

# Introduction to MVC

## What Is MVC?

- An **approach** to designing a web application.
- Breaks everything into three parts: **Model View Controller**.
- It **separates** the different **aspects** of an application by **specifying** where each will be located.
- One of the most **frequently-used** web development **frameworks** because it allows programmers to work on one aspect of an implementation **without affecting** the code of another aspect.

## What Is MVC? (cont.)

### Model

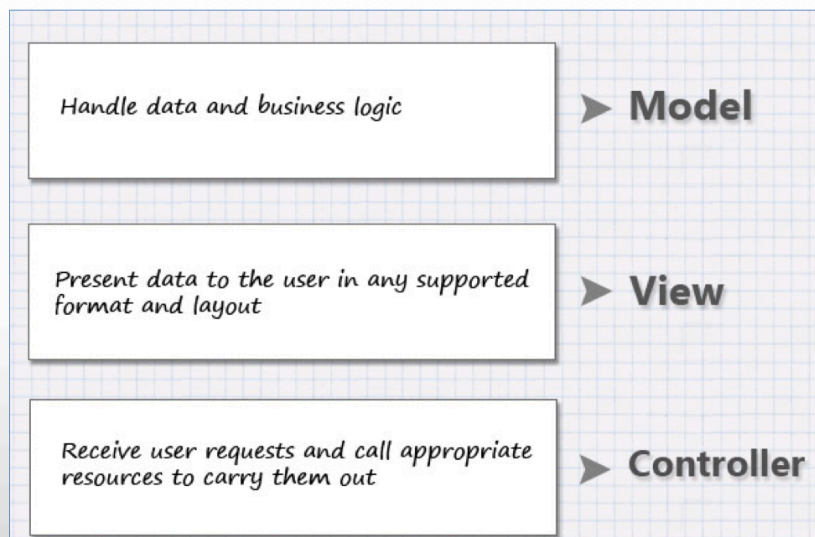
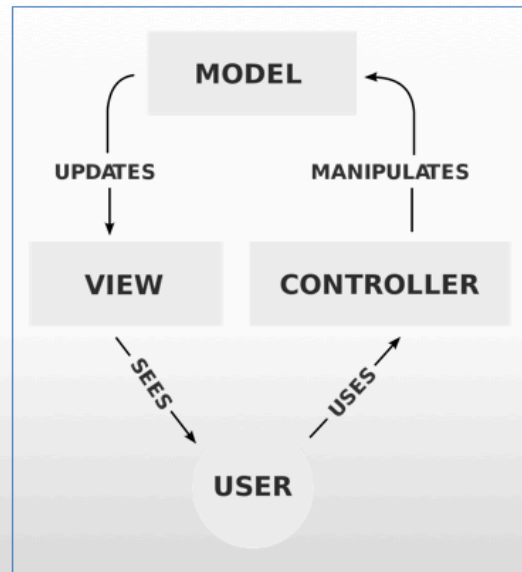
Manages the application **data**, independent of user interface.  
Manages the data, **logic** and rules.

### View

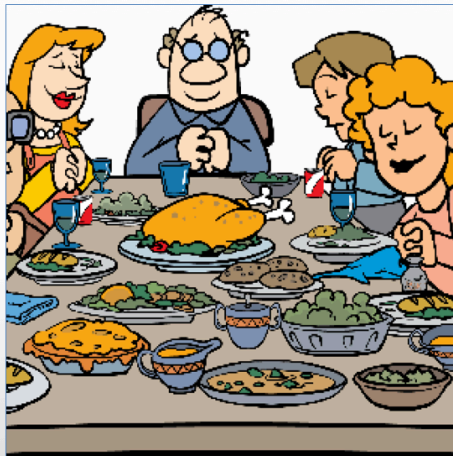
Any **representation** of information that the user sees (e.g. table/chart).

### Controller

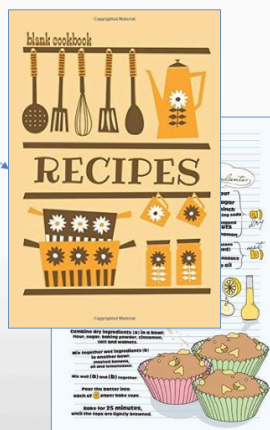
Accepts **input** and converts it into **commands** for the model or view.



[Taken from <https://code.tutsplus.com/tutorials/mvc-for-noobs-net-10488>]



Model



Controller(s)



View(s)

# MVC Example: CSS Zen Garden

## css Zen Garden

### The Beauty of CSS Design

A demonstration of what can be accomplished with this page.

Download the sample [html file](#) and [css file](#)

### The Road to Enlightenment

Littering a dark and dreary road lay the past road.

Today, we must clear the mind of past practices. W3C, WaSP and the major browser creators.

The css Zen Garden invites you to relax and enjoy the beauty of CSS.

```
body {
    font: 12px/16px arial, helvetica, sans-serif;
    color: #555;
    background: url(bg_left.gif) repeat left top;
    margin: 0;
    padding: 0;
}

a {
    text-decoration: none;
    font-weight: bold;
    color: #655;
}

a:hover {
    text-decoration: none;
    font-weight: bold;
    color: #e60;
}
```

[Taken from <https://blog.codinghorror.com/understanding-model-view-controller/>]

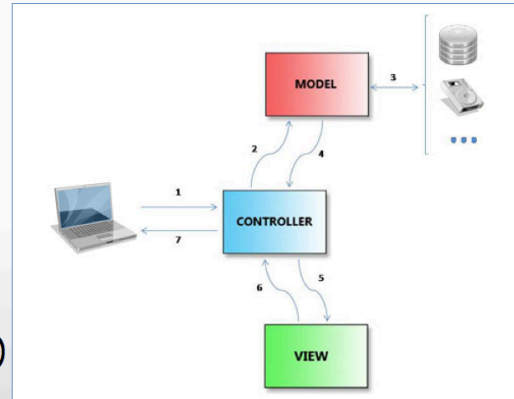
## MVC Example: CSS Zen Garden (cont.)

Model	The HTML is the most basic form of content. It is simply text that contains the data we want to display.	
View	The CSS adds visual style to the content. It is the "skin" that we use to give the data its look. We can use different CSS files without altering the data.	
Controller	The browser is responsible for combining and rendering the CSS (view) and HTML (data) into what the users see.	

# ASP.NET MVC Example

## Online Book Store

1. Controller receives user request.
2. Looks at parameters, calls model.
3. Model filters/gets data required.
4. Model returns data (list of books).
5. Controller uses appropriate view to present data to the user (6. & 7.)



[Taken from <https://code.tutsplus.com/tutorials/mvc-for-noobs-net-10488>]

## Summary

- MVC can be considered an **approach** or **design pattern** that separates an application into three logical components: **Model View Controller**.
- Helps to create **scalable** projects, and encourages **reusable** code.
- MVC is **not exclusive** to ASP.NET

