

# **Code Criticquer**

**Usability Expert - Dhritabrata Mitra**

# Introduction

User Interface (UI) is about how a software or app looks and how you can use it. It includes things like buttons, menus, and forms that you click on or interact with. Testing the user interface is important to make sure the software works well, looks good, and is easy for people to use. It's like making sure everything is in the right place and works the way it's supposed to before letting people use it.

## Test goals

The goal of the test is to find whether the app is working as expected or not. Report any bugs that were found.

The test was conducted on Zoom. Consent from participants was taken on whether they wanted to be recorded or not. A consent form was shared with participants which they agreed to. Before the test some pre-test interview questions were asked and the answers were recorded. The test scenario was explained to participants based on which they performed the usability test. All the bugs that were found were noted. After the test, some post-interview questions were asked and the participants were thanked for joining the meeting.

## Test Scenario

Name: Critique check for the submitted code.

Description: The users will submit their code for review. If they get any critiques they are going to make those changes in their code and resubmit the code again.

Goal: To check if the app is providing correct and all the critiques.

Task List:

- a. The participants will upload Java files or write Java code in the code box.
- b. The participants will click on “Check code” to see if any anti-pattern is getting detected in their code.
- c. The participants added the changes in their code to fix the issues they were receiving.

Qualitative Measurement -

- a. How quickly the participants were able to complete the task.
- b. Difficulties faced while using the webpage.

Quantitative measurement –

- a. Mistakes made by the participants.
- b. Are the participants able to complete the scenario and understand their usage?

## Results

- Participants were able to understand what the app was about.
- An average of 10 minutes was taken by the participants to conduct the test.
- Ran with only one scenario.
- Participants were able to perform the test without taking help from us.

## Pre-Test Questions

- Only one participant participated in the usability test before.
- Only one participant was using a mobile for the test. None of the participants used tablets.

Have you ever participated in a usability test before?

Response



■ Yes ■ No

What device are you going to use for this test?

Response



■ Mobile ■ Laptop ■ Tablets

- One participant was an undergraduate student and the rest were graduate students.
- Everyone had previous programming experience.

Are you a graduate student?

Response



■ Yes ■ No

Do you have previous programming experience?

Response



■ Yes ■ No

## Post-Test Questions

- None of the participants had difficulty in understanding the application.
- All of them liked the navigation provided by our application.

Did you find difficulty in understanding the application?

Response



■ Yes ■ No

Did you find the navigation easy?

Response



■ Yes ■ No

- None of the participants faced difficulties understanding the application.
- Only one participant didn't like the functionality provided by our application.

Did you face any difficulties while testing the app?

Response



■ Yes ■ No

Are you satisfied with the functionality provided by the app?

Response



■ Yes ■ No

## **Conclusion**

### Suggestions provided by participants

- It would have been better if the app provided some suggestions on how to fix the error.
- The app to be more verbose on what the error is.

### My Suggestions

- As this application is mainly for people who are new to Java programming it should have resources or a link from where the users can learn Java programming.

### Things participants like about the app

- The critiques were shown right below the line where the error was detected.
- The overall navigation and styling of the app.

## Appendix A

Dhritabrata Mitra	Code Critiquer	Zoom	04/07/2024 7:00 PM	Connor Ward	Nick Zimanski
Dhritabrata Mitra	Code Critiquer	Zoom	4/7/2024 8:00 PM	Connor Ward	
Dhritabrata Mitra	Code Critiquer	Zoom	4/8/2024 7:00 PM	Johnathan Oestringer	Connor Ward
Dhritabrata Mitra	Code Critiquer	Zoom	4/8/2024 8:00 PM	Nick Zimanski	Connor Ward
Dhritabrata Mitra	Code Critiquer	Zoom	4/9/2024 7:00 PM	Pantaree Prathongkham	Connor Ward
Dhritabrata Mitra	Code Critiquer	Zoom	4/9/2024 8:00 PM	Connor Ward	
Dhritabrata Mitra	Code Critiquer	Zoom	4/10/2024 7:00 PM	Devon Gosnick	Pantaree Prathongkham
Dhritabrata Mitra	Code Critiquer	Zoom	4/10/2024 8:00 PM	Devon Gosnick	Pantaree Prathongkham

All of the undergraduate team members joined the meeting.

## Appendix B

### Bug Report

- a. When participants click on “Check code” after making the changes the same critiques are shown without removing the one already being shown.
- b. In the new critiques in some cases no styling was applied and unwanted spaces were added.
- c. Not all critiques were shown. If there was more than one error it showed critique for the first one only.

## Appendix C

Didn't face any challenges during testing. All the members joined the meeting on time.