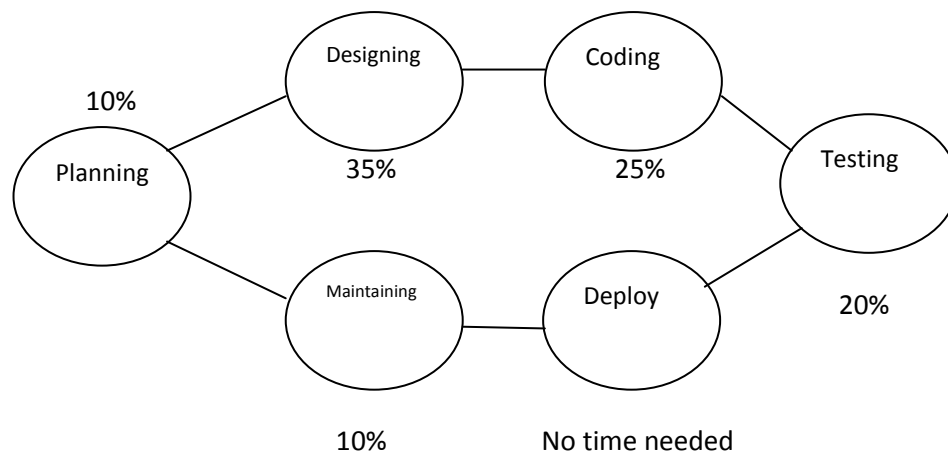


## Assignment

1.



2. a)

1. Character's movement mechanics. (walking, run, jump etc.)
2. Character's behaviours and properties. (attacking, health etc.)
3. Character's collider and trigger processes.
4. A simple level design.
5. An enemy and its main features (wander, attack, follow etc.)

b)

1. What are the main movements of character.
2. What are the main behaviours and properties of character.

E.g.

- Character can attack with sword.
- Character can attack with kick.
- Character can hide.
- Character has a health value.
- Character will die if its health value is equal to 0.

3. Are there any object that the character will be affected by collision ?

E.g.

- When character fell see or below the level. It will be dead.
- Character does not affected by his own weapons. (grenade etc.)
- Character's health decrease when attacked by enemy's sword.

4. What will be on the level and where to put. A list of buildings, obstacles. (sawblade etc.)

5. What are the main features of the enemy.

E.g.

- Enemy wanders randomly or between exact points.
- When enemy sees character. It will follow the character.
- When enemy reached the character. It will attack the character.
- Enemy's health value and main collisions. (like damage point that enemy will be took by character's gun)

4. a) For example i am making a game for Windows and Android.

First, i set the positions of UI objects according to their anchors and UI scale mode to scale with screen size.

For the character movement controller.

I create an interface that named InputController. I create two classes one is for Andriod the other is for Windows that implements the interface. In InputController i create methods for every movement belong to input. In Android and Windows classes, i specify the differences in input . I create a class between character's class and input classes and choose the what type of input that game will use according to platform with a line of code like below.

```
#if UNITY_STANDALONE_WIN
// defining WindowsInput
#endif

#if UNITY_ANDROID
// defining AndroidInput
#endif
```

In this class, i create getter methods for getting the inputs from input controller to character's class.

Fort he UI objects.

I assume that the game has some common UI elements in both Windows and Android (Health bar, ammo etc.) and Windows version don't has difference because not need touchscreen, buttons etc.

In the hierarchy let say we put UI elements under the canvas. I create a gameobject that name AndroidControllerUI under canvas and deactivate it. I create buttons under AndroidControllerUI. I add a line of code like below in the UIController script.

```
#if UNITY_ANDROID
    AndroidControllerUI.SetActive(true);
#endif
```