# **Unit 12 Assignment**

## **Directions:**

Please complete the following assignment to signify your completion of Unit 12. All programming projects need to be completed and submitted electronically, following the Electronic Submission Guidelines discussed in class.

## Background:

The purpose of this assignment is to construct a Rails web application that works with a database. We will be using this application in future homeworks so I hope you can complete this opening step after reading the material in this unit.

## **Project 1: Course Application**

Create a Course application using Rails by defining the following database model:

## Course Table

| FieldName  | Туре    | Description                                     | Example                               |
|------------|---------|---|---------------------------------------|
| department | string  | the department offering this course             | "CS"                                  |
| number     | string  | the number of this course                       | "83R"                                 |
| title      | string  | the title of this course                        | "Server-Side Ruby Web<br>Programming" |
| size       | integer | the seatcount made available for this course    | 45                                    |
| hours      | integer | the length in hours this course meets each week | 3                                     |
| teacher    | string  | the teacher of this course                      | "Professor Stahl"                     |

Build a new Rails application by issuing the command:

rails new CourseApp

## **One Extra Command For Mac Users Only**

In an effort to support as many systems as possible, we will run into a versioning problem at this point. To be sure everyone is working with the same set of things, I need to ask Mac users to issue one extra command at this point. Begin by editing the file named <code>Gemfile</code>. It will be located in the /CourseApp directory. It is a normal textfile. Right at the top, there will be a line that says:

```
gem 'rails', '4.1.8'
```

It might actually say an even higher version by the time we get to this in class. We need to bring that version down to 4.1.4. So please make that line say:

```
gem 'rails', '4.1.4'
```

Exit your editor and at the Terminal window, enter the command:

bundle update

Please be patient and allow this process to complete. You will only need to do this just once in the life of an application.

Use Rails to generate scaffolding based on this database model. (Remember to use course, not courses as the name of your model...)

Use Rake to migrate your model definition.

Once you have done so, please start WEBrick and create some courses.

Once you have do so, upload a screenshot of your course page which you will find at http://localhost:3000/courses.