

chapter 2

1. The name of the controller is Say

The name of the file that contains the controller is `say_controller.rb` Its path is `demo/app/controllers/`

It has method stubs `hello()` and `goodbye()`

It also created `hello.html.erb` and `goodbye.html.erb` in `demo/app/views/say/`

2. `<%= %>` and `<% %>` for structures such as for loops

3. There is a pause because the rails dispatcher is reloading the source files.

4. You can make a change in the controller and have it apply to all the views that use the variable instead of making changes in every view that uses the variable.

5. Rails matches the route to a pattern. First it identifies a controller. Then it identifies an action and calls a method with the same name in the controller. It then looks through the views to find a template to show the result. Then the file is processed by the ERB template system. Finally the result is returned to your browser

6. `link_to` is a function that takes in text that will be the link and a path to link to. The path is a precomputed value by Rails. This system is better than embedding the `href` because the value of the path will change automatically if the file's location in the file path changes. You would have to directly change all the `hrefs` if you embedded them.

7. Ruby does not require parenthesis for method parameters, but still allows them.

1. Incoming requests are first sent to a router, which then sends it to the proper controller.

2. Post methods are associated with the `create()` method

3. Object-Relational Mapping is a way of mapping database tables to classes in your application. The table itself corresponds to a class. Each row in that table then maps to a particular instance of that class, and each column maps to attributes of that instance of the class. Class level methods perform table level operations, while instance methods are performed by specific objects in the table. An example would be if we had a table called `courses`. Our program would also have a class called `Course`. Each row in the table would correspond to a particular course and the columns would contain information such as the students in the course.

4. The controller manages sessions

1. I would describe it as the frame of an object. Using scaffold creates everything needed to for the frame to stand on its own, but there is nothing else added. In the case of rails it creates all the files needed for your application to run as well as files you are likely to use such as css sheets, but leaves them in a simple state that you will need to add to later. Scaffolding is traditionally used to mean a temporary structure used to support the process of building a structure, which is very similar to its role with rails. A scaffold includes a model, database migration, controller, views, and a test suite.

2. In Rails, changes to a table definition are made through a migration file. Once we have made changes to this table in the migration file, we use the 'rake' command to apply the changes to the actual database. These changes can affect the schema of the database as well as the data in it.

3. test data is added by editing the seeds file. Once the seeds file is populated you can populate the corresponding database with the data by running the rake command on the seed.

4. You find your stylesheets under app/assets/stlyesheets. You do not need to run a separate command to generate them, the generate scaffold already created them.

1. the validation code will trigger whenever there is a Insert operation sent to the sql database. In this specific case it will check that the object being created has a valid extension by matching the extension with a regular expression pattern.

2. First a function is defined that returns a test product object. Then the test "image url" is run. This test makes 2 lists of url extensions, one with correct extensions, and the other with incorrect. It then asserts that a product created with each one of the good names is valid, and then asserts that a product created using each of the bad names is invalid.

3. A test fixture specifies the initial contents of a model under a test. The fixtures directive loads the corresponding fixture data into the corresponding database table before each test is run.

4. Overdue_Book

5. The three databases are development, test, and production

1. You can change the route to change the root url for the website.

2. app/views/layouts/application.html.erb contains the page layout used for all views.

3. Turbolinks increases the speeds up how long it takes to switch between pages on your website by keeping the current page instance and only changing the body and title of the page, instead of recompiling the javascript and css every time.

4. `csrf_meta_tags()` helps to prevent cross site scripting attacks by using an authenticity token to verify that a request is valid.

5. `yield` inserts the actual page content into the layout page.

6. You might want to test that certain parts of the page are formatted correctly, and that the page itself responds.

1. By marking it private we can share the common code between different controllers. It also prevents it from ever being an action on the controller.

2. A new cart is created when there is not a cart that exists that has an id corresponding to the current session's id.

3. A rescue clause is ruby's way of defining what happens when an exception is encountered.

4. Line Item has a `belongs_to` relationship with both product and cart because a `line_item` has a 1 to 1 relationship with both a cart row and a corresponding product row in their corresponding tables.

5. a hook method is a method that is automatically called at a given point in an objects life. An example is `before_destroy :function` this function will run before the objects row in the database is destroyed.

6. `link_to` defaults to GET. `button_to` defaults to POST