

CSCI 5709 - Advanced Topics in Web Development



Assignment 1

Application of User eXperience, usability, and design principles

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A1.1 Project's Purpose, Goals, and Intended Features:

As a group we have decided that we would create a web application for helping travelers, either solo or group, find their fellow travelers going to the same destinations at a particular time. The main goal of this project is to create a simple web application that provides a great user experience with responsiveness (i.e., mobile-friendly) and high performance. Apart from helping travelers find their fellow travelers and connecting them, the application will also act as a travel guide with a lot of high-quality information, tips, and suggestions about highlights at a given place and time. For connecting the registered users/travelers, we are planning on creating groups where they can interact with each other, share images, and create polls to make quick decisions as to attend an event/highlight. The travel guide feature is for all users (i.e., including the non-registered users), where they can find details regarding the things that help in planning trips in a better way. For example, we are planning to provide information such as a brief description of the place, visa or the required travel documents, affordable residence options, quick and efficient ways to travel around, any items that must be carried, etc.

Application Features:

1. User Profile Management:

- a. Sign Up / Login Pages – Allow new users to register and existing users to login.
 - i. Forgot Password – Allow user to get the password back to their registered email.
- b. User Profile Page – Allows users to update their profile details.

2. User Permission Management:

- a. Authentication – Verify if the user's credentials are valid.
- b. Authorization – Check if the user has User's or Admin's privilege.

3. Browsing Destination Guide:

- a. Searching for a destination by location name.
- b. Reading the guide for a destination.

4. Destination Highlights:

- a. View all the highlights in the given place
- b. See reviews and comments related to the highlight.

5. Finding People:

- a. You can search for and request join groups of like-minded people
- b. Once inside a group - you can find users to invite to your group

6. Group Member Management:

- a. Once inside a group, you can choose to add users by:
 - i. Invite directly using the userID
 - ii. Use Find Buddies, and click the invite button to invite them
- b. All the members can choose to vote out a particular member. When the votes reach >50% - the user is removed

- c. The group admin i.e. the user who created the group can edit the group details such as title and description.
7. **Group Poll Management:**
 - a. Group members can create Polls for the users to vote out a particular member
 - b. When all the users have given their vote - the results are displayed
8. **Group Communication Management:**
 - Share Images – Allow users to upload images to a group.
 - View Images – Allow users to see the images in their groups.
9. **User Feedback and Communication Management:**
 - Why Us – Static Page
 - About Us – Static Page
 - Contact Us – A form that sends an email to us.

A1.2 User Personas, Intended Scenarios, and Use Cases:

User Persona:

As a group we have decided to use the following user persona while developing our web application:

PERSONA #1: Jane is a 23-year-old Communication & Media Studies student in Canada. She is an active person who enjoys traveling to new destinations whenever she can. She tries to plan at least one trip abroad every year, as well as two shorter getaways to nearby locations within the country. She has one summer break which typically falls in July/August, and two-semester breaks each approximately two weeks long, one in winter (usually beginning on Christmas and ending on New Year) and the other is a spring break. She mainly travels with her boyfriend, but occasionally with a group of friends or even alone. Along, with her studies, Jane also does a job and makes a decent salary so she is not highly budget-conscious, but she is not an extravagant spender either. She often does thorough research before going to a place to see how she can get high-quality experience with the lowest possible expenditure. Jane also prefers to meet new people (or tourist groups) who are also traveling to the same destinations and try to limit expenditure by sharing.

PERSONA #2: John is a 25-year-old software developer. He loves traveling and exploring new places whenever he gets the time. Also, he loves traveling in groups, and attend fun activities. However, when he tries to plan a getaway with his friends or family members, most of them have a busy schedule at that point and he has to wait or postpone the plan to some other time when everyone is available. After observing this several times, John decided that he wanted to travel without having to depend on others' schedules. He wants to use a platform that can help him plan his getaway with other tourists like him. Also, John likes to experience the highlights like popular food, activities, restaurants, and nightlife, etc. at the place he wants to go to.

Intended Scenarios:

SCENARIO #1: You are a new user wanting to use our application, you have read our travel guides and are very impressed. Now, you want to plan exciting trips in the future with the help of our application. So, you want to sign-up with us and take full advantage of our services in the future.

SCENARIO #2: Recently, you have started planning a new solo trip and are doing some research by reading the destination guides, in our application. Now, you want to see if there are any fellow travelers going to the same place, but the application prompts you to log in before proceeding and you have entered your credentials but the application returns an error message saying “Invalid Credentials”. You have now realized that you have forgotten your password and you want to retrieve it. So, you want to go to the forgot password link with only your userID and expect to see the password sent to your registered email.

SCENARIO #3: You are new to our application and have come to visit it as you have heard pleasant things about us from your friends. Based on your friend’s suggestion you have come to our web-application to do some research to plan your next trip well. So, you want to search by the name of the country to see all the top destinations in it and then read about each one of them.

SCENARIO #4: You have used our application sometime back and had a very pleasant experience. Now, you want to plan a new trip and want to get some tips about a particular destination. So, you quickly search by the country name in which your destination and are able to find it easily from the displayed list. Now you want to read and get information regarding details like visa or the required travel documents, affordable residence options, quick and efficient ways to travel around, and any items that must be carried.

SCENARIO #5: Using the Groups feature – you can create a new group or find groups to be a part of. Browsing through the application and the Find Buddies feature – you are able to find and invite users to your group or you can find groups and send a request to join the group.

SCENARIO #5.1: Once inside a group you can view the group details, create polls, invite your friends to the group – either directly by their userID or by using the Find Buddies feature to invite them. You can also monitor other requests to join the group. This feature is available to all the members of the group – so that there is no monopoly/control of the group settings. The members of the group can also choose to remove a current member. If more than 90% of the members choose to remove a particular member – then that member is removed. The group admin i.e. the creator of the group has additional features on the group home page such as editing the home page details.

SCENARIO #6: You used our application and were able to find great travel buddies and reached your destination. After reaching the destination, you would want to look at what are some popular dishes at that place and place an order at your place. You can skim through the various popular activities, restaurants, events, and other highlights you would want to attend.

SCENARIO #7: Your group members have different suggestions of activities to addend. You can have a small poll in your group to decide what to do next. Also, you can share photos and communicate with your group. You can also manage your groups i.e., join or exit groups.

SCENARIO #8: You searched for destinations and you liked some places which you wanted to save for exploring or seeing again later. You can add them to your wish list.

Feature: Group Admin Home Page

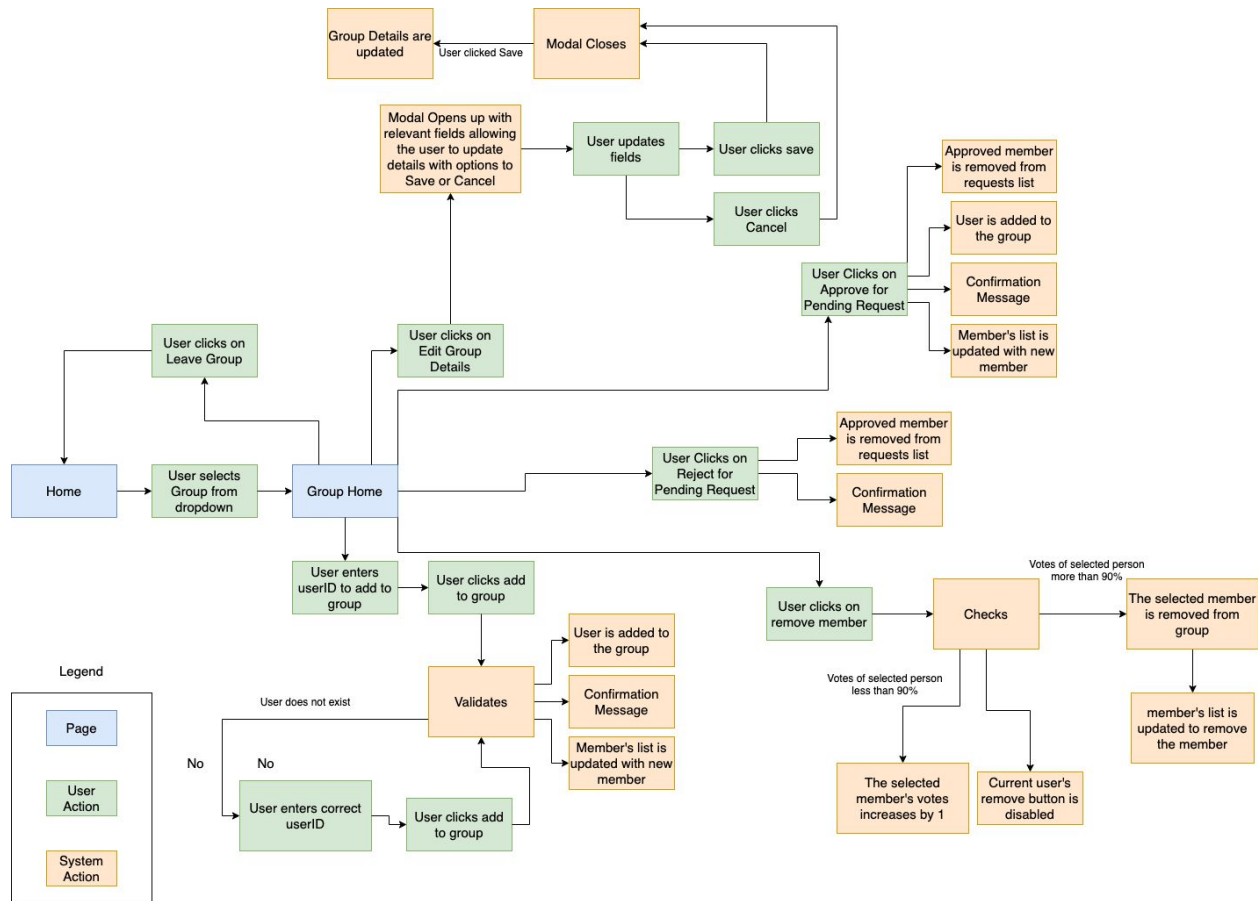
Assumptions:

1. The user is already in a group that he is an admin of.

Use Case:

1. User clicks on a group under "My Groups" to enter the group [user action]
2. The user is redirected to the group home page where they can view the group details, pending requests, vote a member out. [system action]
3. User clicks on Leave Group button [user action]
 - a. User is removed from the group's member's list [system action]
 - b. User is redirected to Home Page [system action]
4. The User clicks on the edit button to edit the group details [user action]
 - a. A modal opens up with a form allowing the user to update the title and description with Save and Cancel Buttons [system action]
 - i. User clicks on Cancel [user action]
 1. Modal closes and the group admin page is shown [system action]
 - ii. User updates the details and clicks Save [user action]
 1. Modal closes and the group admin page is shown with the updated group details.
5. The user clicks on Approve for a pending request [user action]
 - a. The approved user is removed from the pending requests list and added to the member's list [system action]
6. The user clicks on Reject for a pending request [user action]
 - a. The rejected entry is removed from the Pending Requests list [system action]
7. The User clicks on "Remove" for removing existing members
 - a. The selected user's votes to get removed increase by 1 and the current user's button is disabled [system action]
 - b. If the selected user's votes to remove surpass 90% of the votes, the user is removed from the group, and the entry is removed from the group's member's list [system action]
8. The User enters the user ID in the input field to directly add the user by their ID [user action]
 - a. The User ID is invalid - a message is displayed showing that the user does not exist. Input field is cleared [system action]
 - b. The User ID is valid - a message is displayed showing that the user is added successfully. [system action]
 - i. The new user is added to the group's member's list [system action]

Task Flow Diagram:



WireFrame:

Navbar Find A Buddy My Groups Find Desitnation

Group Name

This is what the group is about. The group description will be here.
Any other details will be shown here.

Rules:

- Rule number 1
- Rule number 2
- Rule number 3

Pending Requests

John Doe	<input type="button" value="Accept"/>	<input type="button" value="Reject"/>
Jane Doe	<input type="button" value="Accept"/>	<input type="button" value="Reject"/>
Harry Potter	<input type="button" value="Accept"/>	<input type="button" value="Reject"/>
Ron Weasley	<input type="button" value="Accept"/>	<input type="button" value="Reject"/>

Current Members

Cristiano Ronaldo	<input type="button" value="Remove"/>
Eden Hazard	<input type="button" value="Remove"/>
Lionel Messi	<input type="button" value="Remove"/>
Christian Pulisic	<input type="button" value="Remove"/>

A1.3 Sitemap:

As a group we have designed a sitemap as shown in Figure-1, using the draw.io website [1]. In the sitemap shown in Figure-1, we have used the lock icon to indicate that the pages require the user to be logged in before they can access it. The sitemap has the following pages at the highest level:

About: This page has information about us and also about the application. We also take user's feedback here.

Account: Based on the user's state (i.e., logged-in or logged-out) we display different options. For instance, if the user is a guest user and is not currently logged-in then we only display login and sign-up options. Whereas if the user is currently logged in, we only display logout and update profile options.

Destinations: Here, we allow all users to search for destinations by country name and provide travel tips. If a user is logged in then they can also find people going to the same destination.

Find People: Users who want to find travel companions visit this place and either find people or groups based on the destination name.

My Groups: If a logged-in user wants to manage their groups, communicate with other group members either via polls or by sharing images/messages, they must visit this page.

Wish List: Here, a logged user can save destinations for easy access later.

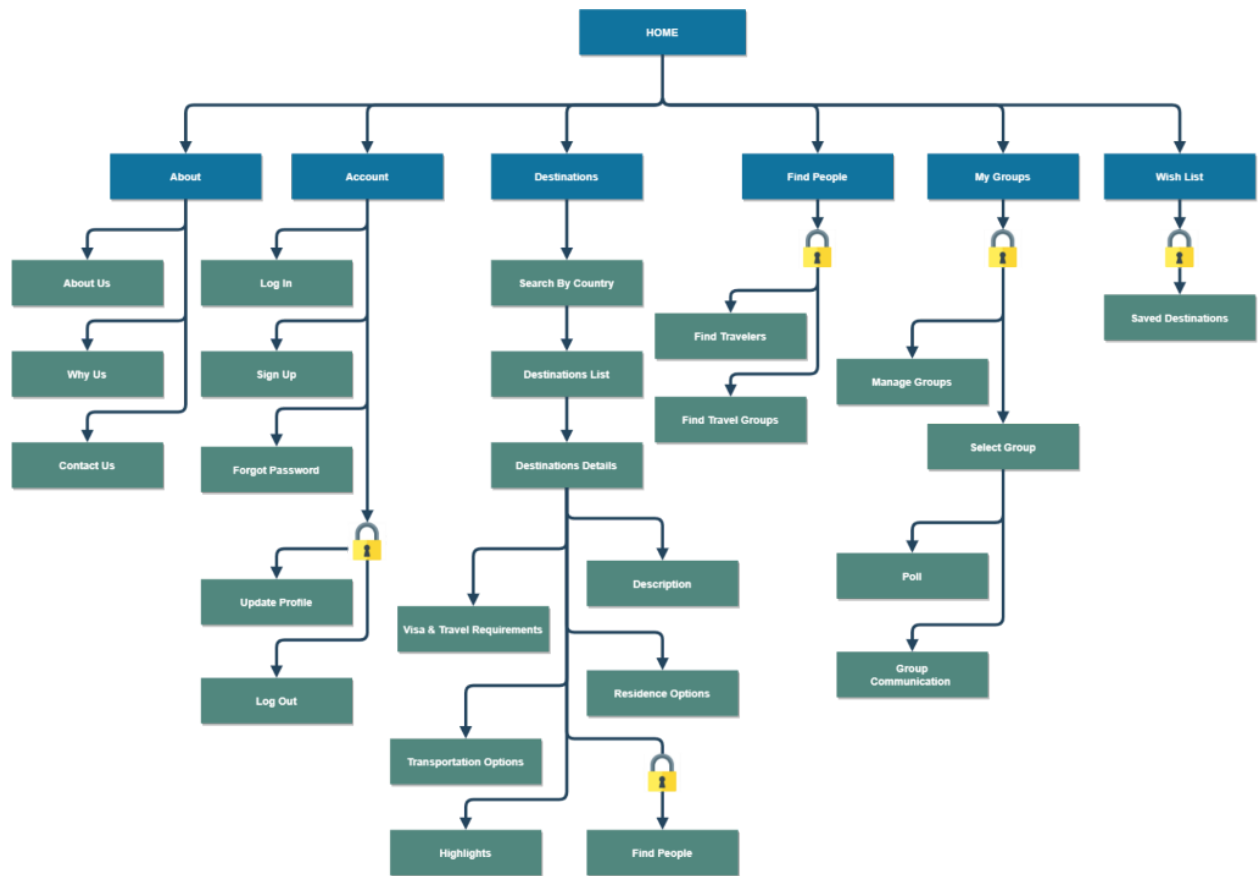


Figure 1: Sitemap

References

- [1] Draw.io.com. 2021. Online Flow-Chart maker | Draw.io. [Online] Available at: <<https://www.draw.io/>> [Accessed at 6 February 2021]
- [2] Adobe XD [Desktop App] Available at: <<https://www.adobe.com/ca/products/xd.html>> [Accessed at 6 February 2021]