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CS 413 HW1

A Model-View-Controller is used to separate the interface or what the user sees (the view) away from the data. Separating these creates a multi-tier architecture to allow for faster and more efficient access to either part. This is also separated from the user input (the controller).

It is useful to separate these 3 components for multiple reasons. Speed, the view is only referenced when necessary and the other components can be accessed when needed, without affecting the view. Also the view can be drawn without having to process large amounts of data. Modularity, multiple views can be applied to represent the same data, again avoiding lots of data processing. Different data can be swapped in and out that use the same view. User input can be accepted and processed and only affect the parts that it needs to.

Designed to be data-driven is abstracting the content of a game for example, away from the engine completely. The data is what makes the game what it is, not the engine.

This is useful because then an engine or modules added to the engine can be reused. The more reusable code, the better. It is also useful because the data that describes a game can be modified to meet specification for a particular game. It is so that the functionality of a particular game or program doesn’t have to rely on the design of it, and vice versa.