SE31520 ASSIGNMENT 1

Part 1

A report on the Weblog Rails Application

500 Word Report (+/- 10%)

The following report summarises the overall architecture of the Weblog Application with a primary focus on how the MVC design pattern is represented by describing the key files used within the application.

To begin, we will first look at the key files which are not included within the model, view or controller sections of the application, but are nonetheless important to the application. Within the config folder we have navigation.rb, which allows the user to successfully navigate the application between the different tabs found within the views folder. While the routes.rb file ensures that upon first loadup of the application, the user is taken to the index page, being the home tab of the application. Meanwhile, within the db folder, schema.rb contains the overall structure of the database system used within the Weblog application. This folder also contains ruby code that allows the application to handle data involving the users and the posts.

The majority of the architectural structure of the Weblog application can be found within the app folder. The assets folder mainly focuses on storing the images and stylesheets that are called by the application in order to make the Weblog look more presentable. The controllers folder contains the _controller.rb files which are used to handle the HTTP requests made by the user throughout the application whenever they wish to interact with any of the records in the database. The models folder contains two .rb files that are of particular interest, being both post.rb as well as user.rb files. These files give their respective tables different properties. In this case, the post.rb file requires that there must be a title in any record of the Posts table as well as being optionally related to a user within the Users table. On the other hand, user.rb dictates that each user must have a first name, surname as well as an email address. Any posts that belong to the user are also cascade deleted if the user in question is removed from the database.

Finally, within the views folder, the layouts folder contains several files that calls for the css and javascript files that can be found within the assets folder. The views folder also consists of the home, posts and users folders, each folder corresponding to the tabs seen within the application. While all of the folders contain the index.html.erb file that simply displays the information on the page, the users and posts folders contain the following files:

- _form.html.erb File containing the html for the form, where the user can create new records for the respective tables.
- edit.html.erb File that allows the user to edit and update any of the information on a record by calling the _form.html.erb file.
- new.html.erb Like the above file, it calls the _form.html.erb file in order to allow the user to create a new record and add it to the database.
- show.html.erb This file displays the information in a record in a HTML format and displays it back to the user.

It's important to mention that for both users and posts sections of the application, the index file displays the table to the user, with options to allow the records to be changed. Depending on the size of the table, the records can become paginated.

UML Diagram

