Test Plan- Neighborhood Movement Stratum

Introduction

This test plan was created to ensure that the testing of the survey data gathering tool (clickable prototype) with the target audience will be done properly. Thus, it will clearly describe where, when, with whom, and how the test will take place. Furthermore, it will clarify the purpose of the test, what the test consists of, who the target group is, the materials needed, and the desired execution of the test.

The app includes features such as survey filing, suggesting ideas to the municipality, reacting to suggestions, and a leaderboard system.

Goal of this test

The purpose of testing is to ensure that the app functions correctly, gathers data accurately, and provides a seamless user experience.

The goal of this test plan is to verify the functionality, usability, and performance of the data gathering tool app. The key focus areas include survey filling, suggestion submission and interaction, point system and leaderboard, as well as the avatar-guided user experience.

Approach

This test plan will be used to test the clickable prototype using a phone. In this test I am the interviewer/observer, and the 2^{nd} person is a test user from the target audience.

Test Fnvironment

The tests will be conducted in the TQ building inside the UX Lab, if possible. Every team member will perform the test with at least 1 student, so we have a minimum of 6 test users. The test will be recorded so the observation can be analyzed properly.

Used materials

- 1 iPhone which runs the clickable prototype
- Stopwatch using mobile phone or timer
- Possibility to use camera to record the process
- Scenario list

Test Scenarios

For our test scenarios, we are targeting 5 main features of the app, so we can test if they work for the user. The following test scenarios will be covered:

- Survey Filling:
 - Test the creation and submission process of surveys.
 - Verify the correct display of survey questions.
 - Ensure accurate data capturing and validation of survey responses.
- Suggesting Ideas to the Municipality:
 - Test the submission process for suggestions.
 - Validate the accurate saving and display of suggestions.
 - Check for proper validation and error handling of suggestion inputs.
- Reacting to Suggestions:
 - Test the ability to add comments and suggestions.
 - Verify the proper display and updating of comments and likes.
 - Ensure effective user interaction with suggestions.
- Point System and Leaderboard:
 - Verify the correct awarding of points for completing surveys.
 - Test the accuracy of point calculation and assignment.
 - Validate the functionality and accuracy of the leaderboard system.
- Avatar-Guided User Experience:
 - Test the guidance and assistance provided by the avatar throughout the app.
 - Verify that the avatar offers clear instructions and explanations.
 - Ensure the avatar's responsiveness and interactivity.

Task List for Users

- 1. Launch the application and create an account
- 2. Sign in with your account
- 3. Get to know how the application works and what it will be used for
- 4. Now add a suggestion to the pin location that has been mentioned by the avatar
- 5. After adding the suggestion, check out the profile settings, points and rank
- 6. Now go to the map, click a location and fill in the designated survey
- 7. Choose a category to your liking, and pick an available survey you want to fill in
- 8. Complete the survey
- 9. Check out the map, change the view of it and go to the list to check out the suggestions which have already been made by community members
- 10. Interact with a suggestion, to like it or comment on it
- 11. Now go to the survey page, choose the category of your liking and fill in another survey.

Test 1 – Usability testing

This test will cover the following:

For example, an usability test will be performed with test subjects, to validate whether the user-friendliness of the application meets the end users' needs. Thus, they will be presented with some scenarios, and must try to execute them. The scenarios will be written down on cards and read aloud if necessary due to language barriers.

Approach usability testing

How: Present scenarios to user

What: Have the user take different actions and test functions. Do the buttons do what is expected? Do the interfaces and interaction work as expected from the users?

Supplies: Clickable prototype, Camera, laptop and stopwatch

Ask questions like:

Question 1: This is your first time on the survey data gathering tool, could you explain what it used for?

Question 2: Can you provide your preferences in the application so that you only see categories you're interested in?

Question 3: Can you place a suggestion on a location and react to someone else's suggestion?

Question 4: Can you see the level of your profile, the number of surveys you've completed and your total points?

Question 5: Can you complete a survey?

1. General Questions:

- What is your overall impression of the app's design and layout?
- o Did you find it easy to navigate through the app?
- Did you encounter any difficulties or confusion while using the app?
- Is there anything you particularly liked about the prototype's design or functionality?
- o Is there anything you disliked or found frustrating about the prototype?

2. Onboarding Experience:

- Did you understand the purpose and main features of the prototype from the onboarding screens?
- Were the onboarding instructions clear and easy to follow?
- o Did you encounter any issues or confusion during the onboarding process?
- Did you feel motivated or engaged while going through the onboarding experience?

3. Task Completion:

• Please perform a specific task using the app (The test scenario).

- Were you able to complete the task successfully? If not, what difficulties did you encounter?
- Did you find the necessary actions or options easily accessible within the prototype?
- How confident do you feel about performing similar tasks in the future using the app?

4. Prototype Features:

- Are the app's features and functions clear to you?
- Were there any features or options you expected to find but couldn't?
- Were there any features or options that were confusing or not intuitive to use?
- Do you have any suggestions for additional features or improvements?

5. Visual Design and Layout:

- Did you find the visual design appealing and visually consistent throughout the prototype?
- o Did the color scheme and typography enhance the overall user experience?
- o Were the buttons, icons, and other visual elements clear and understandable?
- o Did you find the layout of the app's screens and content logical and organized?

6. Performance and Responsiveness:

o Did the prototype respond quickly and smoothly to your interactions?

7. Overall Impressions:

- Would you use the app in the future based on what you see on the prototype
 Why or why not?
- How likely are you to recommend the future app to others? Why?
- Is there anything else you would like to share about your experience with the prototype?

Test Scenarios for Survey Filling:

- 1. Creation and submission process of surveys:
 - User should be able to create a new survey by providing a title, description, and relevant details.
 - Ask the user to fill in the survey and submit their responses.
 - Verify that the submitted survey is successfully saved and the user receives a confirmation message.

2. Display of survey questions:

- User should see all survey questions clearly on the screen.
- Ask the user to verify if the questions are displayed accurately, including text and options.
- Check if any conditional questions are displayed correctly based on previous responses.
- 3. Data capturing and validation of survey responses:
 - Instruct the user to fill in the survey and provide different types of responses.
 - Validate that all responses are captured accurately.
 - Verify that required fields are enforced and any validation errors are displayed appropriately.

Test Scenarios for Suggesting Ideas to the Municipality:

- 1. Submission process for suggestions:
 - Ask the user to submit a suggestion by providing a title, description, and any additional information.
 - Verify that the suggestion is successfully submitted, and the user receives a confirmation message.
 - Check if the user can attach any relevant files or documents, if applicable.
- 2. Saving and display of suggestions:
 - Ask the user to submit a suggestion and verify that it is saved accurately.
 - Instruct the user to search for their suggestion and confirm if it is displayed correctly.
 - Check if the suggestion's details, such as title, description, and attachments, are displayed accurately.
- 3. Validation and error handling of suggestion inputs:
 - Instruct the user to submit a suggestion with missing required fields.

- Verify that appropriate error messages are displayed for the missing fields.
- Ask the user to provide invalid input and check if the system handles the errors correctly.

Test Scenarios for Reacting to Suggestions:

- 1. Ability to add comments and suggestions:
 - Instruct the user to find a suggestion and add a comment or suggestion to it.
 - Verify that the comment or suggestion is successfully added and displayed with the suggestion.
 - Check if the user can add multiple comments and suggestions to the same suggestion.
- 2. Display and updating of comments and likes:
 - Ask the user to add a comment or like to a suggestion and verify that it is displayed correctly.
 - Instruct the user to update their comment or like and check if the changes are reflected.
 - Verify that the total number of comments and likes is accurate for each suggestion.
- 3. User interaction with suggestions:
 - Instruct the user to interact with suggestions by liking, sharing, or following them.
 - Verify that the user's actions are processed correctly, and the suggestions reflect the interactions.
 - Check if the user can filter and sort suggestions based on different criteria.

Test Scenarios for Point System and Leaderboard:

- 1. Awarding points for completing surveys:
 - Instruct the user to complete a survey and verify that they receive the correct number of points.
 - Check if points are awarded only upon successful submission of the survey.
 - Validate that different types of surveys may have different point values.
- 2. Accuracy of point calculation and assignment:
 - Instruct the user to complete multiple surveys and track their points.
 - Verify that the total points calculated for the user are accurate and consistent.
 - Check if any special conditions or rules for point calculation are implemented correctly.
- 3. Functionality and accuracy of the leaderboard system:

- Instruct the user to view the leaderboard and check if it displays the top users accurately.
- Verify that the leaderboard is updated in real-time based on users' points.
- Check if the user's own position and rank are displayed correctly on

- Onboarding experience was a bit confusing, as gamification is not included in it
- People were frustrated with not being able to move the map/write text
- Leaderboard is missing, although icon is there
- Not being able to change your interests after logging in
- Users not being able to change their privacy settings
- Missing feedback loop from inputting a suggestion