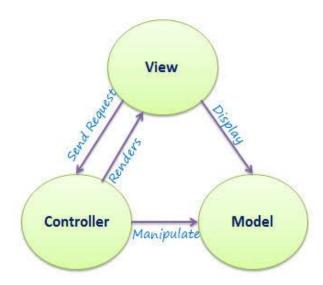
## Software Architecture:

Model View Controller Architecture pattern (MVC) .In MVC architecture the application is divided into 3 parts .

- 1. Model It contains core functionality and data.
- 2. View It displays information to the user. More than 1 view can be defined.
- 3. Controller handles input from the user

Divisions are made to separate internal representation of information in the ways the information is presented to and accepted from user . It decouples components and allows efficient code reuse .



In model View Controller approach applications are created as different aspects of application such as UI logic (view), business logic (model) and input logic (controller). This separation reduces the complexity in building the application because focus is on one aspect of implementation at a time.

MVC is better for projects where we follow test driven development (TDD). It is about how the application code is designed and focus is on how to separate pieces of application to solve the problem of building the application . The interaction between the layers is triangular and bidirectional . The layers of MVC are abstractions of the interactional flow of application and MVC model is better suited for UI problems and small to middle scale projects in which developers can work simultaneously on different aspects of project development .

Advantages of using MVC architectural pattern:

- 1. Simultaneous development
- 2. High cohesion logical grouping of actions on controller are grouped together and views to specific model are grouped together.
- 3. Low coupling less dependence.
- 4. Ease of modification due to separation of responsibilities, future development and modifications is easier . This scalability is increased.

The purpose of MVC is to achieve dynamic programming and allows subsequent modifications and extensions to program to be simplified and make reuse of part of the program code . It also helps in simplifying the complexity making the program structure simple.

## In System Management Application:

Model is used to encapsulate the data associated with business logic of system Management Application by system admin and it monitors how to handle data. Models have the right to direct access to data such as access to database and database queries.

Views are the user interface web pages to accept the form inputs from the user and display the required information requested by system admin. Views present the model by processing the data. Generally there is no procedural logic in views.

Controller is used to control the flow of the system Management application .It deals with events and responds . " Events " include the changes in the user behaviour and data models.