Assignment 1

JSP Web Site Prototyping/Responsive web designing

Points: 100

This assignment is to be completed by a group of two.

This assignment provides the first step toward developing a Java web application. We provide you a set of static JSP pages for several core parts of the application flow. These pages serve as a look-and-feel design prototype for later functional / dynamic application development. You have to make the necessarily changes on the given code to implement all pages and make them all responsive.

This assignment is intended to (re)familiarize students with HTML/JSP development and navigation along with introducing responsive web designing, as well as application design, deployment requirements, and assignment submission in the context of the course.

Overall Overview

This assignment is the first step towards building a responsive Java web application called Researchers Exchange Participations, using the MVC pattern, according to the following specifications:

1. JavaBeans to implement the business layer of the application (***model***).
2. JSP pages to present the ***view*** to the browser.
3. Servlet pages to ***control*** the follow of the application.

About the application

Researchers Exchange Participations is a platform for researchers to exchange participations.

The aim of this platform is to encourage researchers participate in each other's user studies. Moreover, recruiting serious participants has been always a burden on a researcher's shoulder, thus, this platform gives researchers the opportunity to do that effectively and in a suitable time.

Course Standard for Web Page Design

This assignment introduces the fundamental standards for web page design in the course. In this and all subsequent assignments, the following design standards apply.

1. Pages must be valid HTML5 standard.
2. All the web pages must be responsive-i.e.., they should be rendered without any distortion across all browsers and screen-widths like phone, tablet and desktop.

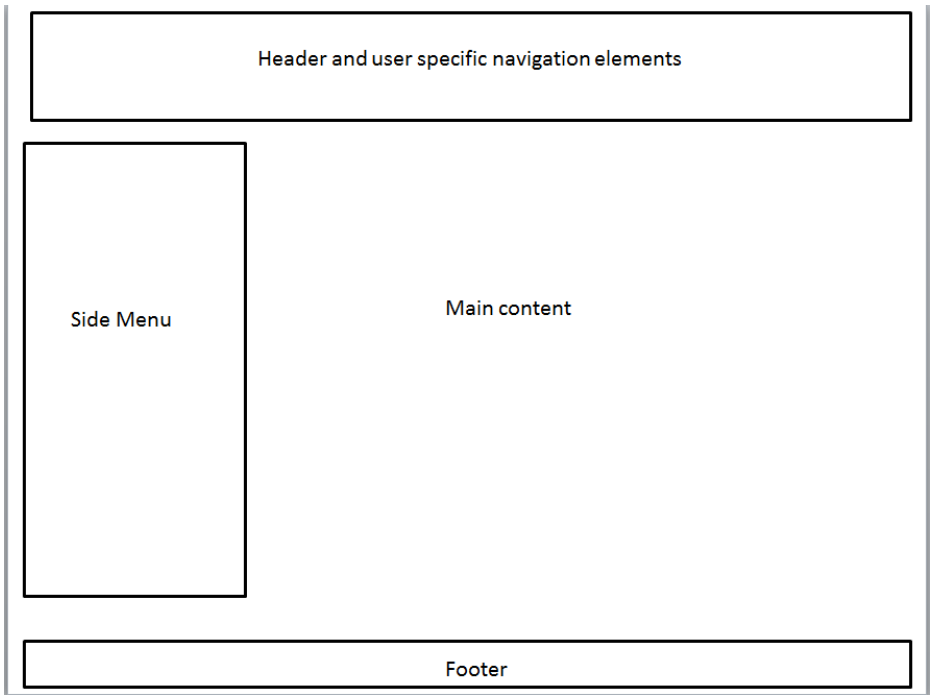
3. You must not use site-builder or automatic site generation tools. Since the code is already provided, you are supposed to make all the web pages responsive. Please follow the instructions given in the tutorial.
4. All pages must validate cleanly as HTML5.
5. All pages must render sensibly cross-browser.
6. All pages must have full and complete separation of CSS into separate files – only the link(s) to load the CSS should be present in the HTML document. No style definitions within the page.
7. All pages must have full and complete separation of JavaScript into separate files – only the link(s) to load should be present in the HTML document. No scripting within the page.
8. All resources (CSS, JavaScript, Media) must be locally stored with the web application (e.g., local copy of JavaScript libraries).
9. Each assignment will consider coding efficiency and design choices, which includes coding elegance or style. Efficiency is required to make the best use of resources (many full pages are viewed on mobile devices). Good code design is required for maintenance, understanding, reusability, and extensibility of applications. Proper indentation for nested elements is just one example. Course's staff is the final arbiters on efficiency and design choices in this context.
10. Page design choices must be sensible for use by a broad audience. Course's staff is the final arbiters on sensibility in this context. Ridiculous and laughable branding / inventory may be fine. Ridiculous and laughable site design / implementation is not. Even if not explicitly or specifically mentioned in assignment requirements, points may be deducted on an assignment for poor efficiency / (code or user interface) design practices in submissions.

Required Page Structure

All pages must use the following foundational layout structure, including:

• Full-width containers of sensible height for (1) page header area and user specific navigation elements, (2) page footer area.

• Partial-width containers of the same height sensibly divided for (1) general site navigation and (2) main content area.



This is a list of pages that you are provided with:

1. home.jsp
2. signup.jsp
3. how.jsp
4. about.jsp
5. main.jsp
6. aboutl.jsp
7. contact.jsp
8. confirm.jsp

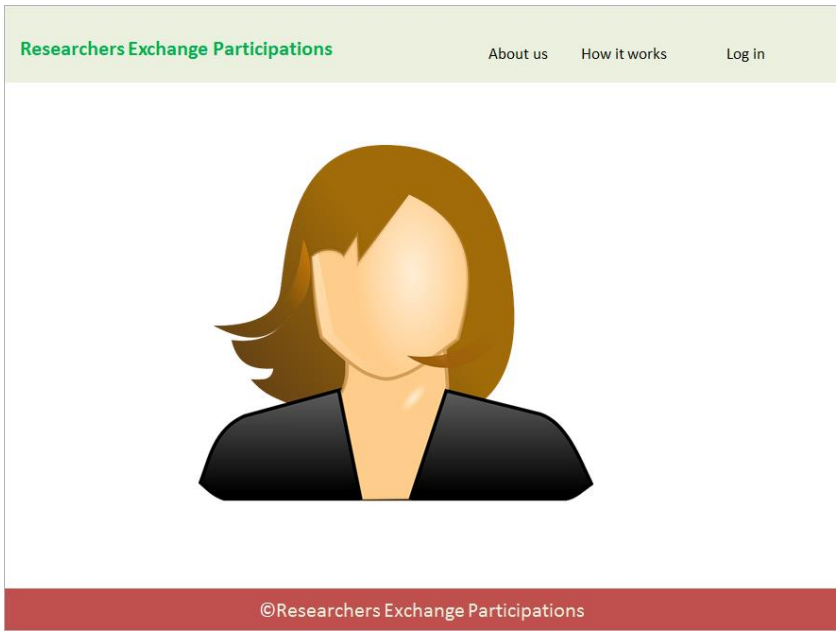
9. recommend.jsp
10. confirmr.jsp
11. studies.jsp

Here's the list of pages which you need to develop/modify:

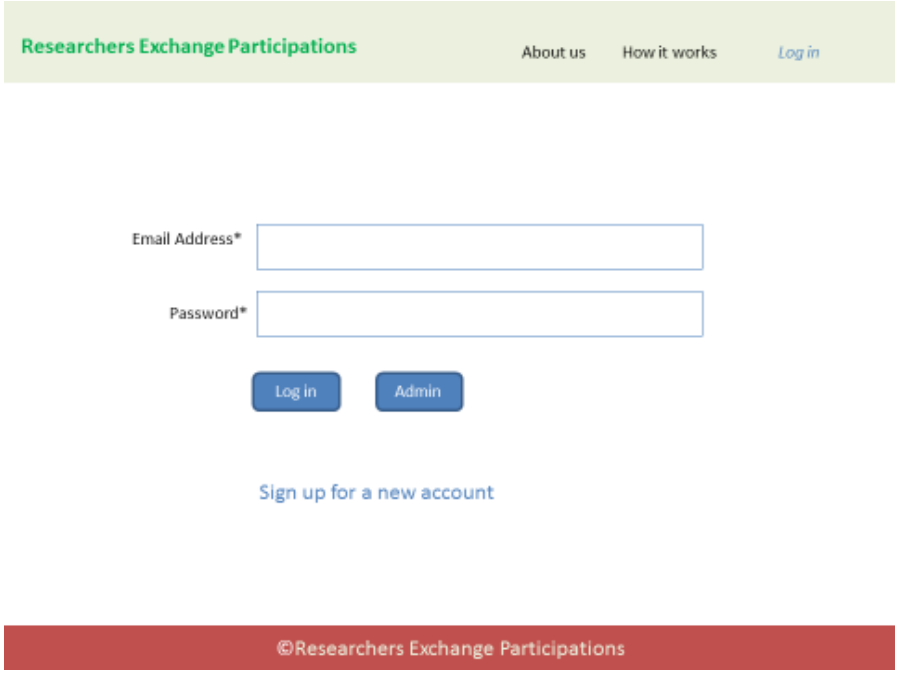
1. login.jsp
2. Confirmrep.jsp
3. participate.jsp
4. reportques.jsp
5. admin.jsp
6. requestc.jsp
7. reporth.jsp
8. question.jsp
9. newstudy.jsp
10. editstudy.jsp

The description for every page along with the functionality is given below:

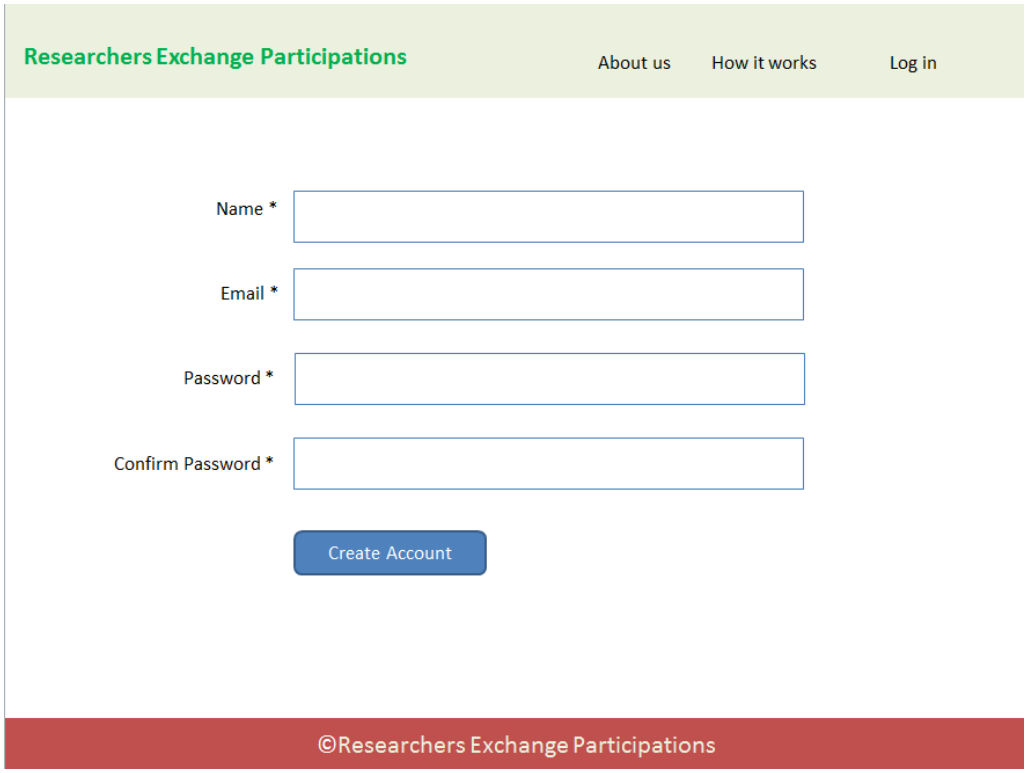
1) home.jsp (the home page before logging in)



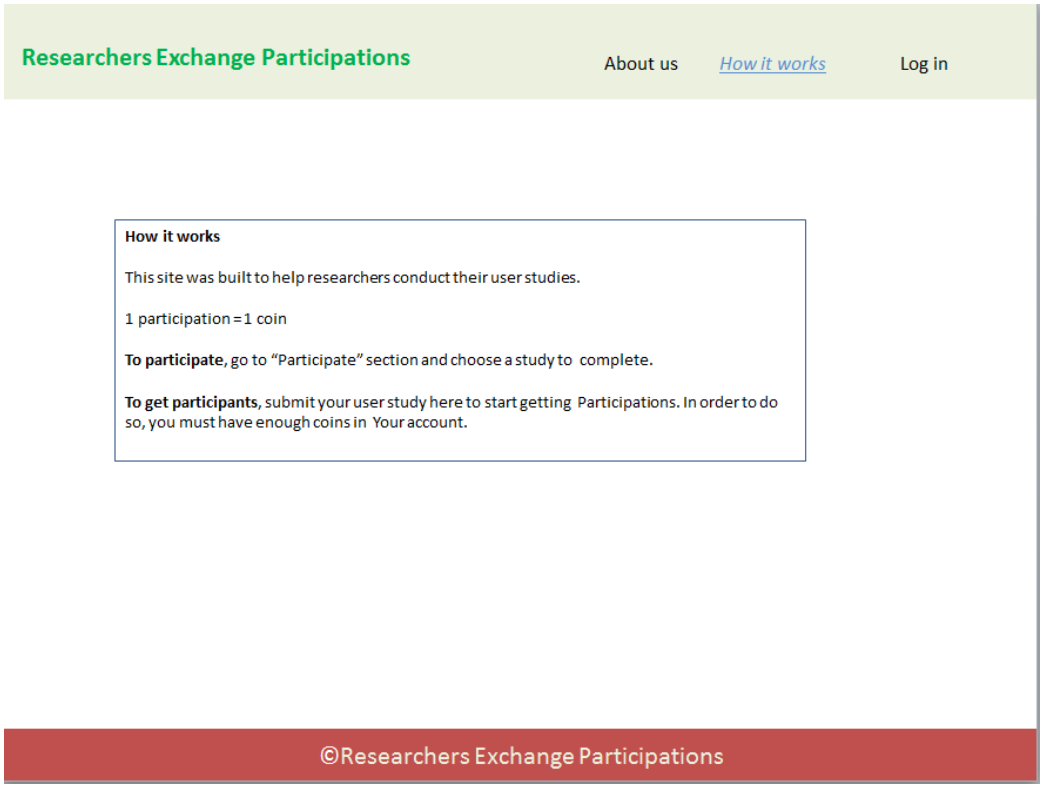
2) login.jsp (clicking the “log in” link brings us here) Users enter their credentials and click on the “Login” button, if the user is admin, he/she will be taken to the admin.jsp page, otherwise, he/she will be taken to the “main.jsp” page



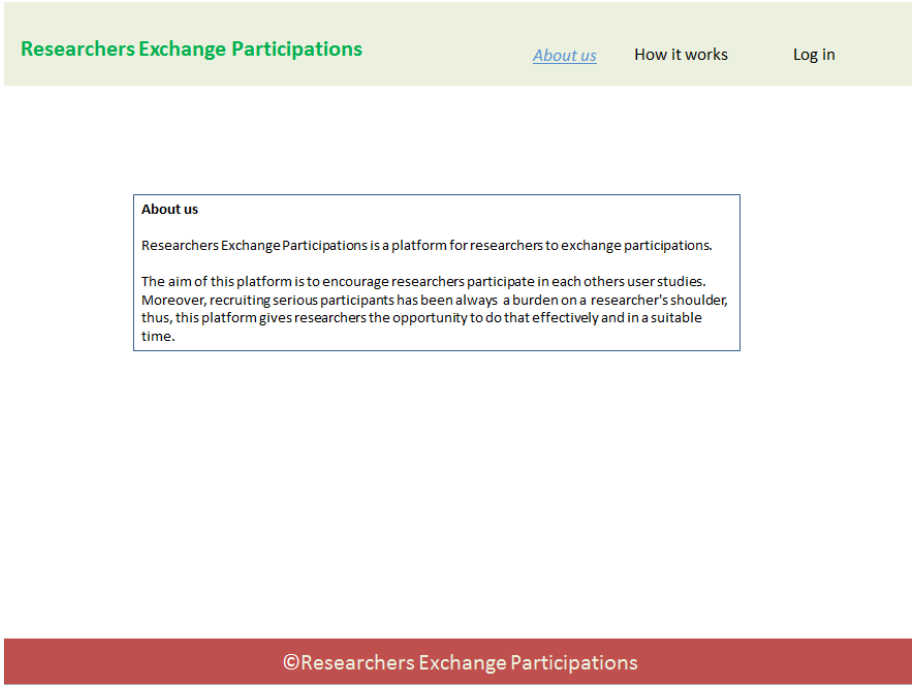
3) signup.jsp (clicking the “Sign up for a new account ” link in the previous page brings us here)



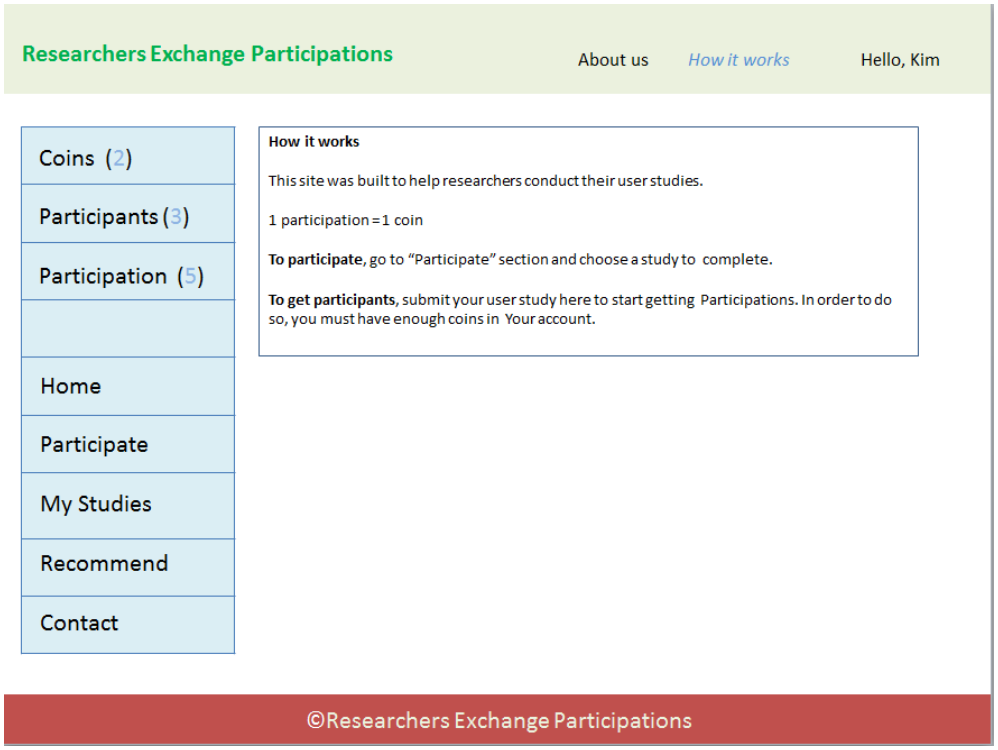
4) how.jsp (Clicking the “How it works” link brings us here – before logging in)



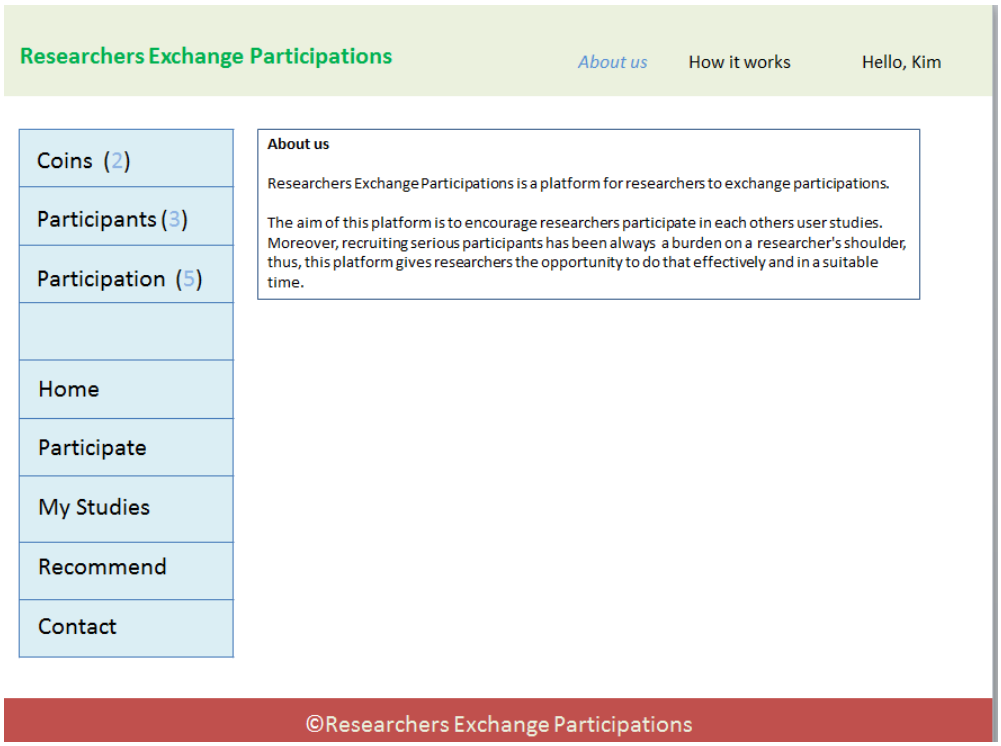
5) about.jsp (Clicking the “About us” link brings us here – before logging in.)



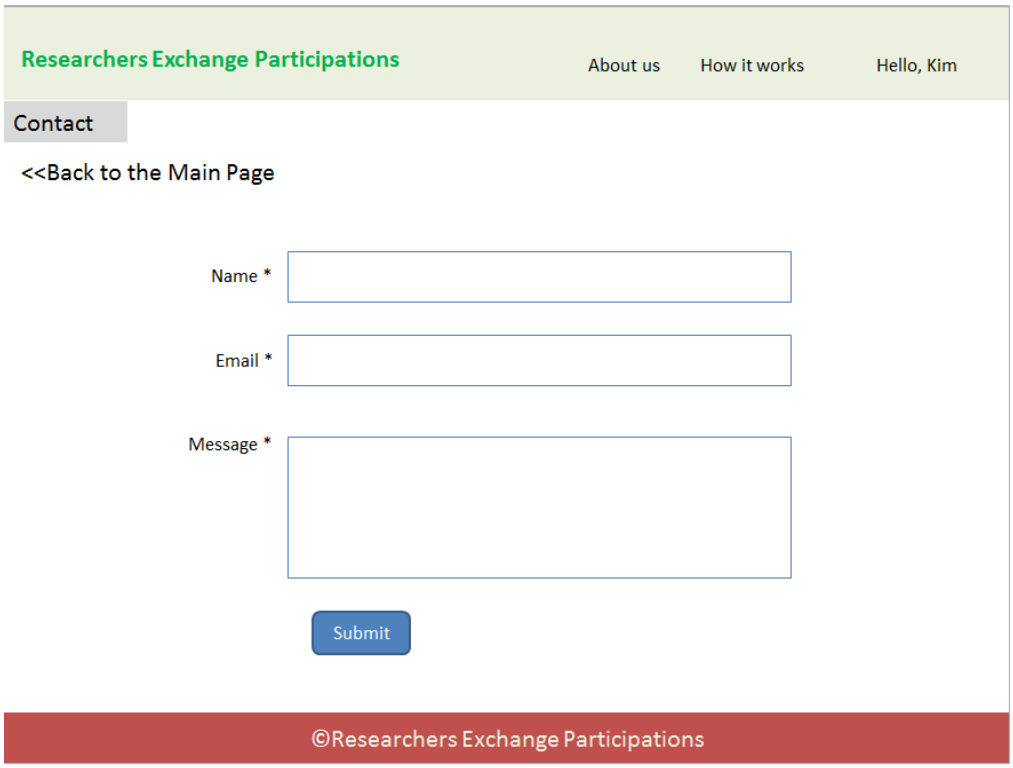
6) main.jsp (the home page after logging in, clicking the “How it works” link–after logging in-- brings us here as well)



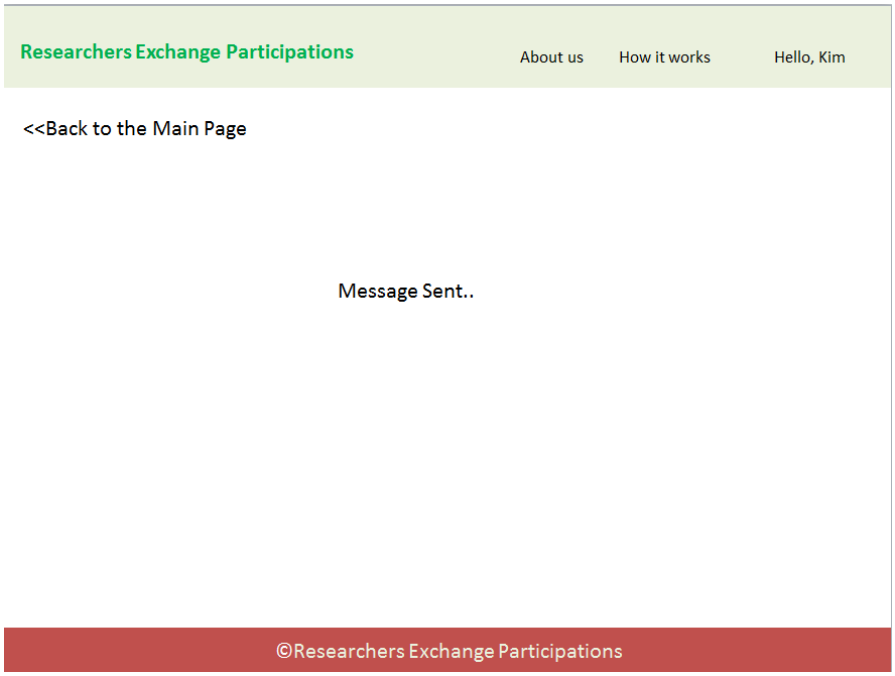
7) aboutl.jsp (clicking the “How it works” link --after logging-- brings us here).



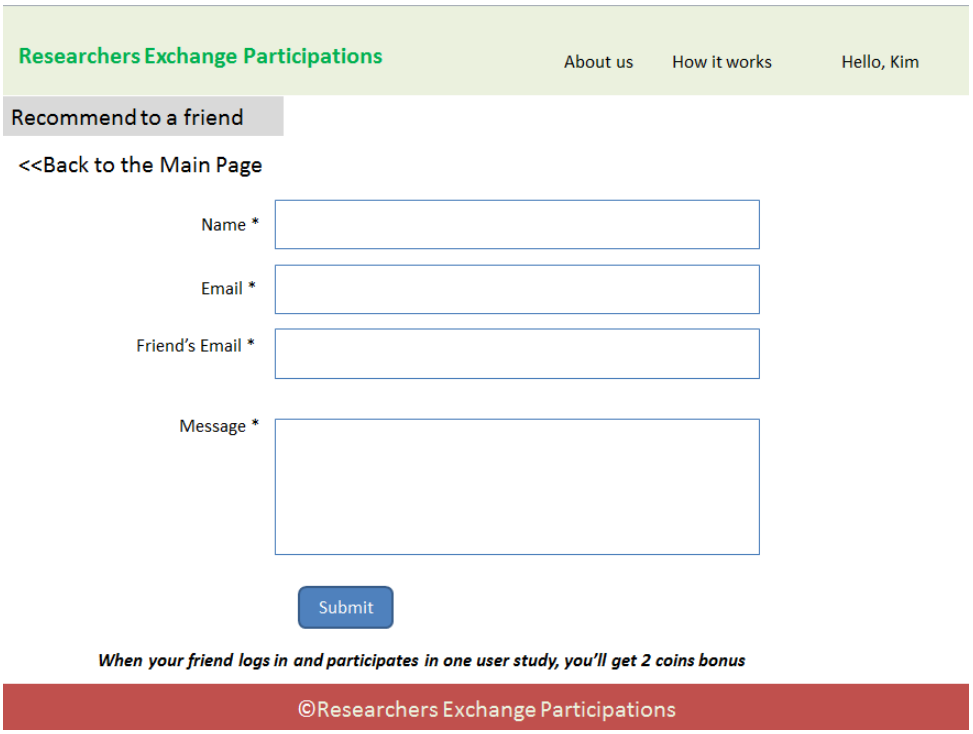
8) contact.jsp (clicking the “Contact” link from the side menu, brings us here) clicking the “Back to the Main Page” link takes us back to the main page. Filling the form and then hitting the submit button takes us to the confirmation page (confirmc.jsp).



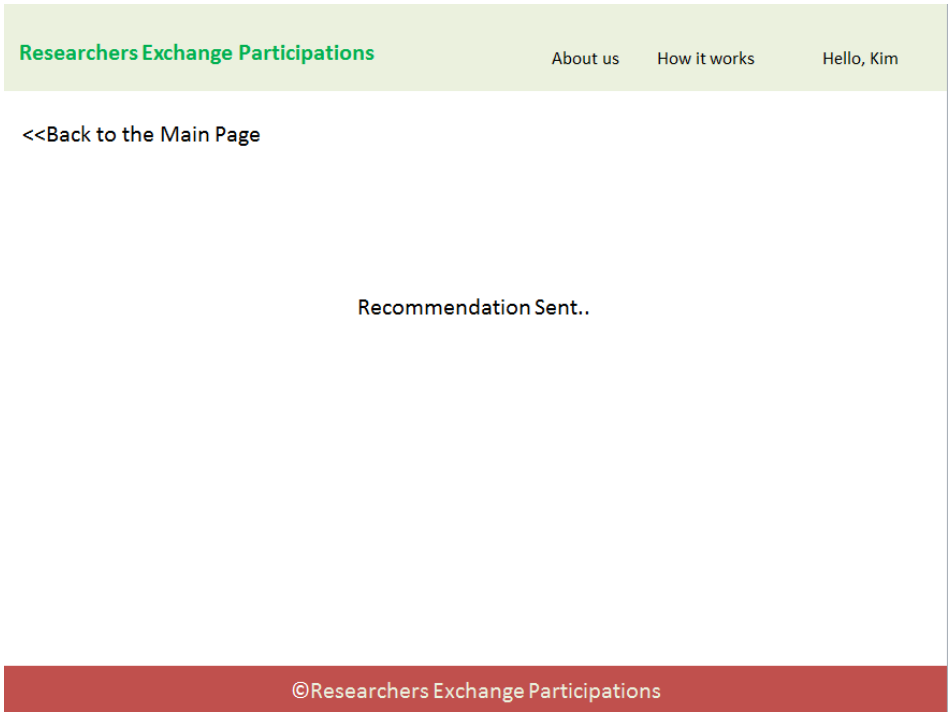
9) confirmc.jsp (the “Back to the Main Page” link is similar to the one in the previous page.



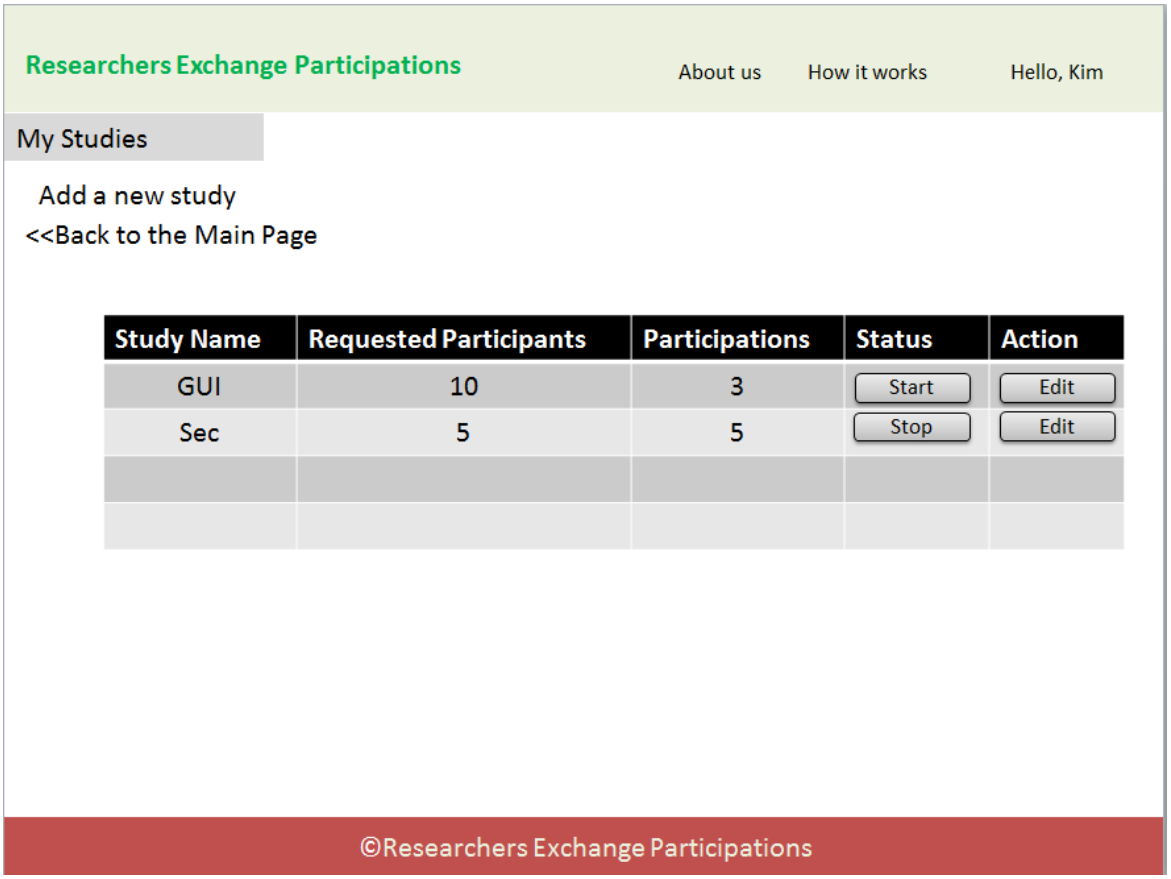
10) recommend.jsp (clicking the “Recommend” link from the side menu brings us here.) clicking the “Back to the Main Page” link takes us back to the main page. Filling the form and then hitting the submit button takes us to the confirmation page (confirmr.jsp).



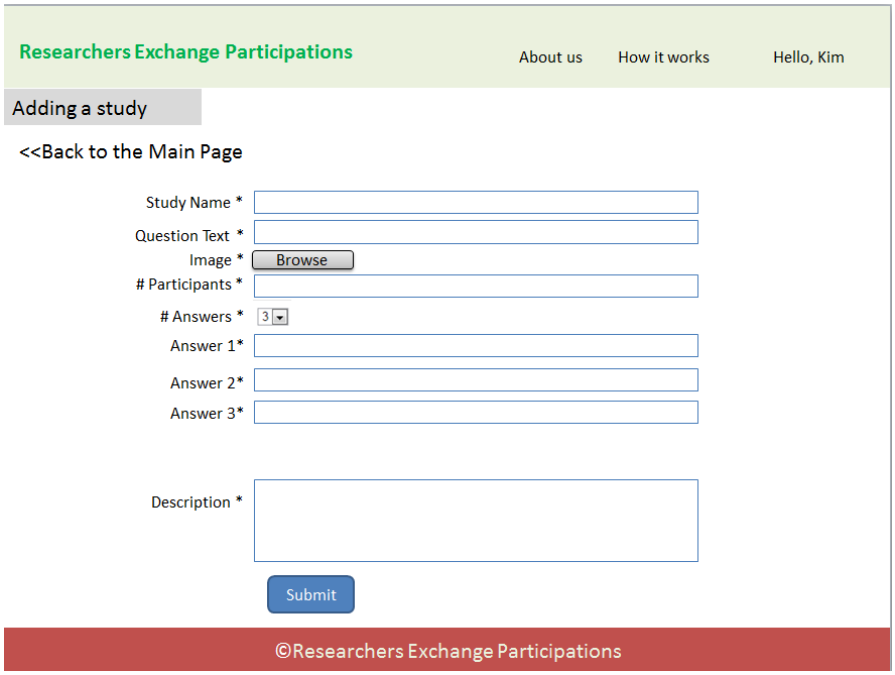
11) confirmr.jsp



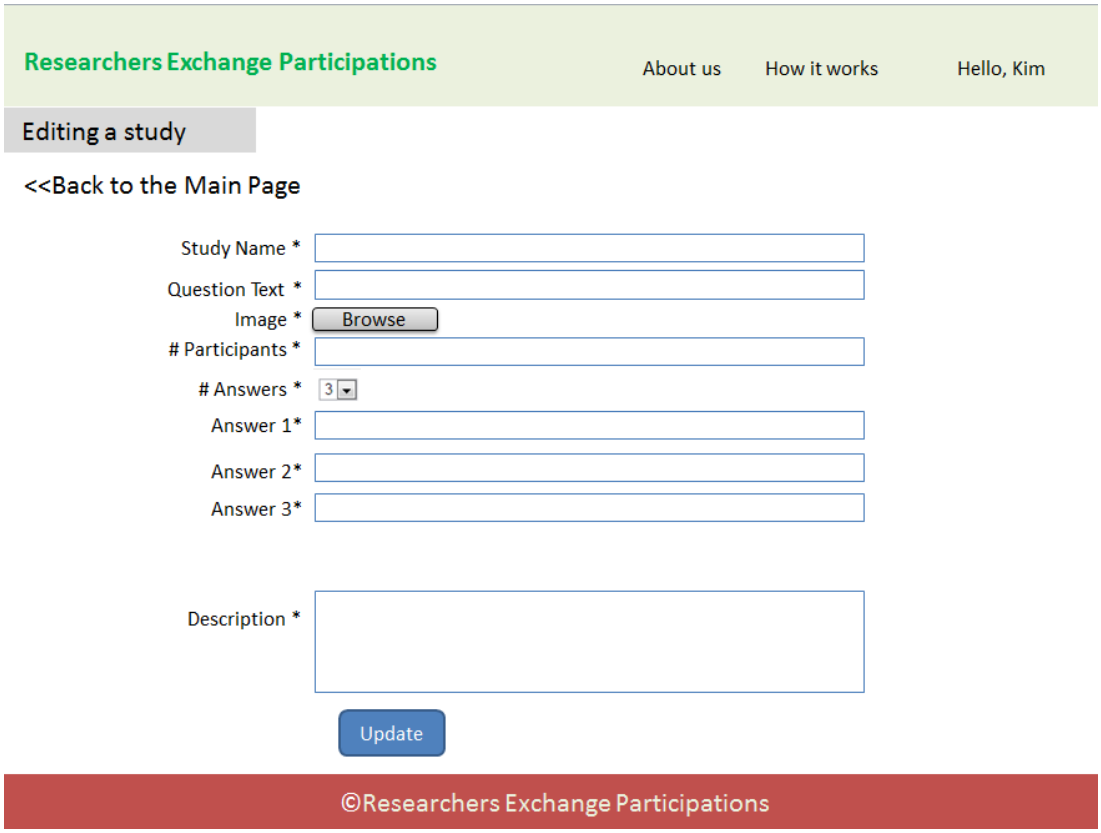
12) studies.jsp (clicking the “My Studies” link from the side menu brings us here).



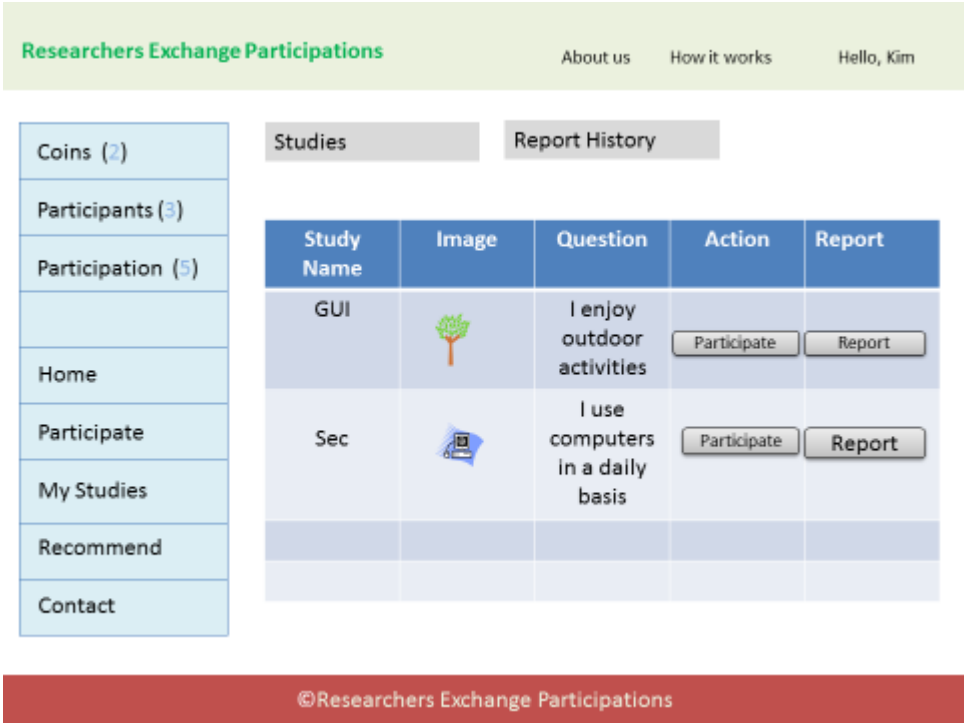
13) newstudy.jsp (Clicking the “Add a new study” link in the studies.jsp page brings us here)



14) editstudy.jsp (clicking the edit button in the studies.jsp page brings us here)

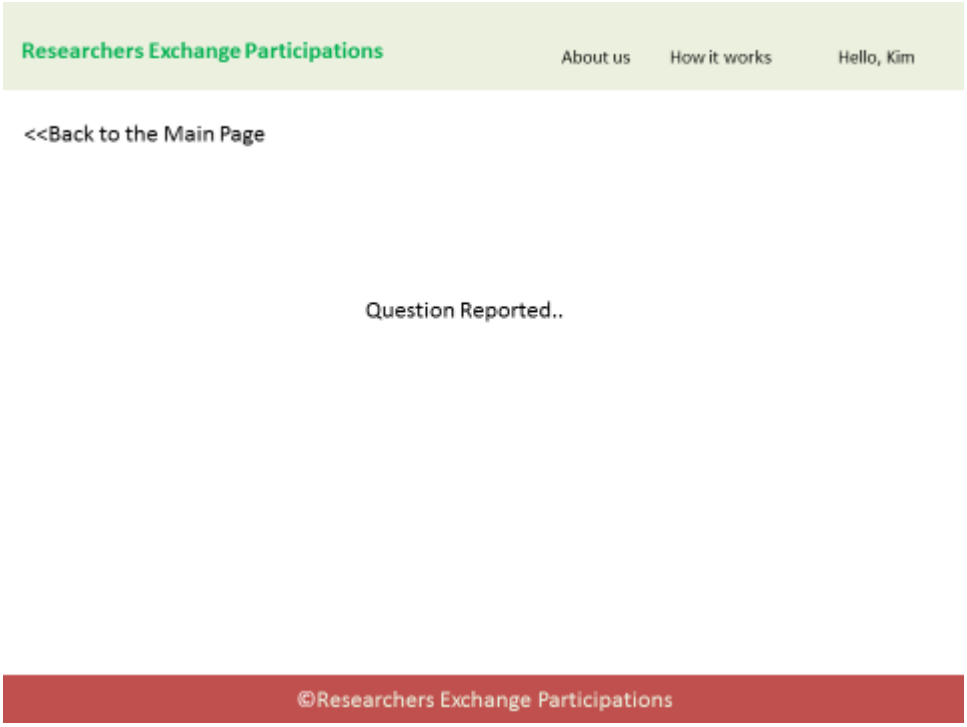


15) participate.jsp (clicking the "Participate" link from the side menu brings us here)

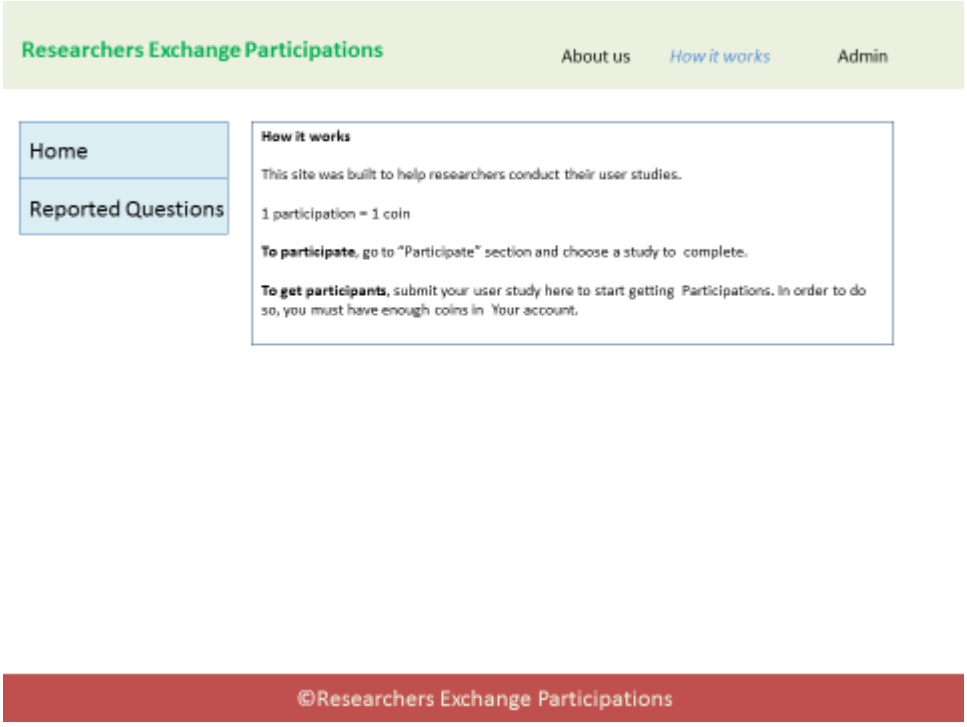


The Researches have an option to report any study. Once they report the study, the admin receives a notification about the request. The researcher is taken to the "confirmrep.jsp" page

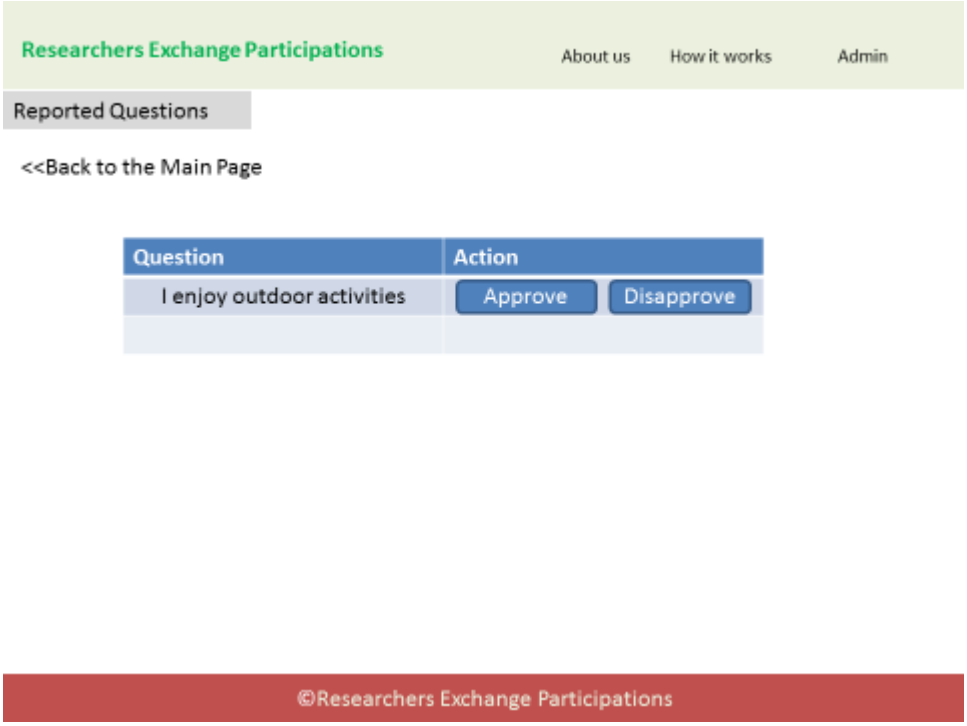
16) Confirmrep.jsp This page displays a notification that the question has been successfully reported.



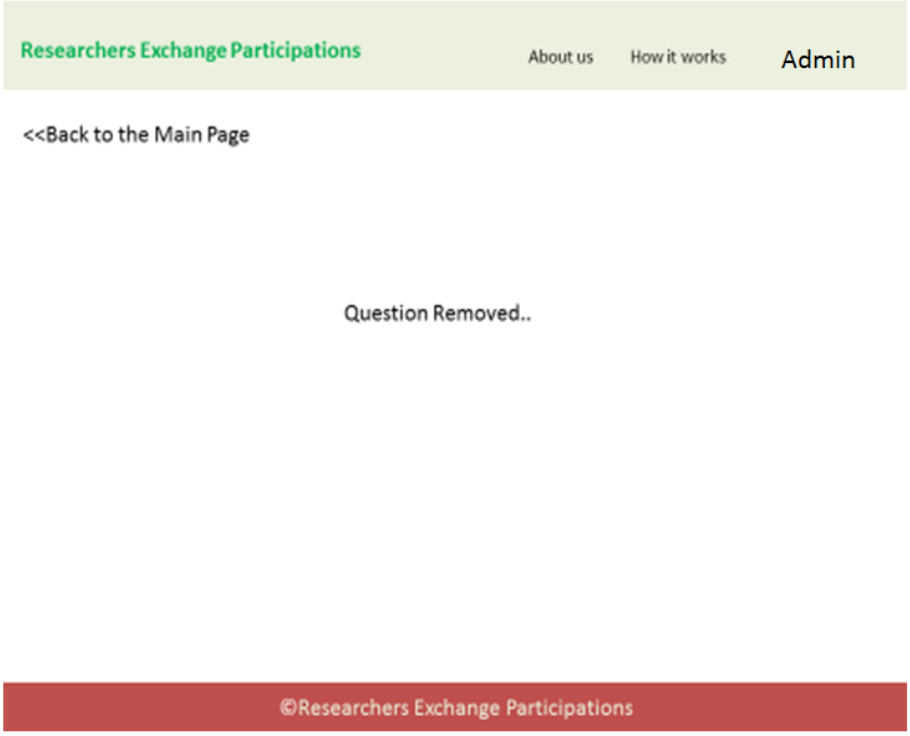
17) admin.jsp This is the page where the admin receives the reported questions.



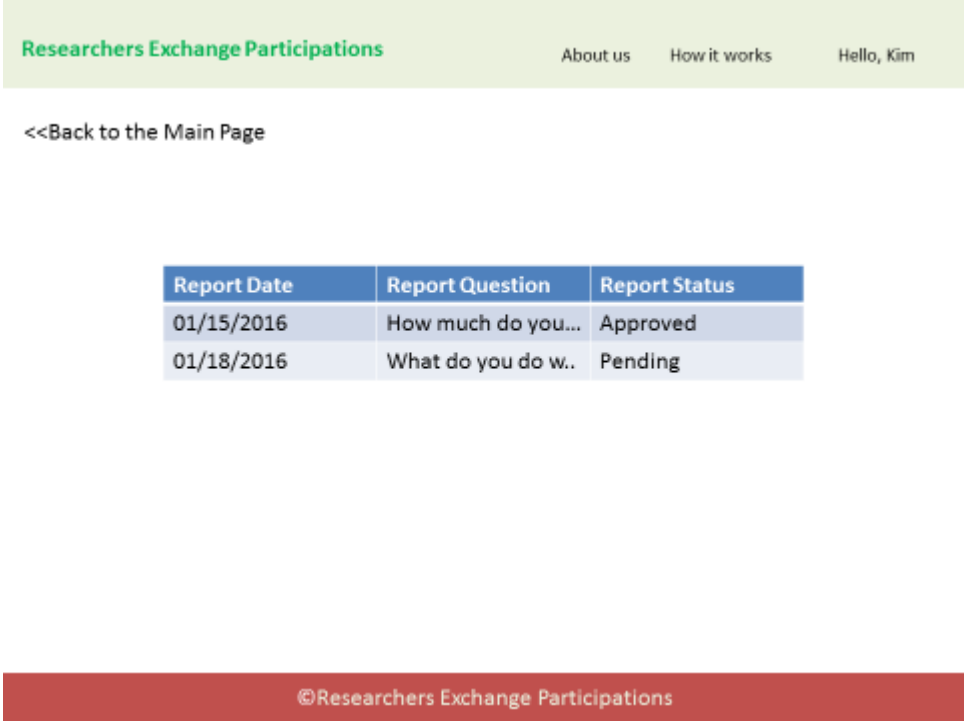
18) reportques.jsp this page displays all the reported questions. The admin can either approve or disapprove the request.



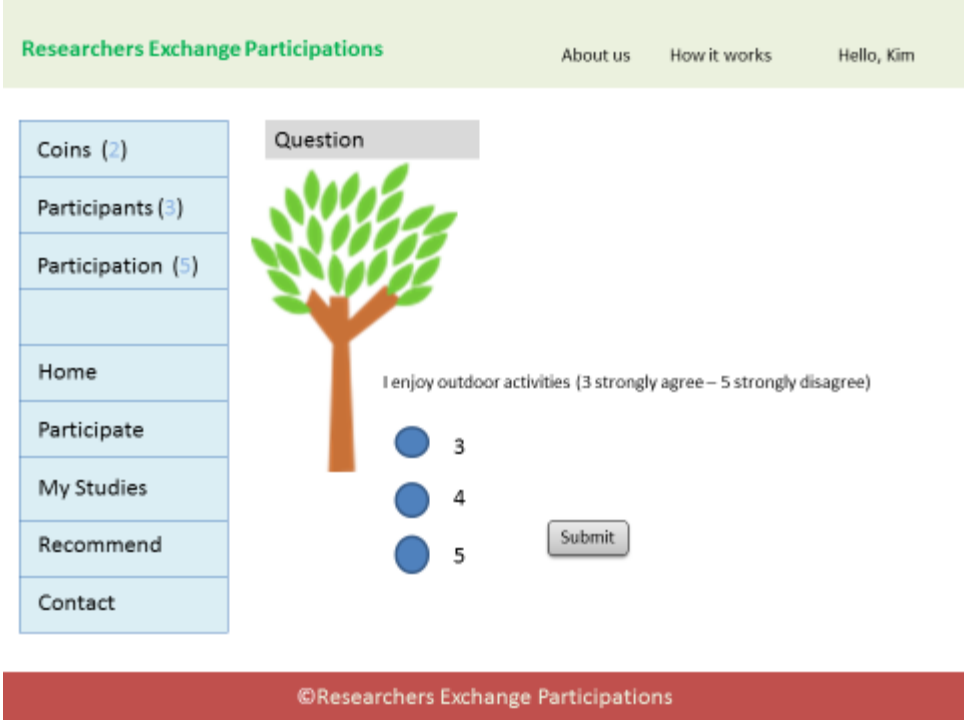
19) requestc.jsp this page displays a notification that the reported question has been removed/not removed.



20) They can view the report history by clicking on “Report History” button in “participate.jsp”which will take them to “reporth.jsp” page. All the details of the reports is displayed here.



21) question.jsp (Clicking the “Participate” button in the participate.jsp page brings us here). For simplicity, we will consider that a user study consists of only one question with a minimum of three answers and a maximum of 5. In order to answer, the user should select one of the options and click the “Submit” button. Clicking “Submit” button must take us back to the participate.jsp page.



HTML5 Validation/Cross-browser testing

Validate your HTML5/JSP on http://html5.validator.nu/. Also, make sure your app works (and looks right) in both Google chrome and Firefox.

Assignment Submissions

What to submit using Moodle (Email submissions will NOT be accepted):
1**. firstname_assignment1.war** - An archive of the entire web application (project) stored in a standard WAR file. Though there are only JSP pages for this assignment, part of the exercise is to go through the steps of creating and submitting such archives. Note that while there are no java sources for this assignment, but when there are, you must ensure that the java source files are included as part of the archive. The WAR file will be imported into Netbeans for grading and may be required to be deployed as part of the submission.

2. **info.pdf** – PDF document with the following assignment information :
a) Explanation of status and stopping point, if incomplete.
b) Explanation of additional features, if any.
c) Discuss the easy and challenging parts of the assignment. How did you overcome all or some of the challenges?

d) Discuss division of labor specifying who did what and why this is a fair and equal split.

3. **Openshift link**. Upload your project into openshift and post the openshift link in the online text session (so we have easy access when grading).

Both team members must submit the assignment (same copy).

Finally, set up a time to demo your assignment to your grader using the process described in the course Moodle site. Students should be prepared to answer questions posed by the grader about their work.