

MVC Overview

- A software architectural pattern for implementing user interfaces
- Divides a given software application into three interconnected parts that provide abstraction

History

- Introduced by Trygve Reenskaug in the 1970s
- Integrated into Smalltalk-76
- Expressed as a general concept for the first time in 1988 in an article in The Journal of Object Technology

Three Components

Model

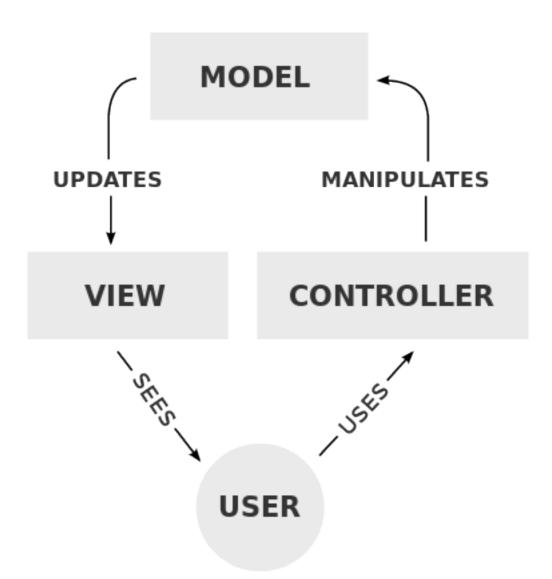
Consists of application data, business rules, logic and functions

View

- Can be any output representation of information, such as a chart or a diagram
- Multiple views of the same information are possible

Controller

Accepts input and converts it to commands for the model or view



Model

- Notifies its associated view and controlls when there has been a change in its state
- Notification allows the view to produce updated output, and the controllers to change the available set of commands
- Can also be passive and components must poll the model for updates
- This is the backend database that stores the object information

View

- Requests information from the model that it needs for generating an output representation to the user
- This is the UI, what the user sees and interacts with

Controller

- Sends commands to the model to update its state
- It can also send commands to its associated view to change the view's presentation of the model
- This is the business logic that controls everything
- The meat of the application

Videos!

- https://www.youtube.com/watch?
 v=LiBdzE DJn4
- https://www.youtube.com/watch? v=eTdVkgF_Slo
- [0-4:17]
 https://www.youtube.com/watch?
 yellowsen:2007.00
 yelwwznm9XSME
- [10:10-21:50]
 https://www.youtube.com/watch?
 v=AAcc uZ3fdU