**Project Summary**

We are designing and developing a student forum mobile web application. The purpose of the project is to create a resource that provides a means of networking, help and support, and general educational news strictly for students. We will be using a database backend for data persistency so that students can be registered and be able to keep track of their posts, topics and conversations, as well as create a custom profile to represent themselves. When we are done the application will be accessible by the public and available for use by students. We hope to accomplish a working application by the end of the semester.

**Project Requirements**

* Be able to handle large numbers of users (hundreds/thousands)
* Be accessible any time of the day (early morning, afternoon, evening)
* Database backend for data and state persistency and user individuality
* The ability to create and edit topics/categories
* The ability to create and edit subtopics/subcategories
* The ability to create and edit posts
* A WSYWIG text editor for posts
* jQuery integration
* CSS/CSS3 for styling
* HTML/HTML5 for visual representation
* PHP for database access and backend architecture

**Users and Tasks**

1. Users & Tasks
   1. Users Must:
      1. Create Account
      2. Login/Logout
      3. Change Account Information
      4. View Categories
      5. View/Add Topics & Posts
2. Permission Levels
   1. 1 – Inactive
      1. Must be activated to login
   2. 2 – Active
      1. Can edit own personal information
      2. Can Edit/Delete their own Topics/Posts
   3. 3 – Moderator
      1. Can edit own personal information
      2. Can edit/delete all Topics/Posts
   4. 4 – Admin
      1. Can edit/delete all Users/Topics/Posts
3. Use Cases
   1. All users
      1. User creates account
         1. Problem: User tries to create account with incorrect formatting. Does not meet the requirements of Username/Password length or other invalid information.
      2. User logs in
         1. Problem: User enters a Username/Password combination that is not found in the database.
      3. User logs out
         1. Problem: User is not already logged in.
      4. User creates Topic
         1. Problem: User creates a Topic with an empty body, no title, or any other invalid format that may be used.
      5. User edits Topic
         1. Problem: User tries to edit Topic that is not in their permission level.
         2. Problem: User tries to use invalid input.
      6. User deletes Topic
         1. Problem: User tries to delete Topic that is not in their permission level.
      7. User creates Post
         1. Problem: User tries to create a Post with an empty body, or other invalid formats.
         2. Problem: User tries to use invalid input.
      8. User edits Post
         1. Problem: User tries to edit Post that is not in their permission level.
         2. Problem: User tries to use invalid input.
      9. User deletes Post
         1. Problem: User tries to delete Post that is not in their permission level.
      10. User edits personal information
          1. Problem: User edits personal information with incorrect formatting, such as changing their password to one with an invalid length or providing a false email address.
   2. Admin users
      1. User edits/activates/deactivates another user
         1. Problem: User account being altered might not exist.

**Activity Diagram**

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**Architecture Framework**

We are using the CodeIgniter framework for our web application

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**Data Storage**

**UI Mockups**

**User Interactions**

**Class Diagram**