Iteration 1 Feature Set
Snap-2-Ask

Web (Tutor)

Registration (Form for submitting information necessary to create an account)

GUI:

- Display a friendly message if anything goes wrong or if any fields are invalid
- Personal Information
  - First Name
    - Not empty
  - Last Name
    - Not Empty
  - Email Address
    - Not Empty
    - Valid Email Address
- Payment Information
  - Credit Card Number
    - Valid Credit Card Number

Backend:

- Create the REST API function for creating a new user account
- Create the session token upon successful creation of the user account
- Redirect the user to the main browsing page of Snap2Ask after the account is created

Feature : Login (Form for submitting email and password in order to sign in to Snap2Ask)

GUI

- Facebook
  - Button to connect with your Facebook account
- Google
  - Button to connect with your Google+ Account
- Snap Account
  - Email Field
    - Must not be empty
    - Must be a valid email
  - Password Field
    - Must not be empty

Backend:

- Verify the user credentials if using Snap2Ask's custom authentication

- Call the respective methods in the Google/Facebook API's if the user selected the Facebook/Google login.
- Display any errors on the same page as the login screen
- If the authentication was successfully, set the session token and redirect to the main page

Logout

GUI:

- Will sign the user out of Snap2Ask and return the the main login/registration page

Backend:

- Clear the session variables

Tutor Validation

GUI:

- A form for a tutor to specify a preferred subject
- Will have a simple test of the user's knowledge in order to validate the tutor

Backend:

- Verify the tutor validation test using the database
- Add the preferred subject to the user's account if the validation was successful.

View/Edit Account

GUI:

- View/Edit Personal Information
    - View Email Address
    - View First/Last Name
    - Modify First/Last Name
- View/Edit Payment Information
    - View credit card information
    - Add/Edit/Remove credit card information

Backend:

- Get the information from the REST API using a GET call
- Update the information using the REST API with a PUT call

Delete Account

GUI:

- A button to delete the user's account from Snap2Ask

Backend:

- Implement a REST API function to delete the specific account from the database.

View Questions

GUI:

- View Recent Questions
    - Questions will be displayed for the tutor categorized by date.
    - Most recent questions will be displayed first
- View By Academic Category
    - Questions will be displayed for the tutor categorized by academic subject
    - If the user selects "Math", only "Math"-related questions will be displayed

Backend:

- Implement a REST API function to retrieve a list of all the questions sorted by date
- Implement a REST API function to retrieve a list of questions filtered by a specific subject

Answering Questions

GUI:

- Details of the current question will be displayed
    - Image
    - Category
    - Other meta-data (E.G. date)
- Tutor will be able to submit an answer to the question
    - Textual answer
    - Must not be empty

Backend:
- Implement a REST API function to post the answer to the question
- Send the student who asked the question a push notification informing them that the question has been answered

iOS (Student)

Registration (Screen for submitting information necessary to create an account)

GUI:

- Display a friendly message if anything goes wrong or if any fields are invalid
- Personal Information
    - First Name
        - Not empty
    - Last Name
        - Not Empty
    - Email Address
        - Not Empty
        - Valid Email Address

Backend:

- Create the REST API function for creating a new user account
- Create the session token upon successful creation of the user account
- Redirect the user to the main browsing page of Snap2Ask after the account is created

Login (Form for submitting email and password in order to sign in to Snap2Ask)

GUI:

- Facebook
    - Button to connect with your Facebook account
- Google
    - Button to connect with your Google+ Account
- Snap Account
    - Email Field
        - Must not be empty
        - Must be a valid email
    - Password Field
        - Must not be empty

Backend:

- Verify the user credentials if using Snap2Ask's custom authentication
- Call the respective methods in the Google/Facebook APIs' if the user selected the Facebook/Google login.
- Display an errors as alerts windows
- If the authentication was successful, then move the user to the application's main page.

Logout

GUI:

- A simple logout button

Ask Question

GUI:

- Take/Select Photo
    - Optionally retake the photo or choose a different photo
- Select Subject (E.G. Math/Science)
- Input optional description

Backend:

- Implement a REST API function to upload the image metadata into the database
- Implement a REST API function to upload the actual image into the Snap2Ask Amazon S3 bucket named according to its question_id.

View Question History (A list of all previously asked questions, along with their answers)

GUI:

- View Unanswered Questions
    - These questions have not been answered before
- View Answered Questions
    - These are all the questions that have already been answered
- View All Questions
    - This is a list of all of the questions that the user has previously asked.

Backend:

- Implement a REST API function to get a list of all questions
- Filter the list of questions according to which option the user selects to view the questions
    - Unanswered/Answered/All

View Specific Question

GUI:

- View the image
- View the subject
- View the description
- View Discarded Answers of the question
- View new answers to the question

Backend:

- Implement a REST API function to get the information of a specific question