

## Documentation for Unity Environment

### 1. Unzipping the Zip Folder:

- Before proceeding, ensure you have downloaded and unzipped the provided zip folder containing the Unity project files.

### 2. Opening the Project in Unity:

- Launch the Unity application on your computer.
- Navigate to the "File" menu and select "Open Project."
- Browse to the location where you unzipped the project folder and select the main project file (usually ending with ".unity").
- Click "Open" to load the project into Unity.

### 3. Running the 3D Environment:

- Once the project is open in Unity, ensure that all necessary assets and scenes are loaded.
- To run the 3D environment, locate the main scene file within the Unity project.
- Double-click on the scene file to open it in the Unity Editor.
- Press the play button located at the top of the Unity Editor to start the simulation and enter the 3D environment.

### 4. Components of the Environment:

- 8 Planets: The environment includes representations of all eight planets in our solar system, each with unique characteristics and textures.
- Space station: A space station structure is present within the environment, adding realism and complexity to the scene.
- Significant Moons and Planets: In addition to the planets, significant moons and celestial bodies are included to enhance the authenticity of the environment.
- Asteroid Belts and Asteroid Sphere: The environment features asteroid belts and individual asteroid objects scattered throughout space, contributing to the immersive experience.
- Sun: A central representation of the sun is included, providing light and gravitational influence within the environment.

### 5. Navigating the 3D Space:

- **Mouse Control:** To navigate through the 3D space, use the mouse to rotate the view in any direction. The mouse functions as a virtual "head," allowing you to look around and explore the environment.
- **Movement Controls:**
  - *Forward and Backward:* Use the up and down arrow keys to move forward and backward within the environment.
  - *Horizontal Movement:* Utilize the left and right arrow keys to move horizontally, allowing traversal from left to right.
  - *Vertical Movement:* Press the 'I' key to move downward and the 'O' key to move upward, enabling vertical navigation through the space.

## 6. Conclusion:

- With its diverse array of celestial bodies, realistic physics, and intuitive navigation controls, the Unity environment offers an immersive and educational experience for exploring the wonders of our solar system. Whether for educational purposes or simply for entertainment, users can engage with and learn from the intricacies of space in a dynamic and engaging manner.