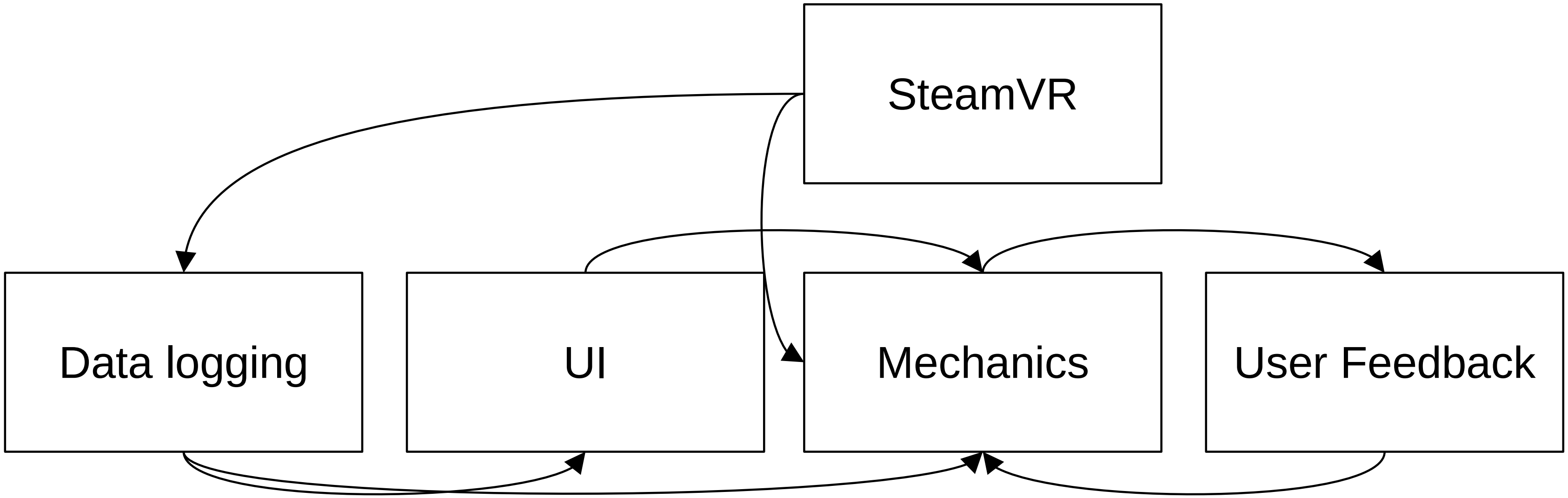
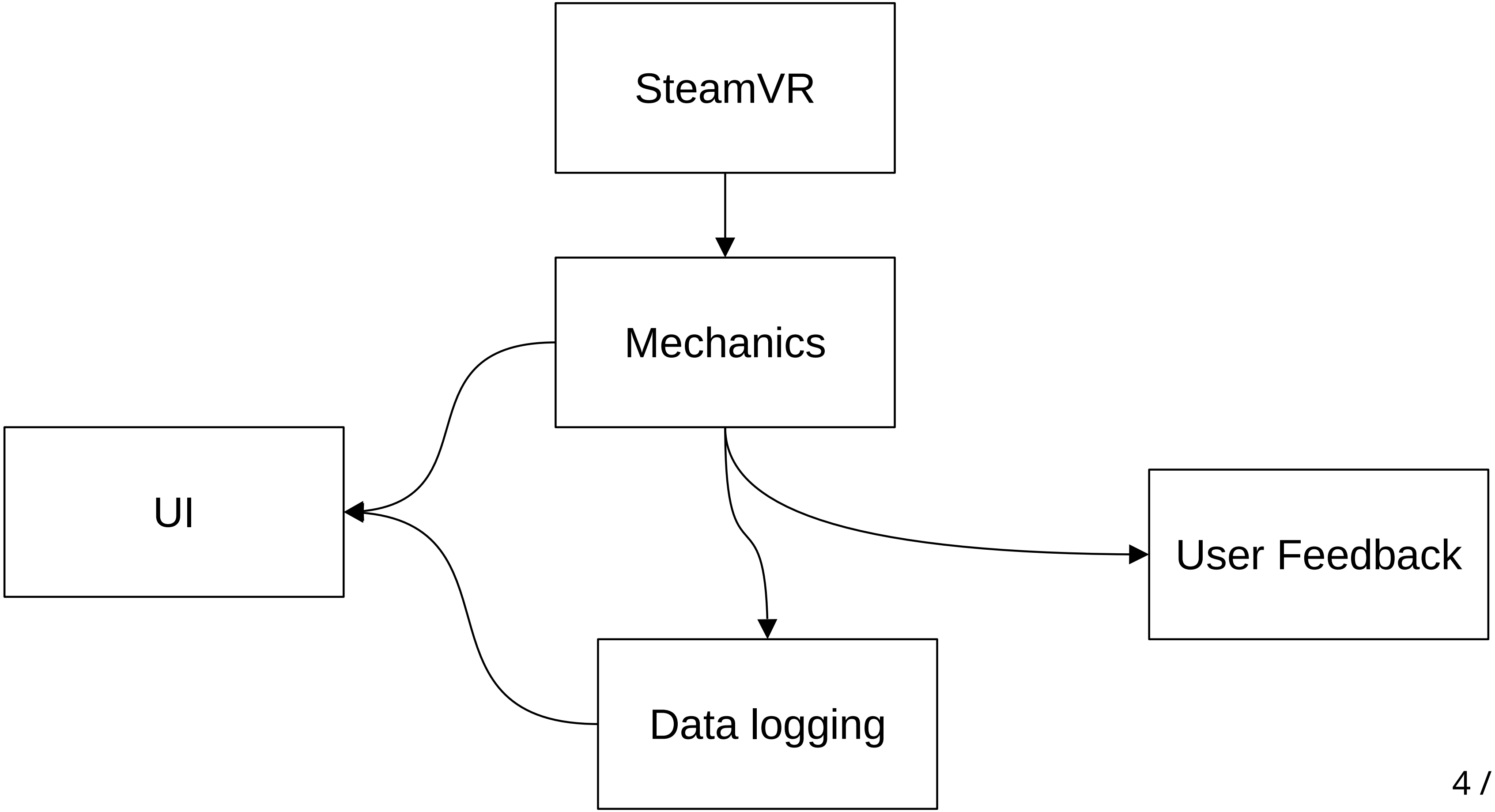
To Do

- Separate modules, by functionality.
- Separate code using inheritance or interfaces.

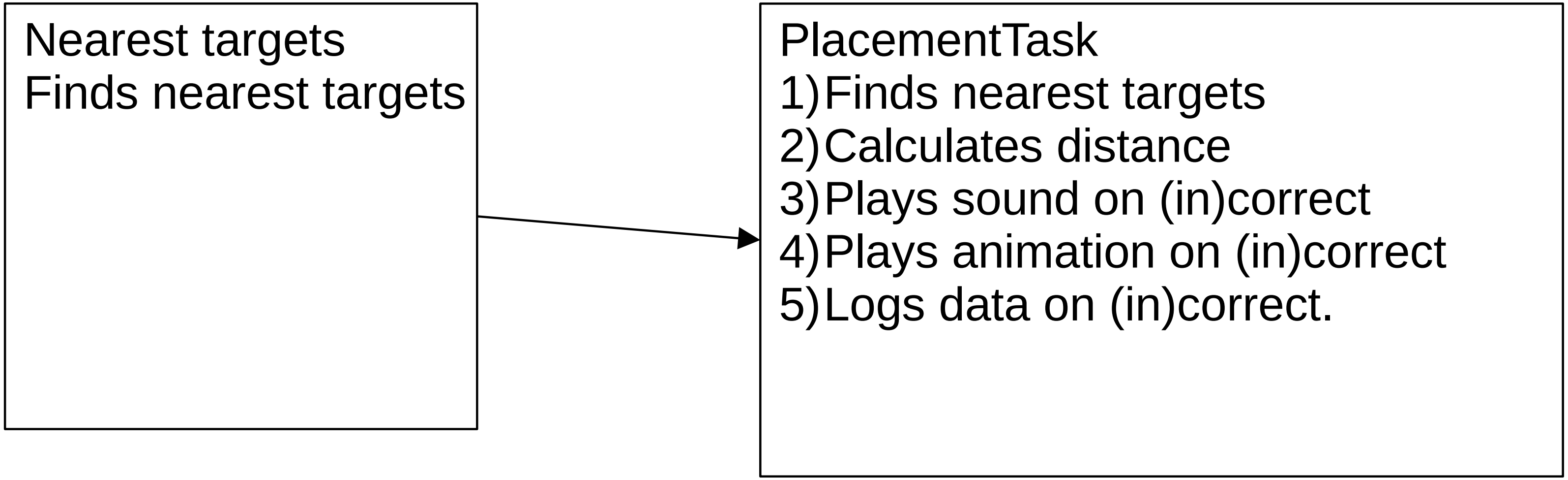
Separate modules: Before



Separate modules: After



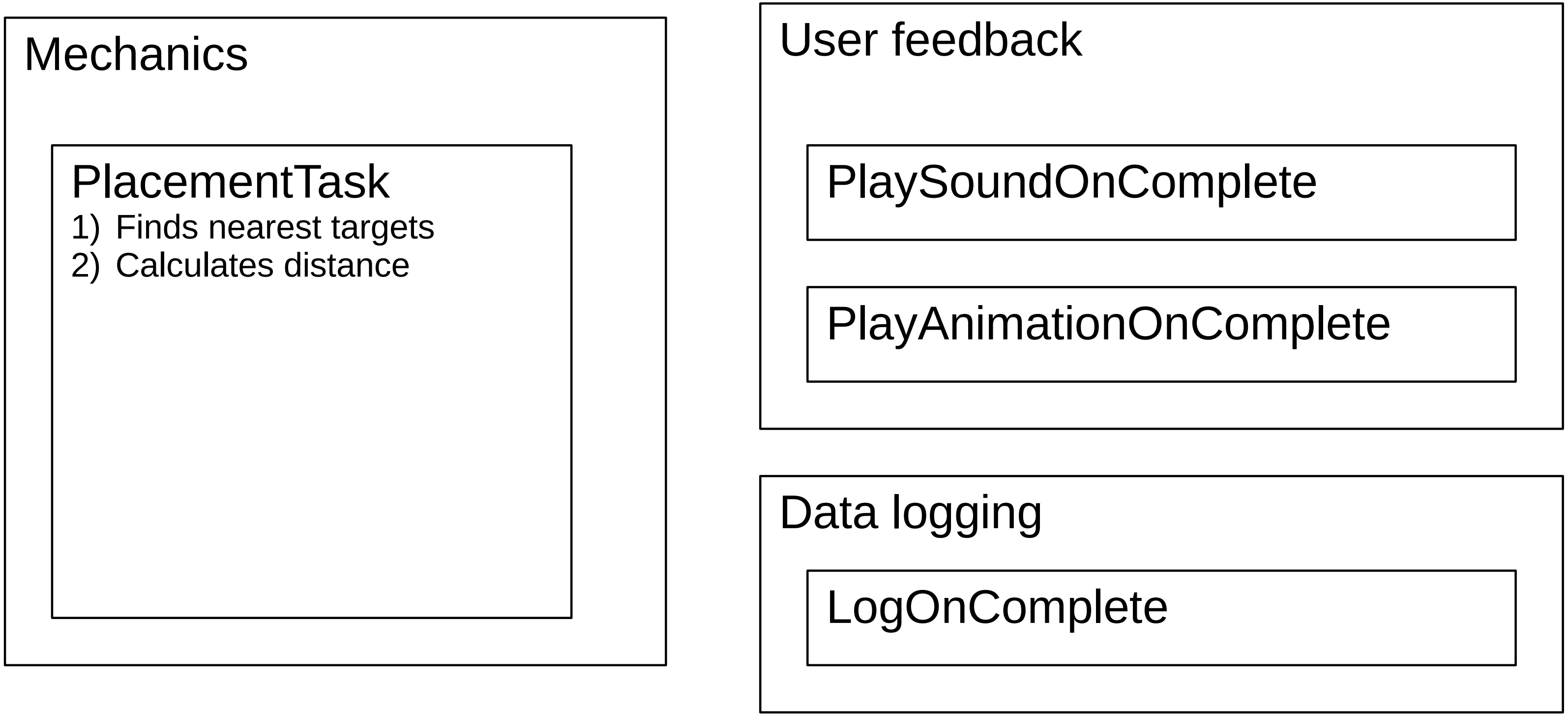
Seperating code



Nearest targets
Finds nearest targets

PlacementTask
1)Finds nearest targets
2)Calculates distance
3)Plays sound on (in)correct
4)Plays animation on (in)correct
5)Logs data on (in)correct.

Separating code



Mechanics

PlacementTask

1) Finds nearest targets
2) Calculates distance

User feedback

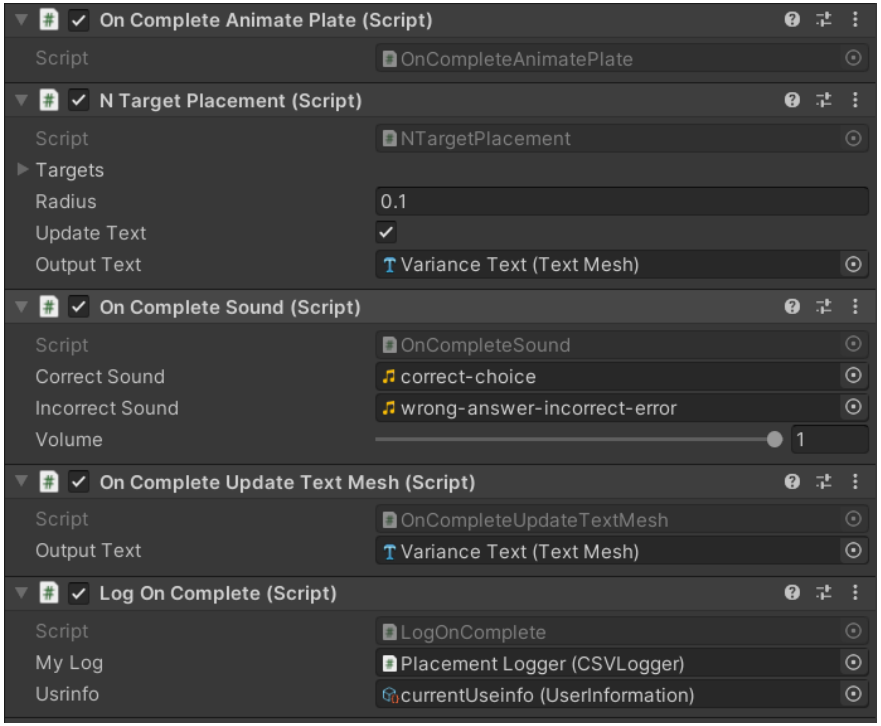
PlaySoundOnComplete

PlayAnimationOnComplete

Data logging

LogOnComplete

What it looks like



☑ On Complete Animate Plate (Script)

Script	OnCompleteAnimatePlate

☑ N Target Placement (Script)

Script	NTargetPlacement
▶ Targets	
Radius	0.1
Update Text	☑
Output Text	Variance Text (Text Mesh)

☑ On Complete Sound (Script)

Script	OnCompleteSound
Correct Sound	correct-choice
Incorrect Sound	wrong-answer-incorrect-error
Volume	1

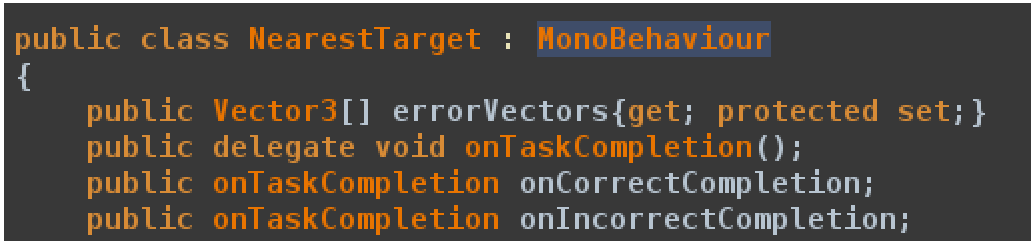
☑ On Complete Update Text Mesh (Script)

Script	OnCompleteUpdateTextMesh
Output Text	Variance Text (Text Mesh)

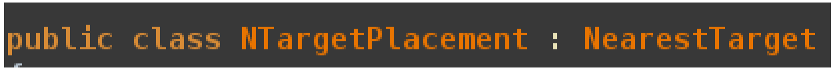
☑ Log On Complete (Script)

Script	LogOnComplete
My Log	Placement Logger (CSVLogger)
Usrinfo	currentUseinfo (UserInformation)

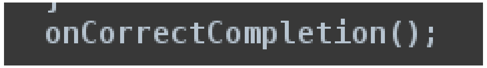
Implemented using inheritance and delegates



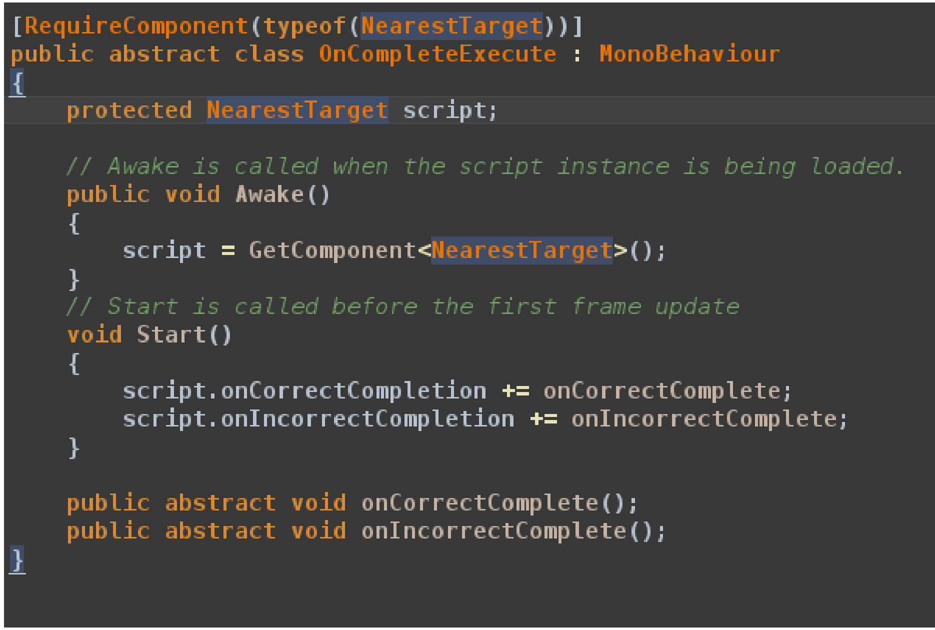
```
public class NearestTarget : MonoBehaviour
{
    public Vector3[] errorVectors{get; protected set;}
    public delegate void onTaskCompletion();
    public onTaskCompletion onCorrectCompletion;
    public onTaskCompletion onIncorrectCompletion;
```



```
public class NTargetPlacement : NearestTarget
```



```
onCorrectCompletion();
```

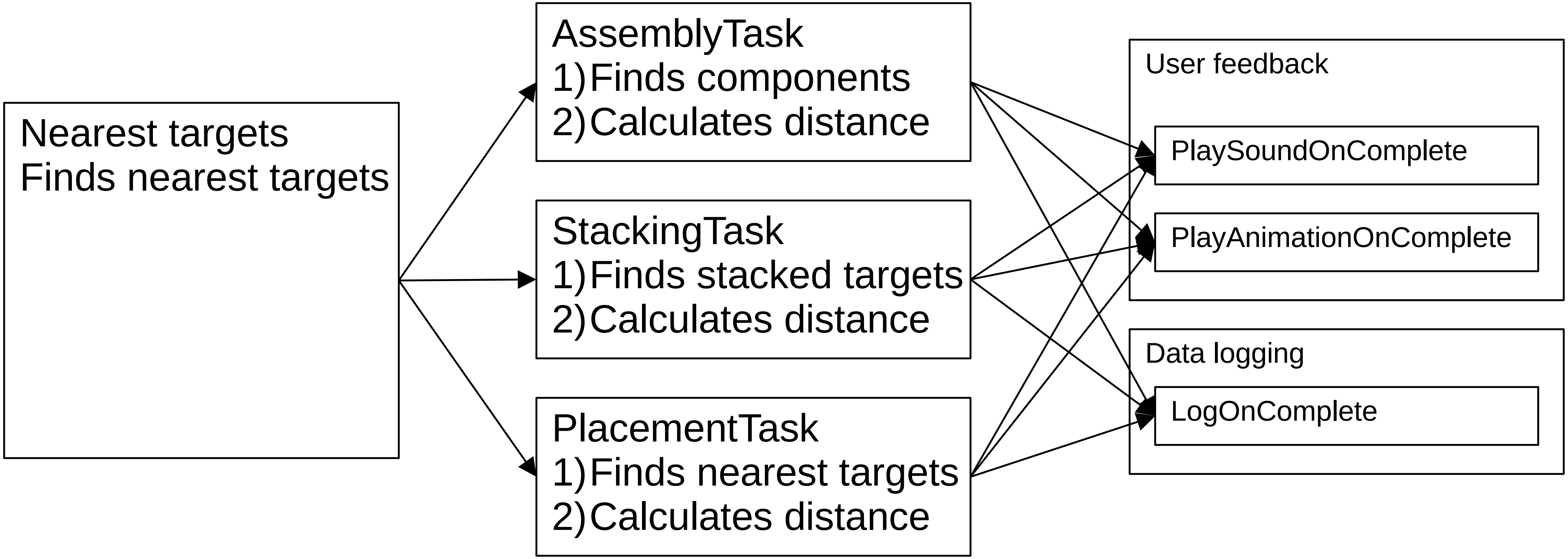


```
[RequireComponent(typeof(NearestTarget))]
public abstract class OnCompleteExecute : MonoBehaviour
{
    protected NearestTarget script;

    // Awake is called when the script instance is being loaded.
    public void Awake()
    {
        script = GetComponent<NearestTarget>();
    }
    // Start is called before the first frame update
    void Start()
    {
        script.onCorrectCompletion += onCorrectComplete;
        script.onIncorrectCompletion += onIncorrectComplete;
    }

    public abstract void onCorrectComplete();
    public abstract void onIncorrectComplete();
}
```

Extensible and reusable



Nearest targets
Finds nearest targets

AssemblyTask
1)Finds components
2)Calculates distance

StackingTask
1)Finds stacked targets
2)Calculates distance

PlacementTask
1)Finds nearest targets
2)Calculates distance

User feedback

PlaySoundOnComplete

PlayAnimationOnComplete

Data logging

LogOnComplete