

## USABILITY TEST PLAN

**TEAM:** Coconut Crab

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### TEST SET-UP DETAILS:

The usability test is being conducted on a laptop and a mobile phone (provided the web app is mobile functional). The user/participant will be given 1 of the 2 scenarios below, based on which s/he will go about using the web app. Observations will be recorded. The user/participant will be interviewed before and after the usability test with the 'common usability questions' questionnaire.

### TEST SCENARIO 1:

You are a tourist who has come to the coral reefs to observe coral spawning as through your research online, you found out that this is a beautiful event and so booked your holiday such that you were on time to witness the spawning. Once you arrived at your hotel, your diving instructor mentioned about the coral spawning app that you could use to upload the pictures and contribute to scientific knowledge and protection of the reefs. You have taken the pictures on your mobile and now you are in your hotel room trying to upload them.

### TEST SCENARIO 2:

You are a third year marine biology student. You love the sea and are interested in understanding marine life. You are slightly reserved socially but an enthusiastic instructor to new divers, and also take on diving jobs on contract. Your latest job is as a scuba instructor and accompanying tourists on underwater explorations of the reef. You are about to upload the pictures that you had clicked earlier in the day at the coral reefs, but before that you want to check out the 'About' and 'help' pages.

### TEST SCENARIO 3:

You hear about this app from a fellow tourist and want to check out the pictures uploaded by others.

#### TEST GOALS FOR HCI CONSULTANT:

1. To verify if the user is able to easily navigate through the app.
2. What challenges s/he faces when using the app
3. Does s/he have sufficient information to achieve the goal (i.e, to upload pictures, identify the type of coral spawning, add demographic information)
4. How much time does it take for her/him to complete the task (key in information and upload 1-3 pictures)

#### TEST GOALS FOR USER:

User will:

1. open and explore the app to get an understanding of the app's features and layout
2. fill out the information asked and upload pictures (pictures will be provided on the hard drive/mobile)

#### LIST OF MEASUREMENTS:

Measurements will be based on the following heuristic principles (based on Nielsen and Molich's heuristic list):

1. How easy is it for the user to understand what s/he is supposed to do?
2. Does the app provide adequate feedback to the user (after reading the feedback, does the user understand what s/he is supposed to do)?
3. Is the language easy to understand?
4. Are the fonts easy to read?
5. Does it ask for a confirmation message when performing a 'submit' function?
6. Is there consistency across the app (in terms of color combinations, words and their meanings)
7. Is the user able to easily find what s/he is looking for?
8. Are their affordances and accelerators in the app?
9. Is the design simple?
10. How error proof is the app (how well did it prevent users from making an error)?
11. How are error messages displayed?
12. Are they useful?
13. Does the app provide an undo feature?
14. Is help information easy to find?
15. How well is real time information like time, water temperature, location, captured?
16. Are objects, actions and options visible or accessible for reference)?
17. Can the user navigate between pages without losing information (is autosave feature present)?

18. Is any irrelevant information provided?

RECORDING OF MEASUREMENTS:

| <b>S.N.</b> | <b>MEASUREMENT</b>   | <b>STATUS</b> | <b>REMARKS</b> |
|-------------|--|---------------|----------------|
| 1           | How easy is it for the user to understand what s/he is supposed to do?   |               |                |
| 2           | Does the app provide adequate feedback to the user (after reading the feedback, does the user understand what s/he is supposed to do)? |               |                |
| 3           | Is the language easy to understand?  |               |                |
| 4           | Are the fonts easy to read?  |               |                |
| 5           | Does it ask for a confirmation message when performing a 'submit' function?  |               |                |
| 6           | Is there consistency across the app (in terms of color combinations, words and their meanings)   |               |                |
| 7           | Is the user able to easily find what s/he is looking for?  |               |                |
| 8           | Are their affordances and accelerators in the app?   |               |                |
| 9           | Is the design simple?  |               |                |
| 10          | How error proof is the app (how well did it prevent users from making an error)?   |               |                |
| 11          | How are error messages displayed?  |               |                |
| 12          | Are they useful?   |               |                |
| 13          | Does the app provide an undo feature?  |               |                |
| 14          | Is help information easy to find?  |               |                |
| 15          | How well is real time information like time, water temperature, location, captured?  |               |                |
| 16          | Are objects, actions and options visible or accessible for reference)?   |               |                |

|    |   |  |  |
|----|---|--|--|
| 17 | Can the user navigate between pages without losing information (is autosave feature present)? |  |  |
| 18 | Is any irrelevant information provided?   |  |  |

**OTHER OBSERVATIONS:**

1. How much time did it take for the user to complete the task (key in information and upload 1-3 pictures):
2. Was the user faster in accessing /uploading information in later scenarios:
3. Was the user able to easily navigate through the app:
4. What challenges did the user face when using the app:
5. Did the user have sufficient information to achieve the goal (i.e, to upload pictures, identify the type of coral spawning, add demographic information):

**BUGS ERROR REPORT:**

| BUG No. | BUG NAME | LOCATION/PAGE | FREQUENCY | REMARKS | ERROR MESSAGE |
|---------|----------|---------------|-----------|---------|---------------|
|         |          |               |           |         |               |
|         |          |               |           |         |               |
|         |          |               |           |         |               |
|         |          |               |           |         |               |
|         |          |               |           |         |               |

Items with \* displays Bug uniqueness: the first time it was encountered in the usability test series.

## **Pre-test Common Usability Test Questions**

1. How much do you use your smart phone?

1. A lot
2. Sometimes
3. Almost never
4. Never

**Please indicate your level of agreement to the follow statements:**

2. I am open to download and use an app on my mobile phone:

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3. I am interested in the testing of this application.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

4. Do you generally prefer using a web app or a mobile app?

5. If you prefer using a web app, would you prefer to use in on a computer (PC, laptop, tab) or on a mobile?

6. Under what conditions will you prefer using a web app over a mobile app?

## **Post-test Common Usability Test Questions**

Please indicate your level of agreement to the follow statements:

1. The app is efficient ( easy and fast to perform the task).

2. Strongly agree
3. Agree
4. Neutral
5. Disagree
6. Strongly disagree

2. I enjoyed using this application.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3. I would use this application again.

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

4. The app is useful:

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

5. It is easy to learn:

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

6. It is easy to navigate:

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

7. Easy to remember how to use it (not much of relearning required if I

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

8. Access it after a time interval of say, a month or year)

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

9. I feel it's safe to use

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

10. If given a choice, what would you like to change about the app?



## **Post-test Interview Guide**

1. Please describe your experience using the app
2. Wat did you like most about the app?
3. What did you not like about it and prefer to be changed?
4. What was easy?
5. What was difficult?
6. Any other suggestions/remarks?