

Model View Controller

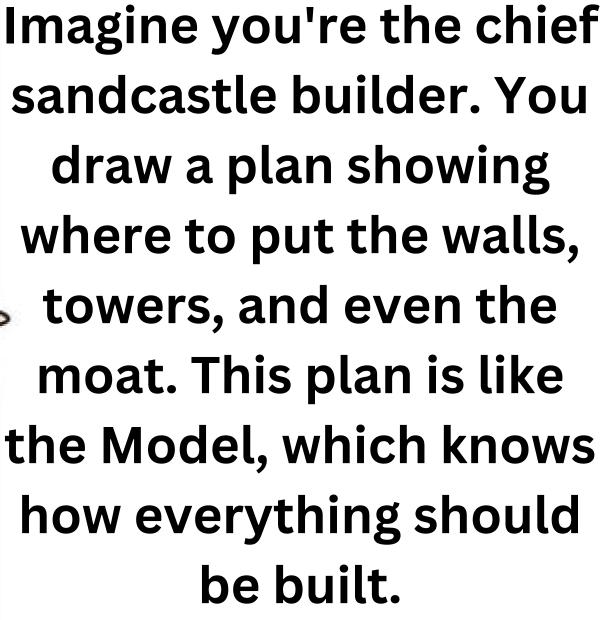


The core concept of MVC:-

is to separate the business logic, user interface and data modelling from each other.



Model (Castle Plan):







View

(Decorations):

Your friends come to help and bring all kinds of cool seashells, flags, and colorful pebbles. They use these to make your sandcastle look like a real palace. This decorating is like the View, which makes things look super nice.

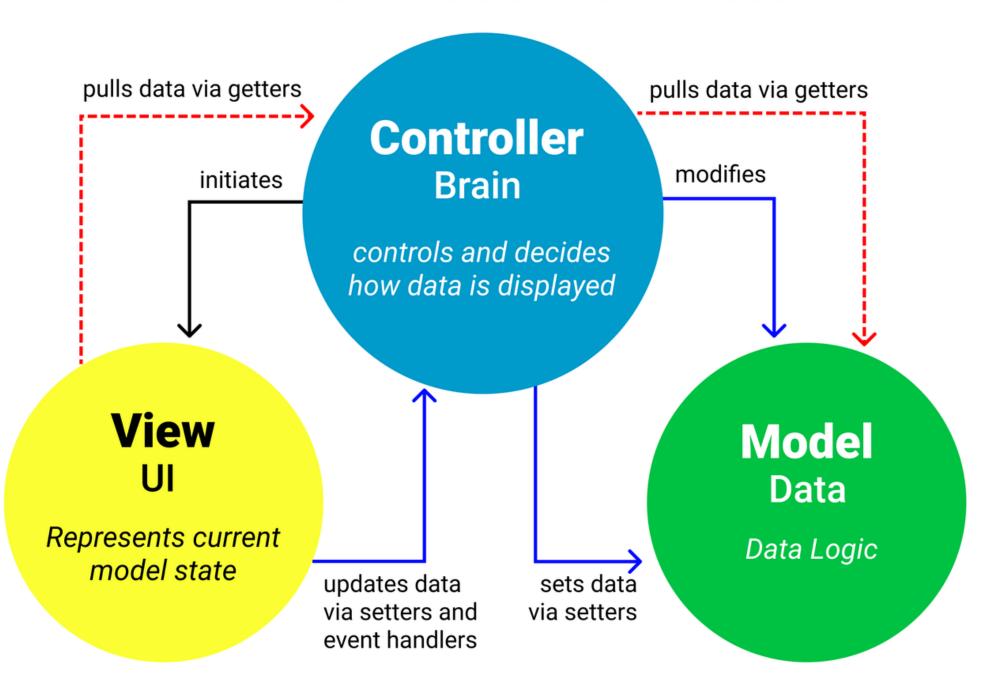


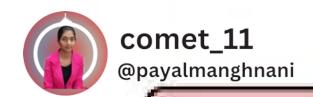


Controller (Play Director):

Now, you need someone to lead the fun. Your friend takes charge and tells everyone which part of the castle to work on. They make sure everyone's having fun and that the castle is built just right. This friend is like the Controller, making sure things go smoothly.

MVC Architecture Pattern





Why Should You Use MVC?

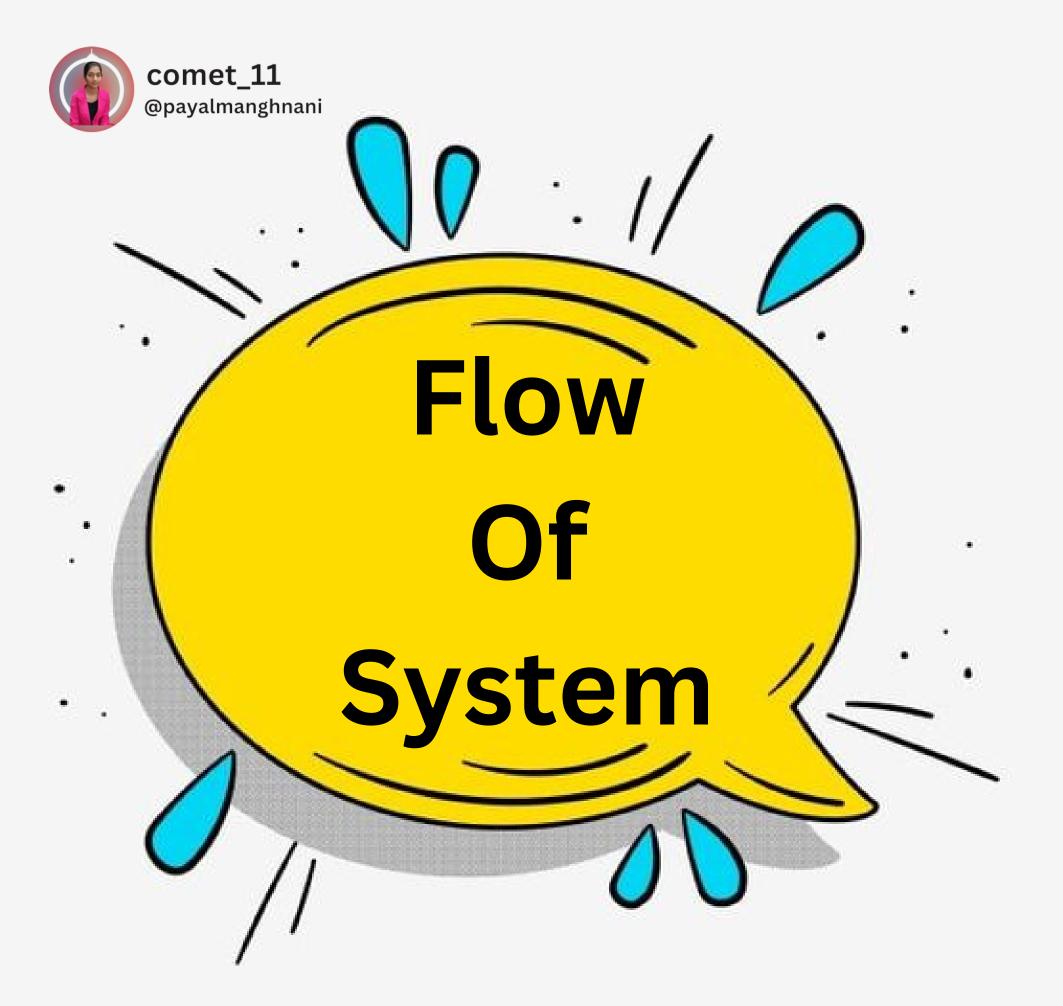




Using MVC to build your sandcastle (or create software) makes everything awesome:











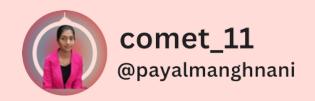
Breaking tasks into three main parts helps engineers write high-quality code that can be used again.

This also makes it simple to work on a project – changing one part doesn't mess up the others.

The user uses the view to see data and talks to the controller through the view to give input.

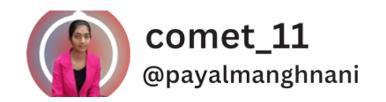
The controller acts
like a brain. It
manages user data
and model data,
sending the final data
to the view for the
user to see





Example of how the MVC architecture pattern can be used to build a simple calculator application:





The View would be responsible for displaying the calculator's user interface, such as the buttons and the display.



The Controller would be responsible for receiving input from the user, such as when the user clicks on a button. The Controller would then send a request to the Model to calculate the result.

 The Model would be responsible for storing the numbers and performing the calculations.





The MVC architecture pattern can be used to build any type of application, not just web applications. It is a versatile and powerful pattern that can help you to build maintainable and extensible applications.

