**Title: Using Virtual Reality to Teach the Fundamentals of Primitive Data Types, Variables, and Logic Statements in Python**

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**Variables are the most fundamental tools in programming, yet when it’s time to teach new programmers about them, the analogy often used is “putting a value into a box to store for later use”. This project aims to let students do just that; manipulate and store physical values inside of a variable box and use those variables to solve logic puzzles in the form of “if statements” through the power of virtual reality. This project was created by Connor Murdock, Alan Oliver, David Torres, and Tylor Rowe, members of the Technology Ambassadors Program (TAP) at Georgia Gwinnett College. The goal of the TAP program is to spark interest for the IT field in non-IT majors, middle school, and high school students, especially those underrepresented in the IT field, by using interesting and relevant technologies to teach a basic concept of information technology. Our game, titled “Project Python VR” was developed in the Unity game engine for use with the VR headset, the Oculus Quest. A non-VR version is also featured for those uncomfortable with VR or for participants attending online. The goal of the game, is to take the given value orbs and manipulate them using adding and multiplying robots in order to make and store a specific value inside of a variable box, which can be used to solve an if statement in order to successfully repair a spaceship. All of the syntax within the game is shown in Python, an easy to learn and understand programming language. After completing our game, participants would be able to assign values to a variable, manipulate values with addition and multiplication, read and understand various if statements, and understand the distinctions between four primitive data types (integer, float, boolean, and string).**