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QUESTIONS

2.a) (3 points) Identify at least two different ways to design pickups. Describe each approach in detail.

- First method – Creating each pickup object using cubes

To create a pickup object, I would have to create a new 3d game object of cube, change its components like rotation, tag, add scripts, and transformations. This would have to be done for every pickup object created. This is a very tedious way to create game objects.

- Second method – Create a prefab

The second way is to create a prefab and use it for instantiating a new object. The first step would be to create the pickup object prefab in the assets and then attach it to the script created for spawning as a public variable. The prefab will have the tag, rotation and the score script attached, so it can be used for every game object. This variable can then be used to create a game object with predefined components of the prefab using this code:

```
GameObject gameObject = Instantiate(pickupObjectPrefabVar);
```

The variable 'pickupObjectPrefabVar' is a public variable where the pickup prefab is attached.

2.b) (3 points) Select the design solution to implement and explain your reasoning.

- I choose the second method (to use a prefab). This solution was chosen as it is more efficient and elegant than the first method, as all the components don't need to be modified every time an object is instantiated. This allows me to attach the PickupScore script and the tag directly in the prefab. I also set the rotation to be 45 degrees in the prefab. The main advantage is that I can use this prefab multiple time without changing the components, making it easier to program and understand the code.