Ellen's Drone

You will build on top of the Unity 3D Game Kit Lite, creating a Drone assistant for Ellen, the main character in the kit. The asset store location is here, and it requires at least Unity 2018.3:
https://assetstore.unity.com/packages/templates/tutorials/3d-game-kit-lite-135162.

This is a timed challenge. We will specify when we expect to see the results when we deliver the challenge.

You will not be evaluated on game design, artwork, or gameplay. We are more interested in good solid code and demonstration of your knowledge of working within Unity.

Once you've created a fresh project with the 3d kit, create a subfolder under Assets with your name (First.Last). It is here that you will put your scene, any prefabs and scripts you create, etc. This folder is what you will send to us when you are complete.

For the scene itself, you can follow the simple walkthrough here to create it:
https://learn.unity.com/tutorial/how-to-use-this-walkthrough?projectId=5c6405b9edbc2a420842d03a

The scene will consist of a flat plane and Ellen initially. Ellen's Drone can be a simple sphere, about the size of her head. You will also need to create some floating pickups 2 units tall (capsules)… when either Ellen or the drone collides with a pickup, the player will receive a score and the pickup will disappear. Show the score somewhere.

The Drone should have the following behavior, listed highest priority first:
1. Follow a fetch command (travel to a distance 10 units in front of Ellen at the time she triggers the command). The fetch command should be triggered by a Unity Behaviour on the Drone, when the user presses the F key.
2. If Ellen makes a melee attack, move up to 10 units high (this is a passive drone, easily agitated). Other than this action, the drone tries to stay around eye level.
3. If a pickup is within less than 5 units away, move to its position
4. Move back to Ellen's side, hovering about one unit away

Before play, 5 of the pickups can be placed by you in the scene. However, there should be 20 pickups randomly placed, no closer than a unit away from previously placed ones, also, they shouldn't be closer than 3 units from Ellen or the drone.

Deliverables

The folder you created above with your name, zipped up. It contains a README file describing your solution,explains challenges and justifies your technical choices. It should contain all the rest of the things you built for this project (prefabs, scripts, your scene, etc). We will take your folder and place it within our own instance of the 3d Kit to evaluate it, using your scene.

The source code and the project setup should follow standard industry and Unity specific best practices. The program should handle all user interactions gracefully.

No further instructions are provided for the task.