

# MVC Pattern

Project for Assembler School.

## Phase I

### 1.1. Investigation

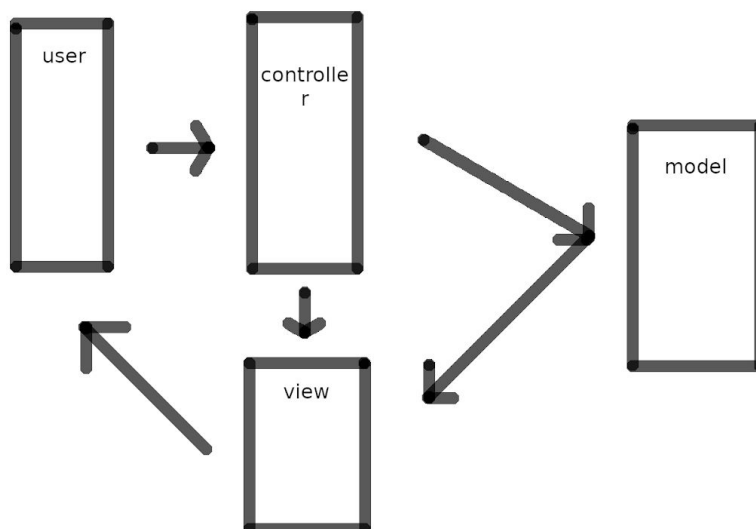
- What is an architecture pattern?

An architectural pattern is a general, reusable solution to a commonly occurring problem in software architecture within a given context.

- What is the MVC pattern?

Model-View-Controller pattern used for divide logic program for three interconnected elements.

- Draw a scheme where you understand that the MVC pattern is clearly



First request is going from user to controller then depend of request is going directly to view or if is necessary make action, request is going to model then from model to view and from view come back to user.

- Explain in which cases you would use this pattern
  - When application is big and complicated.
  - When we modificate our application many times and adapted to new things.
  - When a lot of people work on the project.
  - When we want to use some fragments of application in another project.
- Describe step by step what happens in this pattern from when you create a Request until a Response is returned (all the way)

## **Save Request in DB**

### Step 1

We get request from main page products.php by method POST

### Step 2

In controller we use method addProduct().

Method addProduct() send parameters from main page to our model method what is insert().

### Step 3

In model productsmodel.php we use method insert() we connect to database and we save in table request from user.

## Get Response from DB

### Step 1

We get request from main page products.php by button show product.

### Step 2

After when user click button, inside controller listproducts.php in method render() we create variable \$products what is equal to method from model.

### Step 3

In model we use method getProducts() we connect to database and we get our information from database.

### Step 4

In last step controller send our variable \$products with data from db to view (\$this->view->products = \$products).

- What advantages do you think this pattern has to use?
  - Its keep clean structure and it's easier to work for another person on the project.
  - Ease of modification because of the separation of responsibilities, future development or modification is easier.
  - Multiple views for a model, can have multiple views.

## Phase II

### 1.2. Developing

- You must have a clear directory structure to be able to implement the pattern

config/

libs/

controller/

model/

view/

.htaccess

index.php

MVC.sql

README.md

- You must have a minimum of:
  - 2 controllers
    - listproducts.php
    - products.php
  - 2 data models that obtain information from a database (you can use MySQL or a local file)
    - category
    - products
- You must attach a copy of the database in the repository of your project with the necessary information to carry out the tests.
  - MVC.sql

- 2 views

listproducts/

- index.php

products/

- index.php

- 2 URL's that demonstrate that the pattern is implemented correctly and are capable of displaying the data obtained from the source in a view.

Main URL = <http://localhost/MVC-Pattern/>

[/MVC-Pattern/](http://localhost/MVC-Pattern/) - is because I use more folders in my apache2. Normally will be just localhost.

Add products URL =

<http://localhost/MVC-Pattern/products/addProduct> - URL when you add new products to database.

Show products URL =

<http://localhost/MVC-Pattern/listproducts> - URL when you wanna check how many products already exists in your database.

- URL's can be controlled by:
  - mod\_rewrite (you have to take into account that this option requires the use of the ".htaccess" file
  - I use .htaccess mod\_rewrite.

Information that you consider important.

- You must ensure that the model is separated from the view.

Did you find it useful to know this pattern?

This pattern is really nice it let separate work between tasks, thanks for that it's easy and clean work in groups when we working with big project.