Architecture Description:

The Double Dash Dodge & Deceive project will use the Model View Controller (MVC) software architecture. This architecture splits code between modelling internal state, taking input from the user to update the current state, and processing graphical updates based on the current state of the model.

In particular, the Heads Up Display (HUD) will be structured in such a way that they will update the on screen UI elements (e.g. progress bar) based on the state of the PlayerController element it is hooked into.

Justification:

This architecture was chosen because it is particularly good at simulating virtual worlds, due to the separation between model and view components. This makes it the architecture of choice for interactive video game projects such as Double Dash Dodge & Deceive. It is also the architecture that most closely matches Unity's built in architecture, with rendering happening separately from the scripting layer that the programmer is exposed to.

UML Package Diagram: