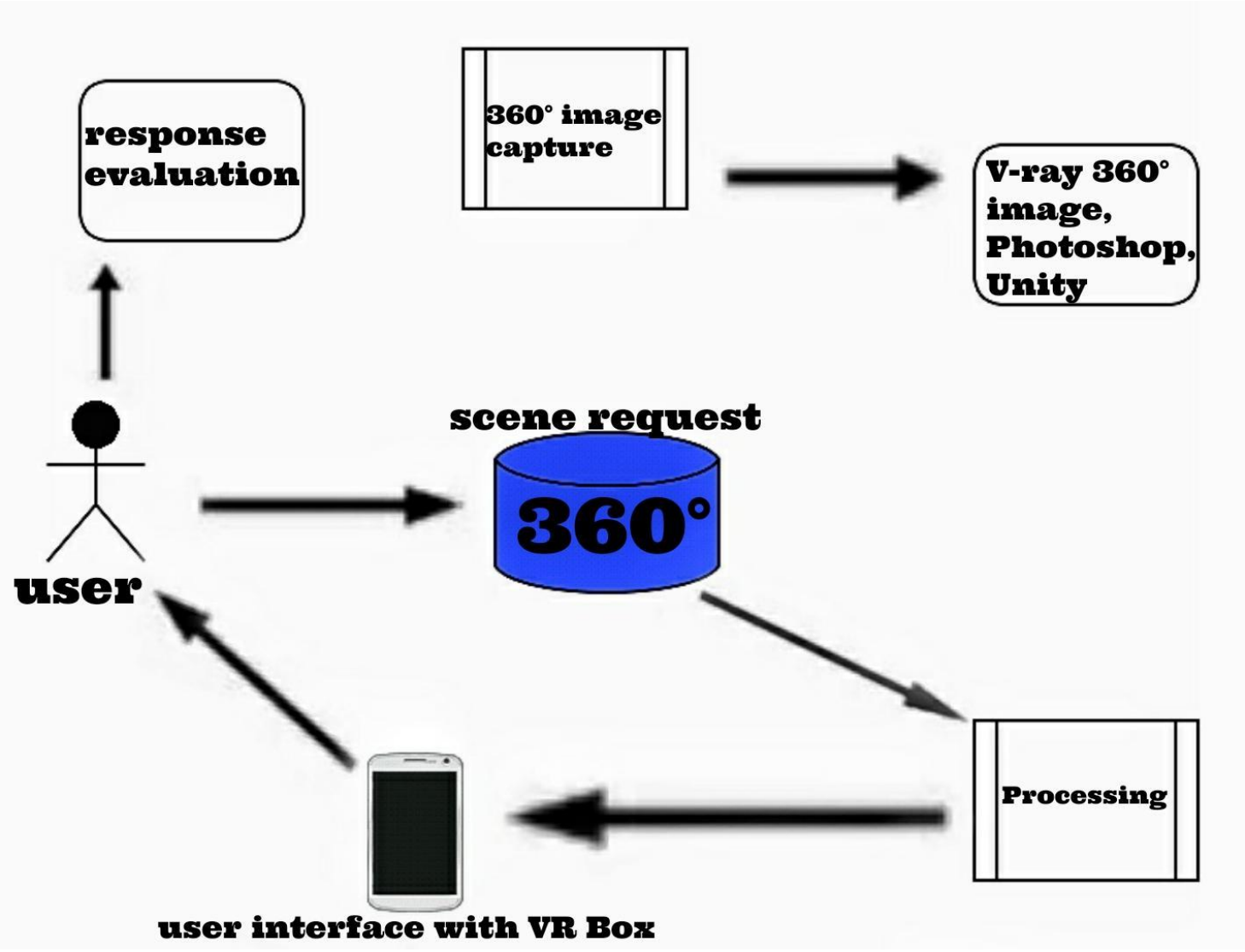


Figure 3.6.1: Simulation Process of the system.

3.7 Design Requirements

For this project to be constructed, perfect planning is quite necessary. Every developer attempts to do a proper job with a proper project, and a proper project relies a lot on its appearance. That's why we are trying to make our project named Virtual Reality Experience For DIU Permanent Campus, a user-friendly design**.**

•Photoshop is number one in my requirement. First of all, we use Photoshop to design and adjust the lighting of the graphics image and 360 images.

•Then we import those into the unity engine. We made spheres for every 360 images and put those images into the spheres. One image for one Sphere

•We use JavaScript to design the User Interface. The language of the internet is JavaScript. It is a simple programming and popular programming language to learn. Similar to the more advanced C programming language, JavaScript also incorporates similar lexical syntax.

•Next requirement is C#. C# is the most common language for VR programming. To generate Unity applications, it is the most prescribed language and Unity is the most common game engine. It will give you a chance to target most stages by using this language, from PC to Mac to flexible Android and IOS applications. In reality, the bulk of any VR applications are encoded in Unity. We made command by it. By C# we design about which view will process after which view.

Summary

In this part or area, I analyzed the full endeavor using the utilization case diagram and data stream layout. We worked like manner depicted in it. We discussed some diagrams and all kinds of requirements of our project.

CHAPTER 4

Design Specification

4.1 Front-end Design:

This part is something that is eventually applying to the UI layer of the project. It is the stuff people see and communicate with. This design is the visual representation of the project. Whatever user can observe and use is front end design. We use JavaScript to design and to show the UI of the project. We use photoshop also to adjust the color combination of the UI images.

4.1.1 What we see first

Figure 4.1.1 shows the starting of the system.

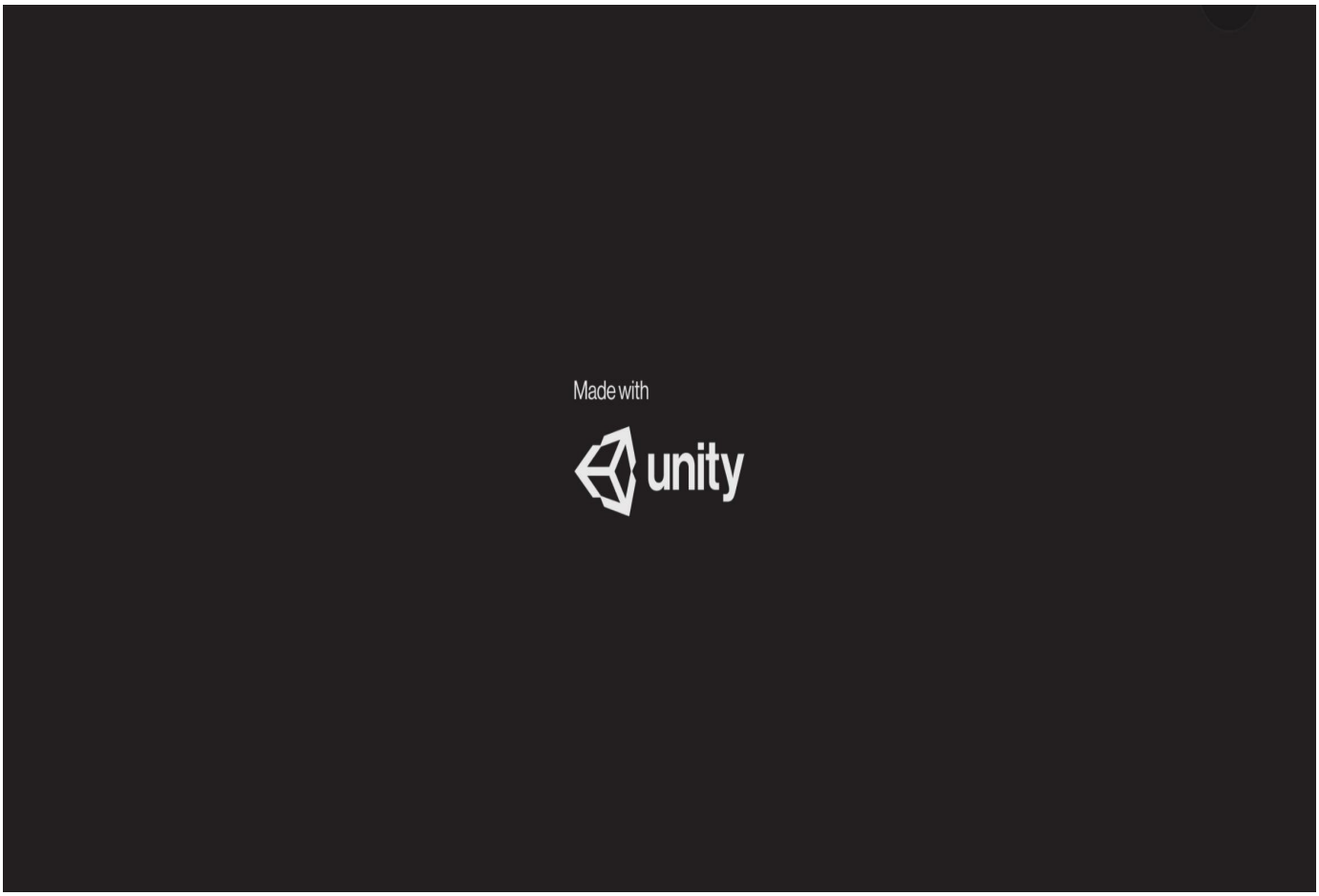


Figure4.1.1: Project starting view.

4.1.2 Home Page

Figure 4.1.2 shows us the Home Page.

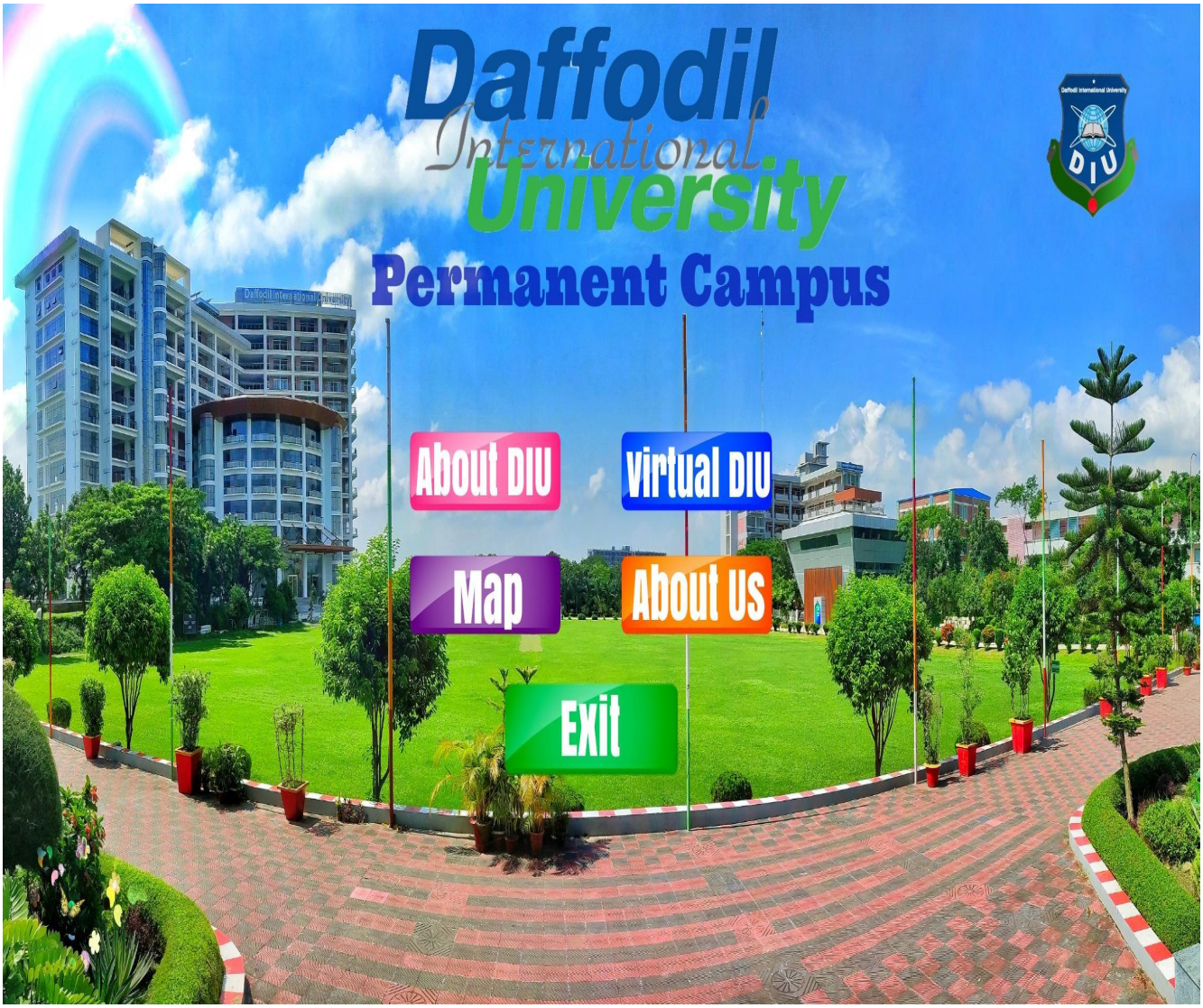


Figure 4.1.2: Home Page of the system.

4.1.3 Action Bar Buttons

Figure 4.1.3 shows the DIU Button action.

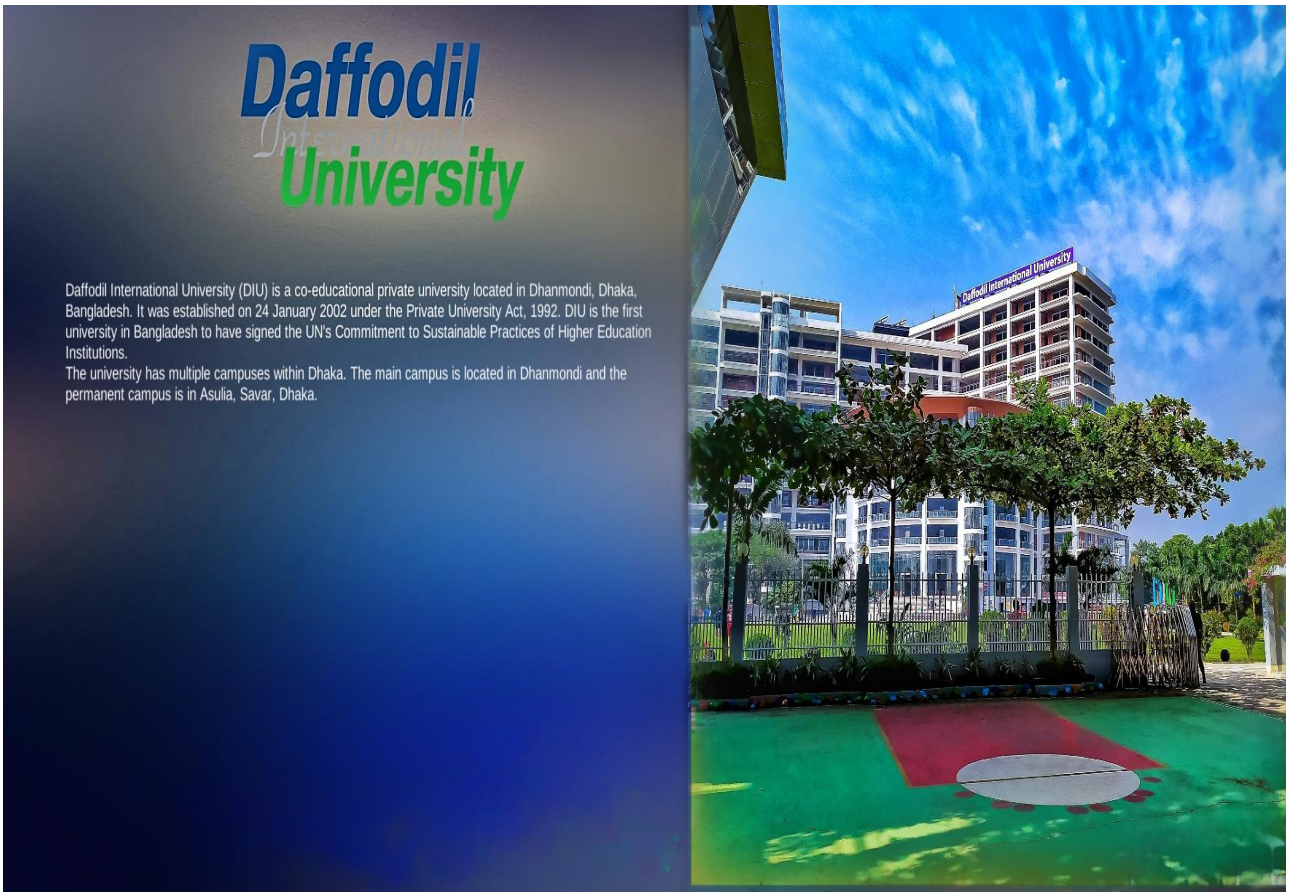


Figure 4.1.3: About DIU button.

Figure 4.1.4 shows us the Map Button action.

Figure 4.1.4: Map Button action

Figure 4.1.5 shows the developer details. About us, the button shows our team members short description.

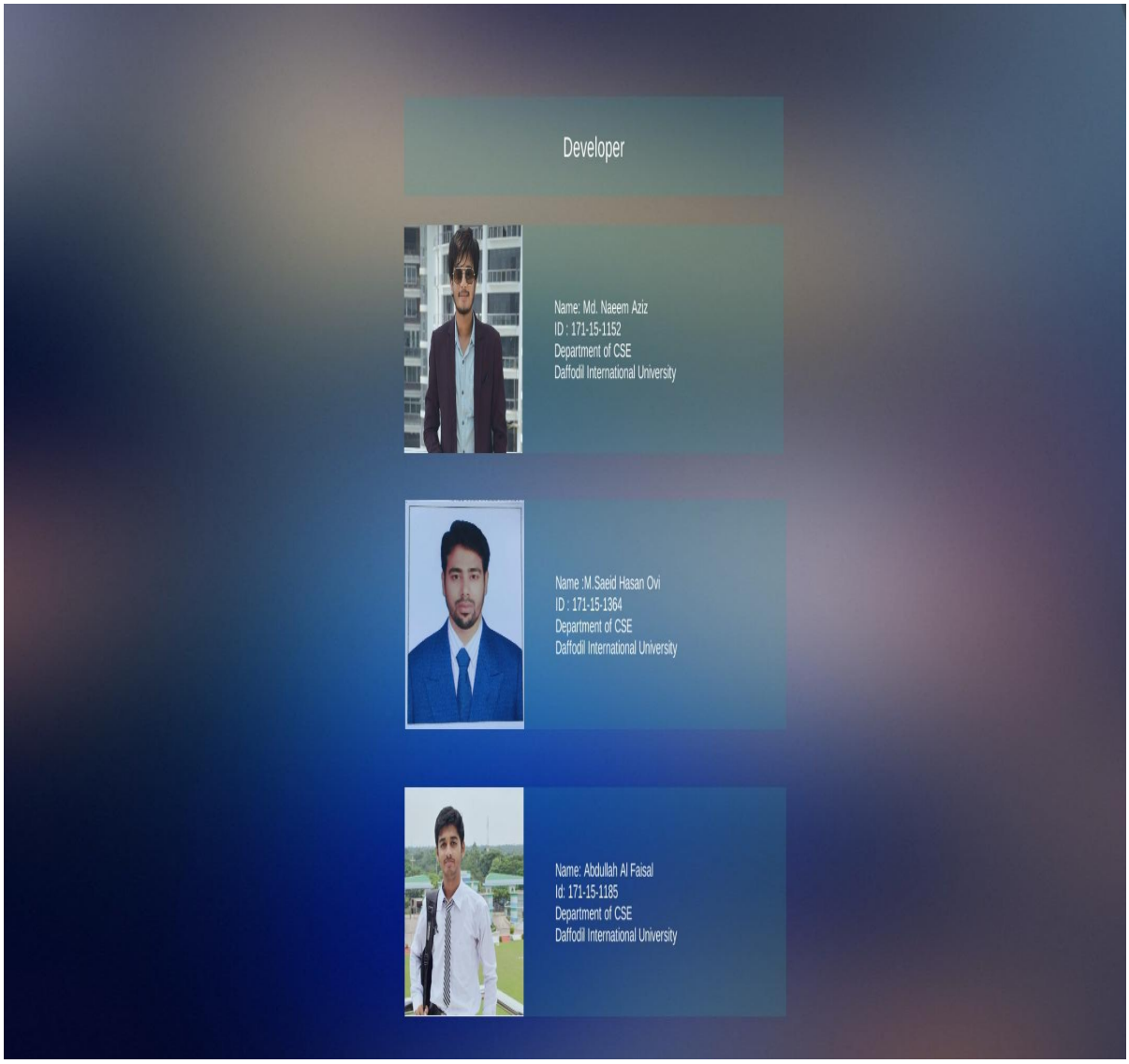
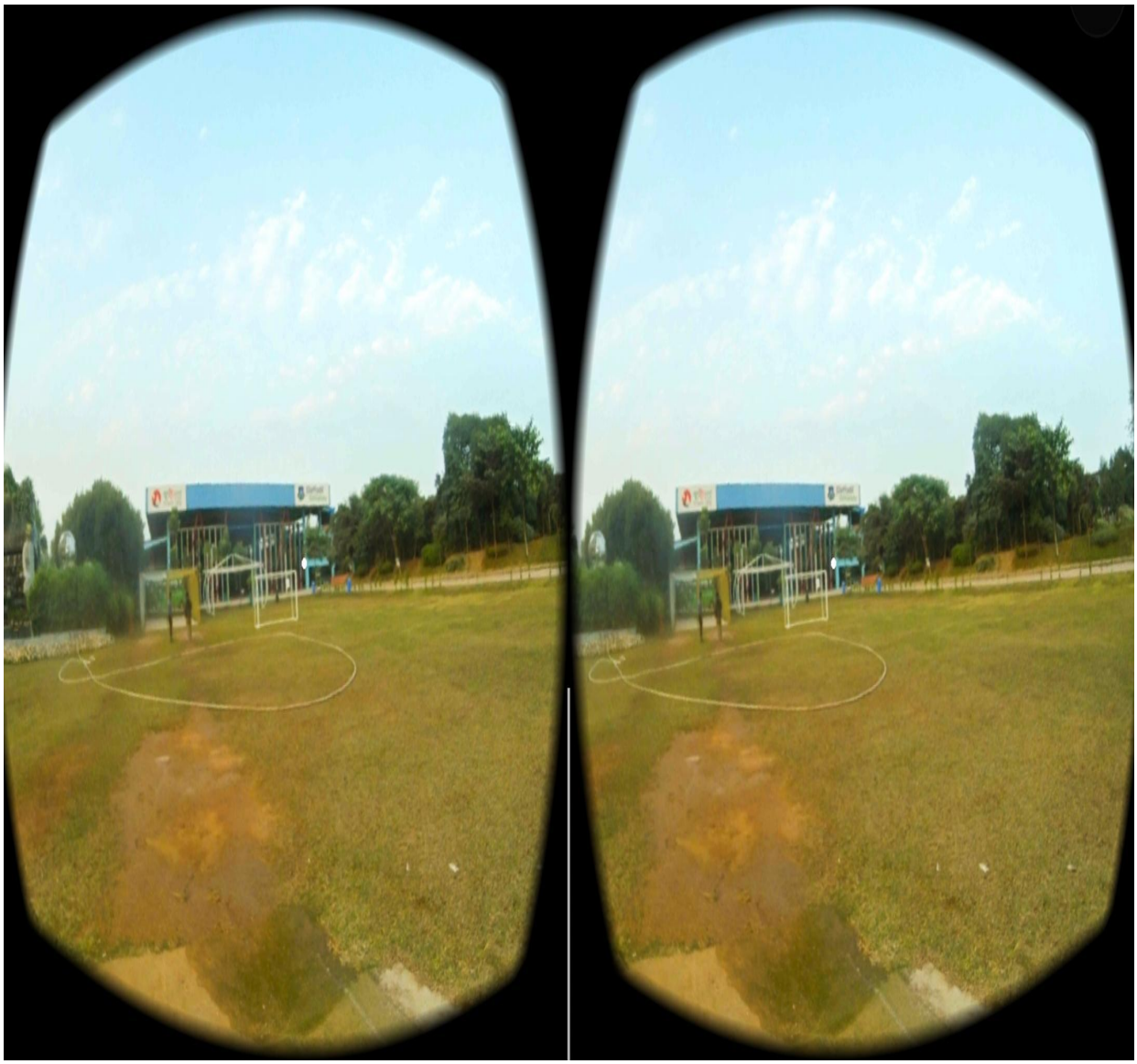


Figure 4.1.5: About Us button action.

Figure 4.1.6 shows us how the Virtual DIU Button (main action button) works.



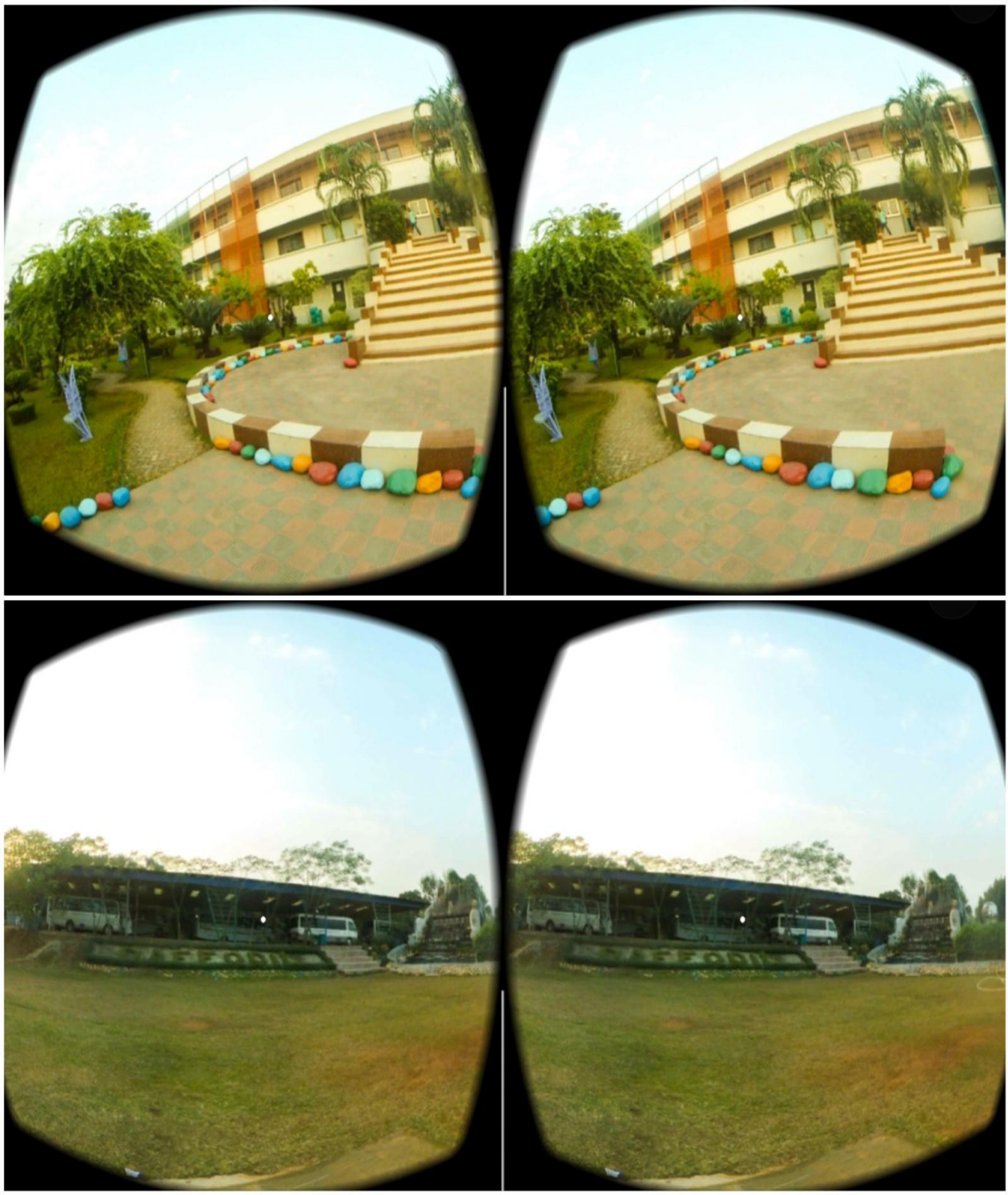


Figure 4.1.6: Virtual DIU Button action.

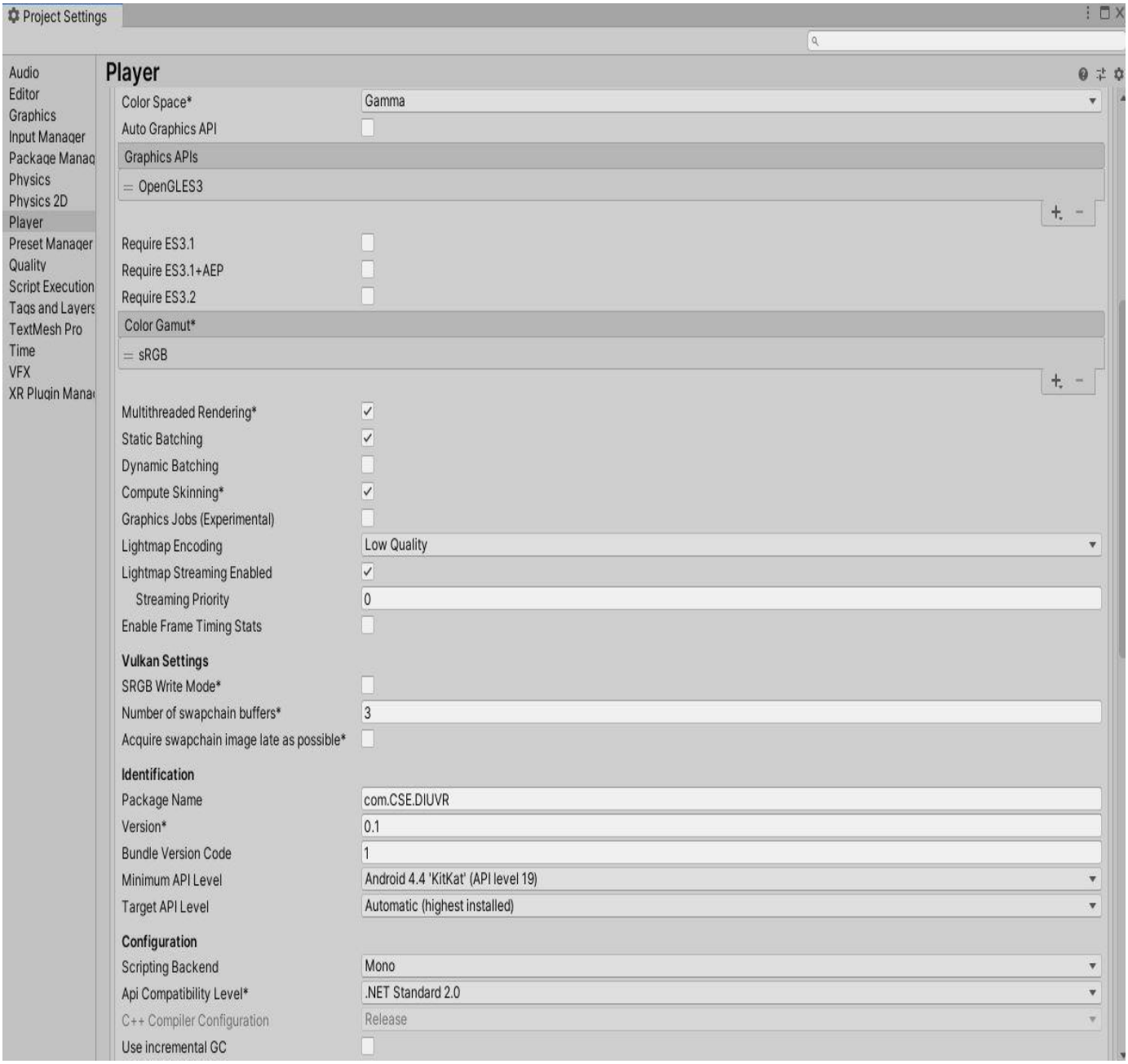
4.2 Back-end Design:

Back-end Design is like a black box design. The only developer can see this sector. The user can't see that part. We do C# code in visual studio linked to Unity, for the back-end design. Back-end design works as a processing unit, all the task of the application is processed by the help of the code which we design in Back-end part.

Figure 4.2.1 shows the spheres we use:

Figure 4.2.1: Spheres part of the project

4.2.1 Some Back-end Design (Unity app Settings):



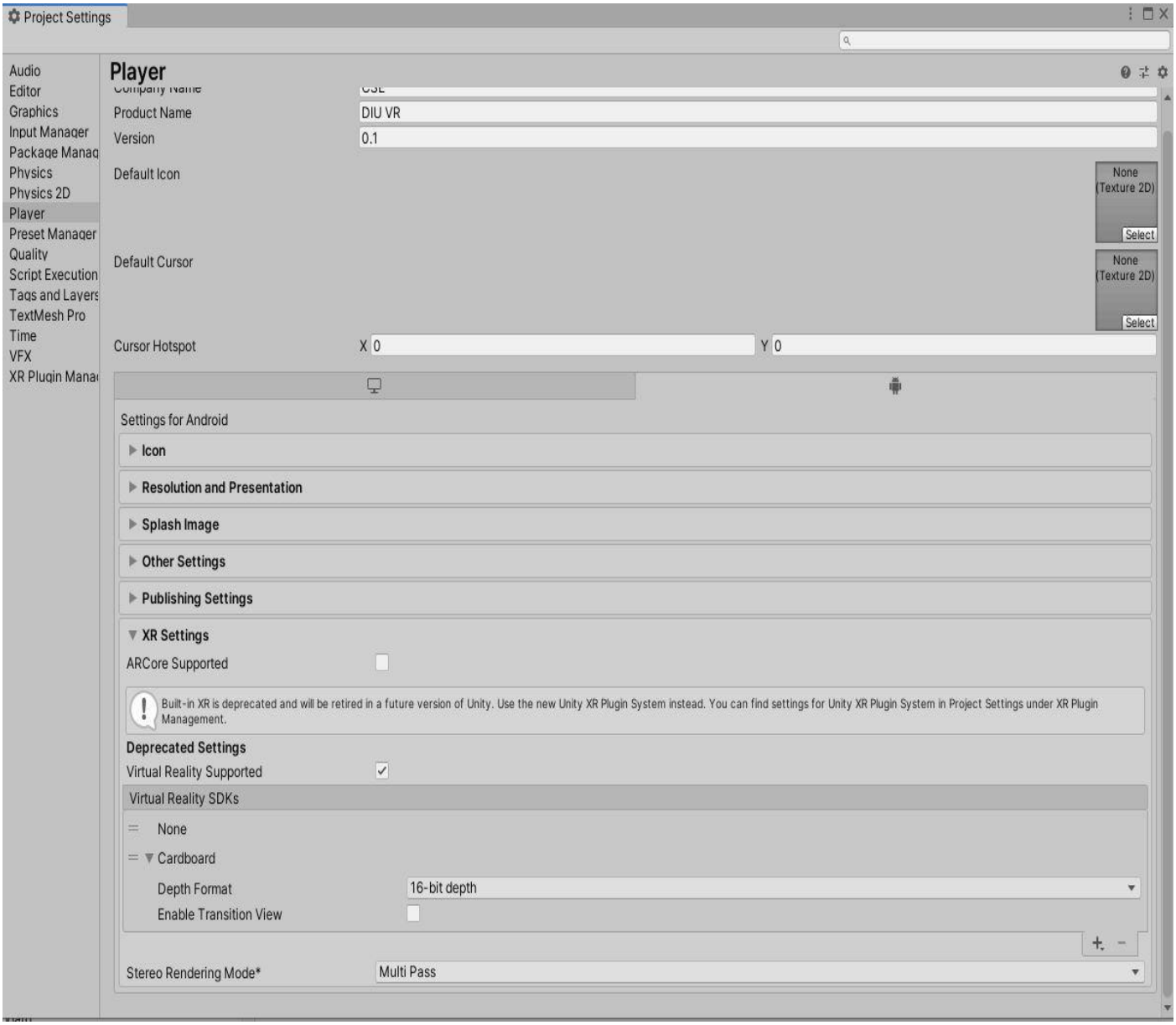


Figure 4.2.2: Unity Project Settings

Figure 4.2.3 shows us the Scripts which is placed inside of the GoogleVR SDK plugin. Inside the Scripts, we placed C# code (#).

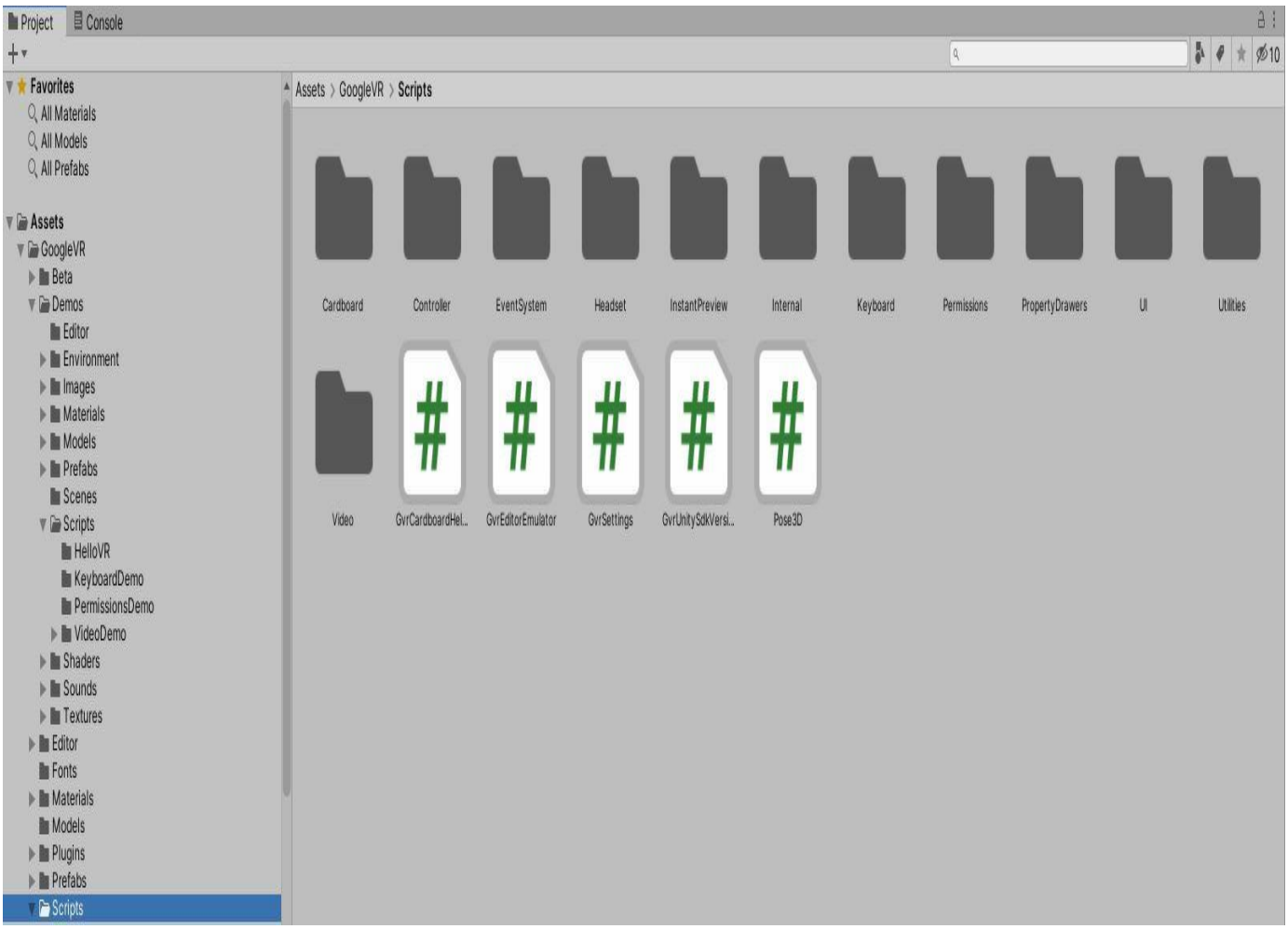


Figure 4.2.3: Scripts of the project.

Figure 4.2.4 shows how the environment view looks in Unity.

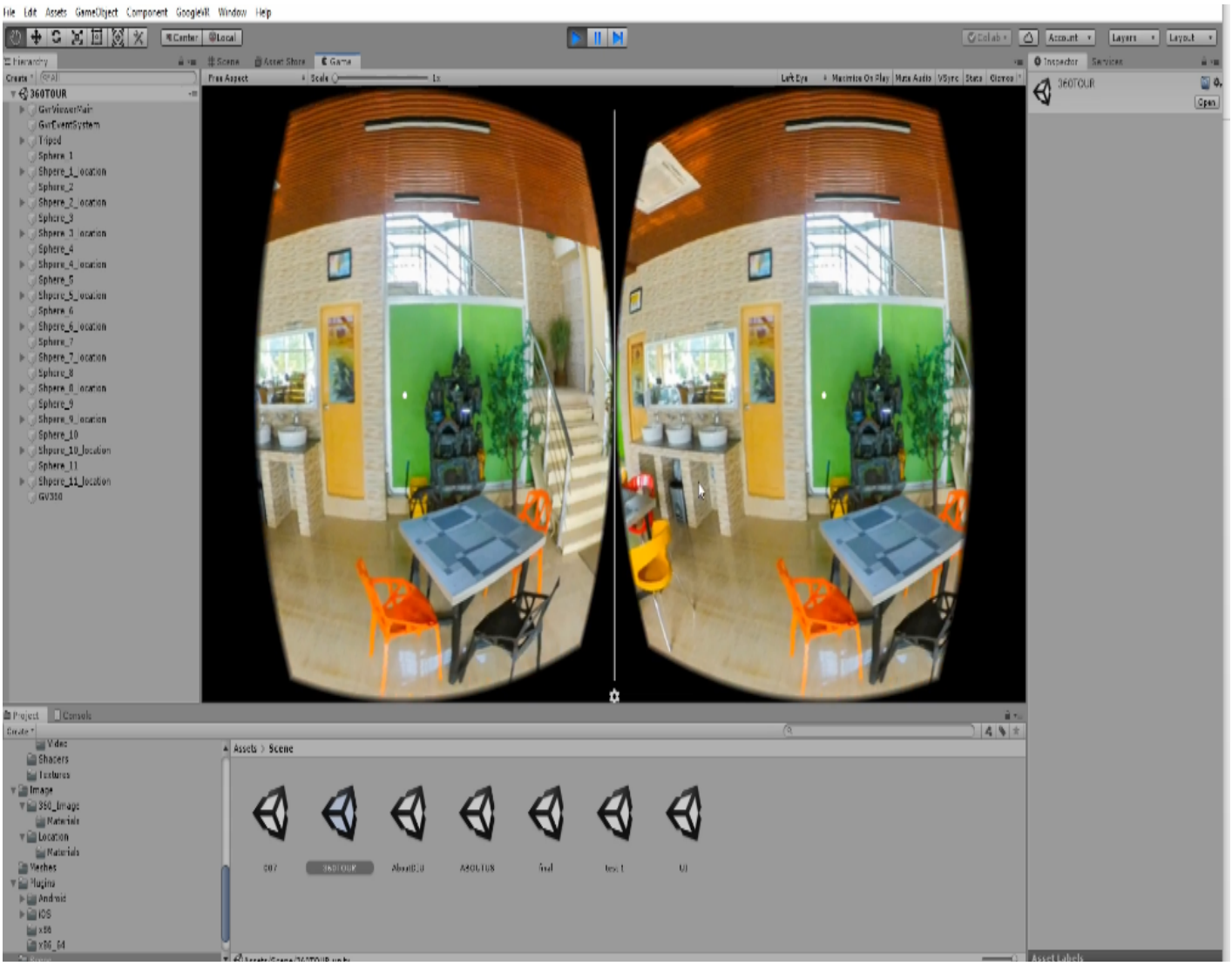
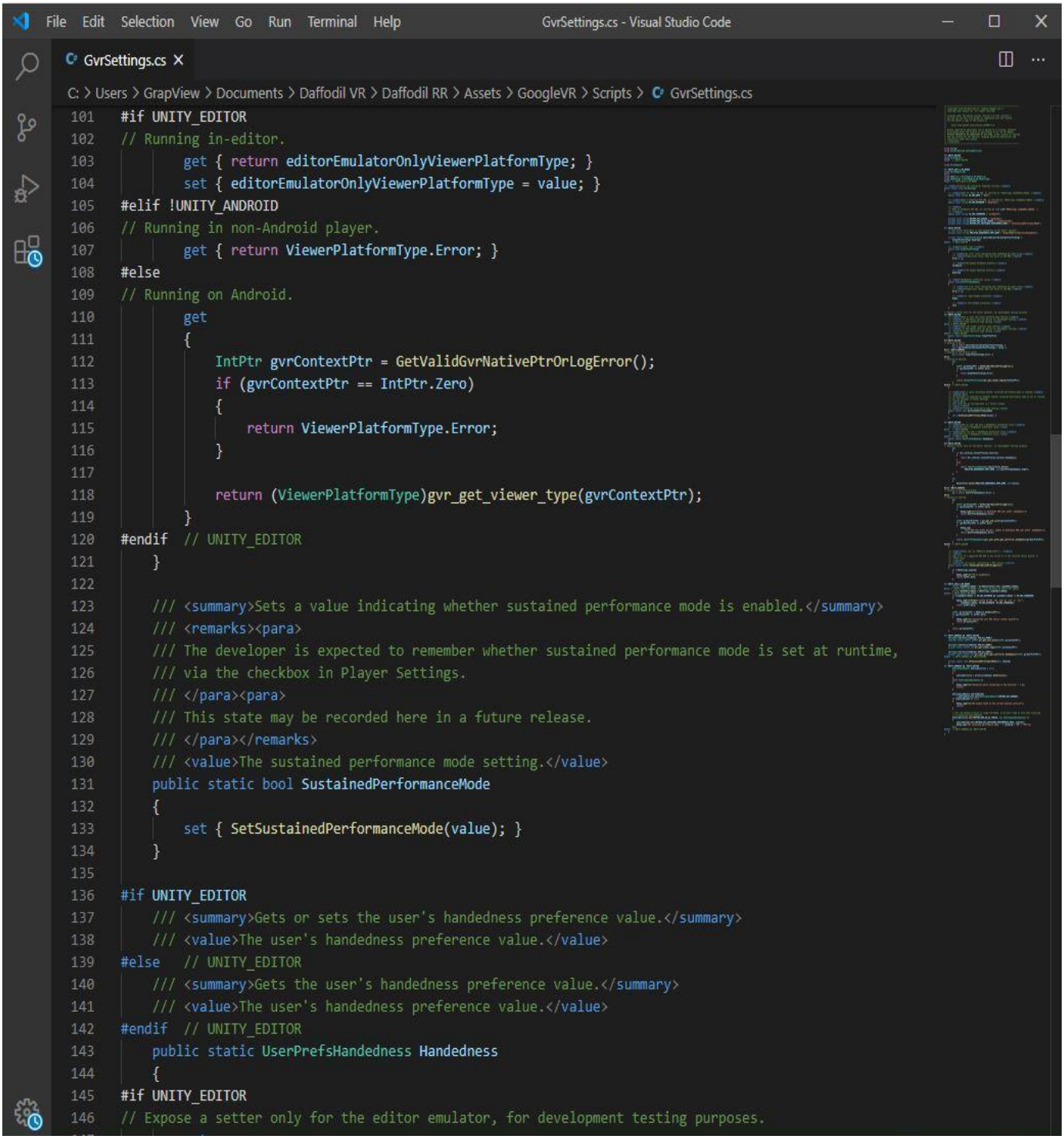


Figure 4.2.4: Environment Scene in Unity of the project.

Figure 4.2.5 shows some C# code of the project.


File Edit Selection View Go Run Terminal Help
GvrSettings.cs - Visual Studio Code
GvrSettings.cs
C: > Users > GrapView > Documents > Daffodil VR > Daffodil RR > Assets > GoogleVR > Scripts > GvrSettings.cs
#if UNITY_EDITOR
// Running in-editor.
get { return editorEmulatorOnlyViewerPlatformType; }
set { editorEmulatorOnlyViewerPlatformType = value; }
#elif !UNITY_ANDROID
// Running in non-Android player.
get { return ViewerPlatformType.Error; }
#else
// Running on Android.
get
{
IntPtr gvrContextPtr = GetValidGvrNativePtrOrLogError();
if (gvrContextPtr == IntPtr.Zero)
{
return ViewerPlatformType.Error;
}
return (ViewerPlatformType)gvr_get_viewer_type(gvrContextPtr);
}
#endif // UNITY_EDITOR
}
/// <summary>Sets a value indicating whether sustained performance mode is enabled.</summary>
/// <remarks><para>
/// The developer is expected to remember whether sustained performance mode is set at runtime,
/// via the checkbox in Player Settings.
/// </para><para>
/// This state may be recorded here in a future release.
/// </para></remarks>
/// <value>The sustained performance mode setting.</value>
public static bool SustainedPerformanceMode
{
set { SetSustainedPerformanceMode(value); }
}
#if UNITY_EDITOR
/// <summary>Gets or sets the user's handedness preference value.</summary>
/// <value>The user's handedness preference value.</value>
#else // UNITY_EDITOR
/// <summary>Gets the user's handedness preference value.</summary>
/// <value>The user's handedness preference value.</value>
#endif // UNITY_EDITOR
public static UserPrefsHandedness Handedness
{
#if UNITY_EDITOR
// Expose a setter only for the editor emulator, for development testing purposes.

```
    // Texture2D Variable
    [Header("Texture2D")]
    public Texture2D menuLogo; // Menu logo texture

    // Float Variable
    [Header("Float")]
    public float gAlpha; // GUI alpha for fading GUI
    public float gXPos; // GUI position for x

    // Boolean Variable
    [Header("Boolean")]
    public bool doneFading; // Check if the fading effect is done
    public bool animType; // 0 = In, 1 = Out
    public bool startAnim; // Start animation of GUI

    // Int Variable
    [Header("Integer")]
    public int onMenu; // 0 - Home, 1 - Continue, 2 - Character, 3 - Option, 4 - Exit
    public int tempOnMenu; // Temporary onMenu

    // AudioSource Variable
    [Header("Audio Source")]
    public AudioSource clickSound; // CLick sound whenever player pressed GUI

    // Vecator 2 Variable
    [Header("Vector 2")]
    public Vector2 liveUpdateSB; // Live update scrollbar

    void Start()
    {
        gXPos = 1500; // Set gXPos to correct pos before animating
        gAlpha = 0;
        StartCoroutine(GFade(0, 1, 1)); // Start fade in effect
        animType = false; // In animation
        startAnim = true; // Start GUI animation
    }

    // Fade Function - FD003
    IEnumerator GFade(float start, float end, float length) // Make function for fading that have start, end, length
    {
        if(start > 0)
        {
            clickSound.Play();
            doneFading = false;
        }
```

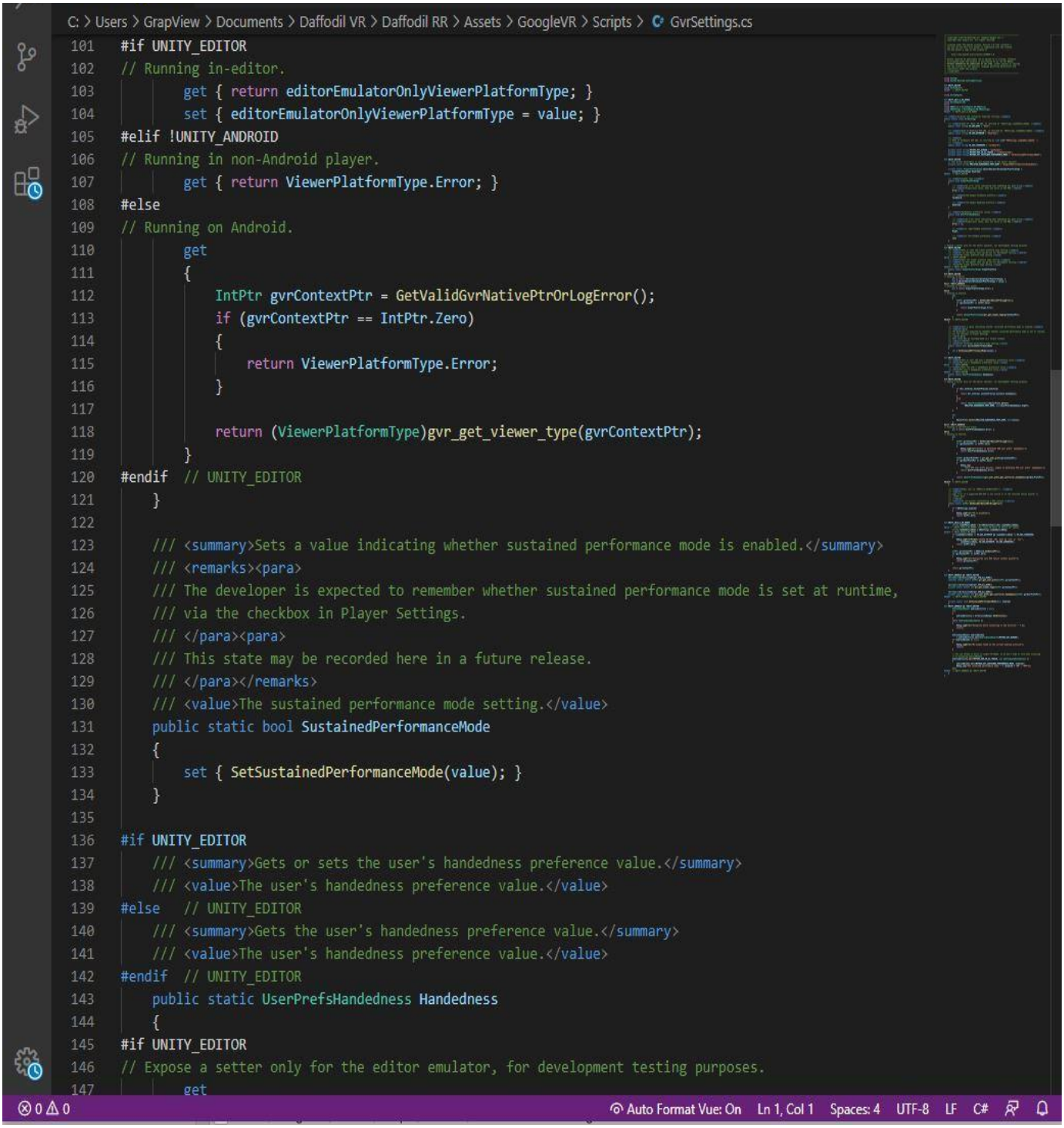


Figure 4.2.5: Some C# code of the project.

CHAPTER 5

Implementation and Testing

5.1 Introduction

I'll be inspecting how I apply these arrangements. In my endeavor, I will join the Front end and back-end execution. All the execution wish appearance with changed figures.

5.2 System Architecture

Below is a high-level architecture for VR technology that applies to all VR solutions, regardless of their field of application.

Figure 5.2.1: System Architecture of the project

The architecture's main module is VR software, which is responsible for:

•Input data processing, typically obtained through motion controllers and haptic gloves.

•Feedback generation for output devices like HMD and smart glasses and speakers (including visual rendering).

•Simulation of physics to apply the laws of physics to the virtual world.

•The database loads data (360 models)

5.3 Implementation of front-end design

We add our project's GUI in the front-end design. To introduce and give the original look to our project, we design so many layouts. Some of them are:

• Main Action Bar

• Scene Control

• Content Side

• Split Action Bar

In this project, the list view is used to build a menu bar where we add 5 action buttons. Those are:

•About DIU
•Virtual DIU
•Map
•About us
•Exit

5.4 Implementation of Back-end Design

My administration program is virtual reality-based as it were. Back-end design work is harder than front-end work since the functionality used by the front-end is embodied by back-end systems. As such, there can be bigger challenges: how the algorithms operate, where we get the data, how we guarantee tolerance for faults. These are some of the problems that can arise and a lot of code needs to be applied as well. So, we used C# to build the back-end design.

5.5 Test Execution

Software testing is a type of confirming if there should be an occurrence of the real program task fits the trusted particulars and guaranteeing that the assembling is liberated from deserts. This plan requires the execution of programming/framework segments to test at least one property of interest utilizing manual or computerized strategies. In contrast with genuine particulars, programming testing plans to discover slip-ups, holes, or missing prerequisites.

5.5.1 How We Test:

Start testing: The issue with VR testing is that you can imagine it's the blackest form of Black Box testing because you're taking feedback that you think the system can get and then trying to decide whether it's the right output. It's not after a trial and error phase that you can get acquainted with the project. We collaborated with our team to come up with some innovative solutions to our testing issues until we were more familiar with our project. It is an evolution-type process.

5.5.2 Testing Tools

We use a unity engine to build the project. That's why we at first did Unit testing. We also use a plug-in named Google Instant Preview. What it does is allow the Unity construct in the editor to be previewed. It's pretty good because we could just run our project and keep the phone and tilt it around instead of having to place it on the glasses. That way, everybody in the editor will be able to see what we do directly.

5.5.3 Air Test (UI testing)

It is a cross-platform, automated system for research that focuses primarily on games. But it supports native applications as well. Windows and Android are also supported; support for IOS is in Open Beta. Cross-platform APIs, simulated input, assumption, and so on are supported by Air Test. To locate UI components, it also uses image recognition technology. That means that without injecting any code, one can automate tests on apps. The tests produce HTML reports that allow you to quickly locate failed test cases. We did use image recognition technology to test UI.

5.5.4 Unit Test

The aim is to validate that the software code performs as expected in each device. This Testing is accomplished by the developers at the time of the production (coding cycle) of an application. This test isolates and checks the purity of the code partition. This formula is applied when we tested out after our own first mistakes as the code is applied. In my case when I am doing code, I get guaranteed and adjudicated to discover the initial faults.

5.5.5 Integration Test

Integration testing is the stage of software testing in which unconnected software mites are blended and appreciated as a genus. We integrated all back-end and front-end code. Then we checked that part of the project as if there's any kind of mistakes happened or not. It's an important term we did to test our project.

5.5.6 Testing of Motion Sickness

When engaging with our virtual reality project, another aspect is how someone feels. In VR, movement is seen through our eyes, however, our body doesn't sense it. Sickness will be caused by this case. The impact that happens to the US once we area unit on a ship is that the same. No person has a constant degree of motion sickness. Motion sickness is something when people enjoyed a project related to it if the motion is high then they will feel dizziness. If it's too low then it can be very boring. So, we have to detect this wisely. We have to choose a sensitive person to do this. Because the people who always work with this, are not sensitive enough to detect this. Then that person feels dizziness and we fixed that. Then another person and the first person didn't find any issue with it. That's how to test motion and fix it.

5.6 Test Result and Report

Test Case	Outcome	Result
Application installation process	Successfully installed.	passed
UI and Action Buttons	Works smoothly	passed
Bugs problem	No problems found	passed
Motion problem detection	No problem found	passed

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

In those coming years, the vogue of VR applications and services will expand and this craft will start to trace fresh genres to catch all conveniences of the engineering. VR innovation gives colossal occasions to schools and colleges from understudy enlistment to real learning measures. For content creation, full inundation, association, programming, and organization, VR will require specialized aptitudes. Consequently, the new age of VR expert visual planners, developers, and specialists should initially be prepared to give impeccable arrangements, however that will consider all the deficiencies of the present idea of applying VR in instruction and preparing portrayed in this paper. This endeavor gave me a huge chance to set up, code, evaluate, and execute an application. This has helped to consolidate different concepts of software engineering and database management, such as ensuring reliability and data consistency. Further, this has helped me to get familiar with C#, JavaScript, Photoshop, visual studio, and Unity3D engine. Thanks to our supervisor and co-supervisor to help us from the beginning. This is a user-friendly application and we think, it's also a very useful app for many peoples.

6.2 Scope for Future Development

We will work with it in the future also and will update it. We will add many more features. Some of those are:

•We will add more places in the Daffodil area.
•We will add a virtual realistic map
•We will add many roads to come to the area.
•We will try to add some games also in the field of DIU.
•We will add some other varsity environments in the application in the future.
•We will ensure that the project will be promoted nationally.

The future scope of that project is high because we will add many other university areas bit by bit in every update. So, it will be helpful for every student and also for those who want to see the beauty of any varsity they want. So, it can be a demandable application for all.

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