Programming Assignment 2 VR Platforming Christopher Colling • Rohan Khera

To complete programming assignment 2, we created a 3D environment that was populated with a series of floating natural islands, which moved horizontally using a script to control the location like a sine wave. We used assets such as trees, rocks, and hand models to enhance the realism of the environment. To represent treasures, we used treasure chest assets.

To enable the user to interact with the environment, we allowed more direct controller interaction. The user could point at a location on the platforms and press a button on the controller to teleport to the targeted location. The user could also collect the treasures using the controllers as hands, which would disappear from the 3D environment once collected.

As an obstacle in the game, we created velociraptor models as enemies, each linked to a specific moving platform. The enemies moved on the platform via a script. If these enemies touched the user, the user was teleported to the starting point of the mini-game. However, the progress was not reset, meaning that the treasures that were previously collected did not need to be respawned.

Additionally, we created WSUI panels, providing the user with instructions on how the game is to be played. Given that the platforms were moving, we made these WSUIs move along with the platforms to ensure that the user could access them at any time. Once collecting all of the treasures, a SSUI pops up, prompting the user that they have won.

In conclusion, the game provided an engaging experience for the user, with a mixture of exploration, treasure hunting, and a challenging component with the velociraptor enemies. By incorporating natural looking islands, physical treasure chests, hand models, and velociraptor models, the environment felt immersive and realistic, enhancing the user experience. The WSUI panels provided additional information and instructions for the user, making it easy to understand and navigate the mini-game.