

# Ruby on Rails



# What's on the agenda

1. Review of MVC (an analogy)
2. A bit about Rails (and Ruby)
3. Building a basic web app (an example)

# MVC – the official guide

COMPONENT	FUNCTION	EXAMPLE
Model	<ul style="list-style-type: none"><li>- Persistent storage of information</li><li>- Managing and organizing data</li></ul>	<ul style="list-style-type: none"><li>- MySQL database</li><li>- Data files</li></ul>
View	<ul style="list-style-type: none"><li>- Presentation of information to user</li><li>- User interface</li></ul>	<ul style="list-style-type: none"><li>- HTML</li><li>- Minimal PHP (e.g., for iterating over data to print it out)</li><li>- Min</li></ul>
Controller	<ul style="list-style-type: none"><li>- Handles user requests, gets information from the model</li></ul>	<ul style="list-style-type: none"><li>- PHP</li></ul>

# MVC - the unofficial guide

- Model



(Madeline)

- View



(Vicki)

Controller



(Caitlyn)

# Understanding MVC

## An Analogy

- Lets say our characters all happen to work in CVS

### Scenario 2:

- A customer asks Vicki for a piece of candy from right in front of the register...

### Scenario 1:

- A customer asks Vicki for a cup from the back...

# About Ruby on Rails

- Built in Ruby
  - MUCH less syntax than PHP or C
  - Ruby Gems! (like libraries)
- Framework (what does that even mean?)
  - Default structure for database, web service, web pages
- Convention over Configuration
- Rails Documentation:  
<http://rubyonrails.org/documentation/>

# Ruby Syntax

- An example of Ruby awesomeness to print out elements in an array:

```
numbers = Array[1, 2, 3, 4, 5]
```

```
numbers.each do |number|  
  puts number  
end
```

- Some helpful Ruby tips and tricks:  
<http://www.tutorialspoint.com/ruby/index.htm>

# On to an example!

To view directions and code please visit: [https://github.com/lhofer/CS50\\_Rails\\_Seminar](https://github.com/lhofer/CS50_Rails_Seminar)

Option 1: follow along with the instructions and build your own app!

Option 2: download all of the code by typing the following command into your terminal:

```
git clone https://github.com/lhofer/CS50_Rails_Seminar.git
```