Application Developer Assignment

Create a desktop (Windows 10) app that allows a user to interact with the virtual world. The app should be created with the intention to train and assess user to complete his tasks. Assume the user doesn’t have any prior knowledge to complete the tasks.

**Project Scope of Work**

The imaginary client that’s specialised in manufacturing has given us this scope of work:

1. The trainee should be able to login with his credentials (username and password).
2. The trainee should be able to train his knowledge **or** assess his own knowledge.
3. The trainee should be able to choose a scenario, with each scenario to have a different checklist. Scenario 1 is to learn spawn objects, scenario 2 is to learn changing object colors, etc.
4. The trainee should be able to see his progress in the form of a checklist.

**Project Requirement**

These are the project requirements:

1. The system should have a local database to store multiple account login credentials.
2. The system should have local logs for the trainee activities during the simulation.
3. The application should run on a computer with specs as follows: i7 processor, 16GB of RAM and GTX 960 video card.

**The Environment**

Room with a control panel with 5 buttons

* Spawn a random object (etc. cube, cone, sphere)
* Change the colour (randomized) of all spawned objects
* Increase the size (randomized) of all spawned objects
* Decrease the size (randomized) of all spawned objects
* Delete all spawn objects

**Assignee Task**

1. Create it in Unity; project hierarchy is important
2. Should be in the first-person mode with keyboard and mouse navigation.
3. You need to come up with a design for the user experience, no need to have a good UI per se; we’ll need to see how good you can think from a user perspective. So you need to think about action feedback in various forms (sounds, etc.).
4. For the account database and logs, just use a simple solution. It doesn’t have to be cloud-based.

**Output**

1. Windows installation file

2. Unity project folder

3. Accessible account database and logs