**TODO**

**Utility**

* **Implement signup page**
* **Home page should be accessible only to authenticated users.**

**Contact/Group**

* **Adding new contact** 
  + Search for the contact information as user types:
    - Get the text from the input field- listen for keyboard event.
    - Send an AJAX request to Query users whose name matches the string entered by the user.
    - A php script will respond to this request; it will search the user/group table for matching name and return the result in JSON format.
    - Steps 1 through three will continue to execute, as long as user keeps typing, until the user hits the search or no name/username match the string entered.
  + **Click on the add button to send an “add contact” request to the selected user. The following steps will happened with the “add” button is clicked:**
    - The username of the targeted user will be retrieved.
    - An “add contact” notification will be built.
    - The “add contact notification” will be sent to the user immediately if he/she is online.
    - The “add contact” notification will be saved in the database’s “notification” table.
    - When the targeted user logs in the client side will indicate that there is a pending notification. The following will happen when user clicks on the notification:
      * A popup UI will be displayed asking the user “ Do you want {sender} as a contact”.
      * Upon acceptance a “contact” relationship will be created between the two user.
* **Creating new group and invite users to join group**
* **User should be able to search for a group and send a request to join the group.**
* **Group owners should be able to deleting group**
* **Members (non-owners) should be able to drop out of a group.**
* **Users should be able to send and receive contact request**
* **Users should be able to remove contacts from their contact list.**

**Client side messaging**

* **Incoming message from “non-active” users should be queued.**
* **Outgoing message should be queued if client is still in the process of connect to the server, and sent when connection is established.**
* **A message notification element should be created for each contact, who is actively messaging, and store in an associated array object, which should be stored in the session.**

**Data Encryption/ Security**

**Notifications**

* **Message notifications needs to be handled.**
* **New contact request notification needs to be dealt with.**