

# Roya Survey

## Developers

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# **About the Roya Assessment**

The Roya Assessment aims to aid coffee farmers and scientists in identifying and tracking the outbreak of La Roya Fungus in fields around Mexico. The data collected will be used to improve current and future models predicting outbreaks of La Roya. This site is currently under development. The current version is 0.1.

# Description of UI

The app requires the user to login to his account and then start submission new data. Help page give a brief overview of this app. After giving leaf input user can upload new issue. Scientist can check this issue and give solution in comment section.

The basic UI of the app is given bellow:

- ✓ Figure1 is the login page
- ✓ Figure2 is home page
- ✓ Figure3 help page
- ✓ Figure4 for comment

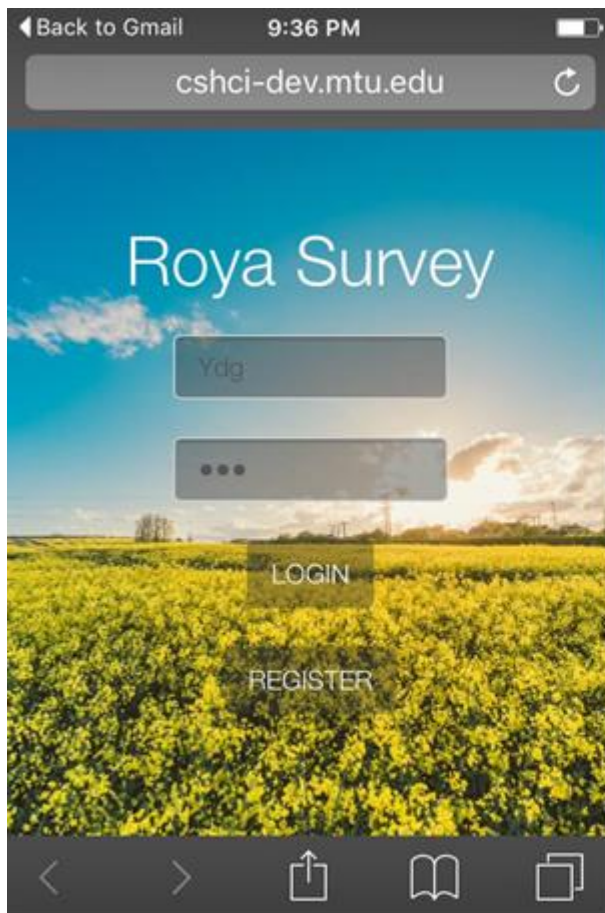


Figure1: Login Page

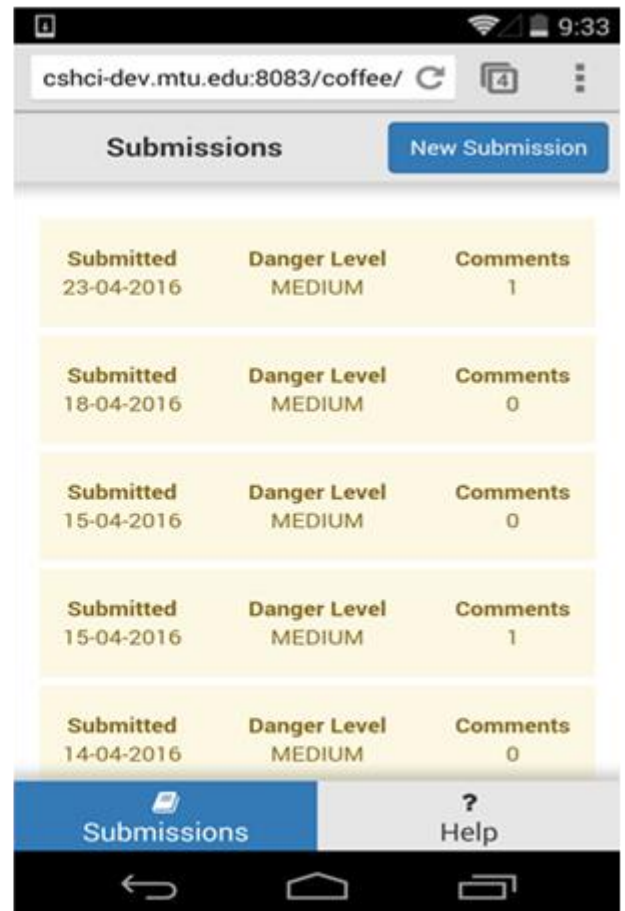


Figure2: Home Page



Figure3: About Page



Figure4: Comment

# Test Plan

## Test scenario 1

### 1. Test scenario name

Login

### 2. Test Goals for the scenario

The goal of this scenario is to test the login and going to the home page. Another goal of this test is to test the response of the application if the wrong login information is provided.

### 3. Scenario description

Assuming a user wants to submit some photos or information. For that, first user go to login page. The participant enters the login information and tries to login. After successful login, the user can view the data submitted by the other users.

### 4. Task list

The participant will perform the following tasks.

- a) Find the correct button to login
- b) Fill up the user name and password
- c) Press login button
- d) After successful login, the user can view submitted data.

## Test scenario 2

### 1. Test scenario name:

Create new submission

### 2. Test Goals for the scenario

Assume that a user want to submit an issue. For that he/she will submit some infected leaves. To submit infected leaves, first user have to select location. And after the leaves page loads, make them select 5 leaves as infected - two in the top row, two in the middle row and one in the last row.

#### **4. Scenario description**

This is read to the participant “Assume that you find an infected plant in a specific region of where you are living. And you find two leaves in the top row, two leaves in the middle row and one leaf in the last row as infected. After finding infected leaves, you plan to create new submission by providing such information.”

#### **5. Task list**

The participant will perform the following tasks.

- a) Select new submission
- b) Enter location
- c) Selected two infected leaves in the top row
- d) Select two infected leaves from the middle row
- e) Select two infected leaves from the last row
- f) Click save to return to the previous step

## **Test scenario 3**

### **1. Test scenario name:**

Update submission

### **2. Test Goals for the scenario**

Assume that a user want to update a submission. For that he/she will submit some infected leaves and then update the submitted data.

### **3. Scenario description**

This is read to the participant “Assume that you find an infected plant in a specific region of where you are living. And you find two leaves in the top row, two leaves in the middle row and one leaf in the last row as infected. After finding infected leaves, you plan to create new submission by providing such

information. After submitting that information, you find an error in the submission. So you modify the submitted data using edit option.”

## **5. Task list**

The participant will perform the following tasks.

- a) Select new submission
- b) Enter location
- c) Selected two infected leaves in the top row
- d) Select two infected leaves from the middle row
- e) Select two infected leaves from the last row
- f) Click save to return to the previous step
- g) Edit the submission
- h) Select two three infected leaves instead of two.
- i) Update the submission

# **Test scenario 4**

## **1. Test scenario name**

Delete submission

## **2. Test Goals for the scenario**

Assume that a user want to delete a submitted data.

## **3. Quantitative measurement list**

- a) Time taken to find delete button
- b) Time to delete submitted information
- c) Overall time taken for the entire scenario

## **4. Scenario description**

This is read to the participant “Assume that you find an infected plant in a specific region of where you are living. And you find two leaves in the top row, two leaves in the middle row and one leaf in the last row as infected. After finding infected leaves, you plan to create new submission by providing such

information. After submitting that information, you find an error in the submission. So you want to delete the submitted data using delete option.”

## **5. Task list**

The participant will perform the following tasks.

- a) Select new submission
- b) Enter location
- c) Selected two infected leaves in the top row
- d) Select two infected leaves from the middle row
- e) Select two infected leaves from the last row
- f) Click save to return to the previous step
- g) Delete the submission
- h) Select two three infected leaves instead of two.
- i) Press yes while pop-up shown

# **Test scenario 5**

## **1. Test scenario name**

Identifying the fungus rating of infected leaves

## **2. Test Goals for the scenario**

The goal of this scenario is to familiarize the user with level of infection. Make the user understand the level of infected leaves by reading the about section first and show them a set of similar leaf images and to estimate the level of understanding given by the about section description.

## **4. Scenario description**

This is read to the participant “ Click the About button and read through the information provided in the section. Carefully examine the images of the infected leaves and the levels of infections. After this you will be asked to identify certain leaves which are infected and you need to mention the levels of infection of each such leaf.”

## **5. Task list**

The participant will perform the following tasks.



- a) Make the user click the about section
- b) Make the user read the about section completely
- c) Provide a list of images of infected coffee leaves which are infected at different levels
- d) Make the user select the level of infection for each such leaf

## Test scenario 6

### 1. Test scenario name:

View past submissions

### 2. Test Goals for the scenario

The goal of this scenario is to view the all post and get some idea after analyzing this. To ensure that the users can comfortably view their past submissions from the submissions section, this scenario has been designed.

### 4. Scenario description

This is read to the participant “Assume there are some submission and with each submission there are solution. You want to analyze similar post. You open some submission and read the expert solution from the submission”.

### 5. Task list

The participant will perform the following tasks.

- a) Click submissions button
- b) Scroll down to view the all submission
- c) Make the user identify the location of the submission
- d) Make the user identify the level of risk of the infected leaves submission made

# Test Participant Profiles

The tests were carried out with test participants who fulfilled the following requirements:

- Between 19 and 25 years old.
- Somewhat experienced on smartphone use.

There were two female and three male in the testing

<b>Participant</b>	<b>Gender</b>	<b>Age</b>	<b>Title</b>	<b>Computer experience (in years)</b>	<b>Smartphone experience (in years)</b>	<b>Testing interest*</b>
1	Male	19	Undergrad student	10	2	Strong agree
2	Female	21	Undergrad student	17	7	Strong agree
3	Male	21	Undergrad student	9	5	Agree
4	Female	25	PhD student	17	11	Agree
5	Male	19	Undergrad student	12	5	Neutral

\* Internet experience was classified by the test participant according to these groupings:

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

# Quantitative Measurements

Participant	Time to run a test	Ask for help
1	8	2
2	6	2
3	12	5
4	5	0
5	8	6

# Qualitative Measures

1. Positive facial expression during testing
2. Positive comments by user
3. User's attention in the application was good
4. Average users were comfortable during testing

# Bug

Bug number	Bug name	Severity	Frequency	Bug location	Bug description
1	No message	Major	Always	Login page	No message after providing incorrect credential
2	No Save or Done option	Major	Always	Leaf selection page	No Save or Done option after giving leaf input
3	No edit or delete option	Major	Always	Submissions page	Edit or delete option unavailable for submissions
4	Logout option unavailable	major	Always	Home page	Logout option unavailable
5	Find me option is not working	Minor	Once	Home page	Find me option is not working for android os
6	Save button didn't work after	Minor	Always	Leaf selection page	After giving partial information, its not

	Partial information				possible to save as a submission
7	Alignment problem in capture option	Minor	Always	Center plant	Alignment problem in capture option
8	No option to select photo from storage	Minor	Always	Photo capture	No option for taking picture from storage in android phone
9	Sorting option unavailable	Minor	Always	Submissions	Sorting option is not available
10	Login failed	Minor	Once	Login page	Unable to login from Firefox

# Post Test Questions

<b>Participant</b>	<b>App was easy to use*</b>	<b>enjoy using this app**</b>	<b>use this app again*</b>
1	Agree	A little bit	Agree
2	Strongly agree	Very much	Disagree
3	Strongly agree	Very much	Strongly agree
4	Strongly agree	A little bit	Neutral
5	Agree	Neutral	Neutral

\* Easy to use and use this app again was classified by the test participant according to these groupings:

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

\*\* Enjoying this web application was classified by the test participant according to these groupings:

- a) Very much
- b) A little bit
- c) Neutral
- d) Not very much
- e) Not at all

# Design Recommendations

- Showing an message after providing incorrect credential
- Adding Save or Done option after giving leaf input
- Adding Logout option
- Adding edit and delete option

# Appendix A – Undergrad Attendance

Team Members' Name	Number of attended test sessions
William Doyle	2
Greg Johnson	3
Brad Johns	3
Robin McNally	2

## Appendix B - Bug Report

Bug number	Bug name	Severity	Frequency	Bug location	Bug description
1	No message	Major	Always	Login page	No message after providing incorrect credential
2	No Save or Done option	Major	Always	Leaf selection page	No Save or Done option after giving leaf input
3	No edit or delete option	Major	Always	Submissions page	Edit or delete option unavailable for submissions
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