COS20001 – USER CENTRE DESIGN

TASK 10.1 USABILITY EVALUATION

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Group 5

Part 1: Data collection

Participant Characteristics

Four students the came from in and outside from Swinburne University of Technology, Viet Nam were invited to be the participant in this usability evaluation. From the table 1 below, 100% of users are from the age of 18 to 24 years old and they have used smartphone for more than 3 years. Some of them attend for college and high school and Bachelor's degree. However, our participants have a certain experience in interface design. We believe that as they are most familiar with the gamification application, they could easily get over 4 tasks to test the application on mobile platform.

Table 1: Participant characteristic

Id	1. Which of the following includes your age?	2. What is your gender?	3. How long have you owned a smart phone?	4. How often do use Quitch?	5. What is your level of education?	6. Experience in interface design? (1 for none and 5 for professional)
0003	18 - 24	Male	5 years or more	3	College	5
0001	18 - 24	Female	5 years or more	3	College	3
9999	18 - 24	Male	3 - 5 years	2	High school	3
2802	18 - 24	Male	5 years or more	3	Bachelor's degree	1

Methods

We sent email for our participants and wait for them to agreed, we have to prepare some of forms about the project description, the agreement for participant to read and understand the process of this usability evaluation. When our participant came the test day, we have to be professional to say hello and thanks you them to join the test.

Explain them what will they do in the evaluate process. Because we need to record their face so we need to explain them and require them to sign in the form of agreement. As soon as they finish that, there is a form of general questions that need them to sign in. Next the test with the interface will begin, participant can now interact with the interface prototype with their own experience. Our team will sit next to them and will note all the errors or timing when they complete each task, as well as support them whenever they ask. Then, participants need to answer some post questions about their experience with the prototype. All the data from the form and the recording will be collected and stored in secured in a folder to protect private information and for further analysis.

Tasks Efficiency Measures

Task 1

For the first task, we require our participant to log in the application with the given account. We have 3 methods to login with the Quitch account, Google as well as Facebook. From the data collected, no one need assisted from us, this task is made for most of the users so the time it took would be really fast, the fastest is 5s and the slowest is 12 seconds which is acceptable. The average time completion for this task 1 is 8.75 seconds.

Task 1 Efficiency measures				
User ID	Unassisted task complete (100 for no assist)	Assist	Error	Time complete(s)
0003	100	0	0	12s
0001	100	0	0	10s
9999	100	0	0	5s
2802	100	0	0	8s

Task 2

Task 2 Efficiency measures				
User ID	Unassisted task complete (100 for no assist)	Assist	Error	Time complete(s)
0003	100	0	0	15s
0001	100	0	0	20s
9999	100	0	0	12s
2802	100	0	0	10s

For the task 2, we require our participant explore one course from the dashboard, user can access the classroom and click around to test the user interfaces. For the result, no one need assistance and the longest time it took is 20seconds. Some users did not explore all the available prototypes so the time is much shorter than our expected that is 10 seconds. For the average time completion for task 2 is 14.25 seconds.

Task 3

Task 3 Efficiency measures				
User ID	Unassisted task complete (100 for no assist)	Assist	Error	Time complete(s)
0003	0	1	1	22s
0001	0	1	1	30s
9999	100	0	0	18s
2802	100	0	0	20s

Task 3 was order user to access the notification from the dashboard and see graded quiz notify, then ask them to see the score. It task is more challenge when 50% of participants needs help, they did not know where to click, we have to explain them where to click. It took 30 seconds for the longest time to complete and 18 seconds for the fastest time completion. The average time to finish for task 3 is 22.5 seconds.

Task 4

Task 4 Efficiency measures				
User ID	Unassisted task complete (100 for no assist)	Error	Error	Time complete(s)
0003	100	0	0	8s
0001	100	0	0	15s
9999	100	0	0	13s
2802	100	0	0	15s

Task 4 orders user to access a quiz with the provided access code. This task is easier to to finish, however, our participants took more time to complete because they spent the time to look around the interface prototype. We have a quiz for them to do and see their reaction, however, they don't want to do it. For the longest time which is 15 seconds, and 8 seconds for the fastest time. The average time completion for the task is 12.75 seconds.

Satisfaction Measures

Paticipant ID	Task1	Task 2	Task 3	Task 4	SUS score	Recommend
0001	1	3	2	2	75	Yes
9999	1	1	2	1	93.75	Yes
2802	1	1	2	1	93.75	Yes
0003	2	1	2	1	87.5	Yes
				Average SUS Score	87.5	

This table is collected from the google form about the rating difficulty of each task. In this case, 1 will be 4 scores and 4 will be 1 scores. We have 4 questions so to calculate the SUS score, we calculate the total score of a participant and multiple to the coefficient of 100/16. Look at the table, we can see that participants who spent more time on the task as well as make more errors tend to rate the difficulty less than the other the one who did the task quicker. Overall, the average SUS score is 87.5 which is good in the usability requirement. In addition, all the participant is willing to recommend the application to their friend.

# Part 2: Problem

Problem 1: Comeback to the dashboard
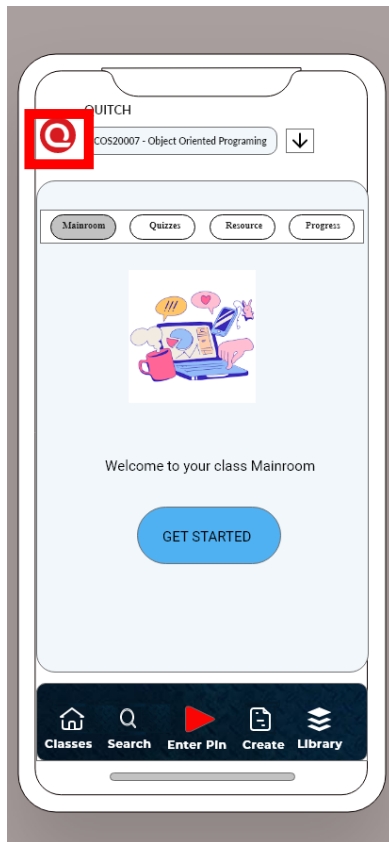
Problem summary: Users did not know to click in the logo of Quitch at the left corner to go back to the main dashboard

Severity Assessment: Caused some confusions and unwanted clicking on the interface. Some users asked for helping when they start to do task 2, some could recognize and click the logo to come back for the main screen. Because most user are students, there is a high rate that they can overcome this problem, otherwise, who cannot overcome this will never go back to the main dashboard

Severity Rating: High Priority

**Recommendation:** Create a vivid box that point out user that to click will take them to the dash board
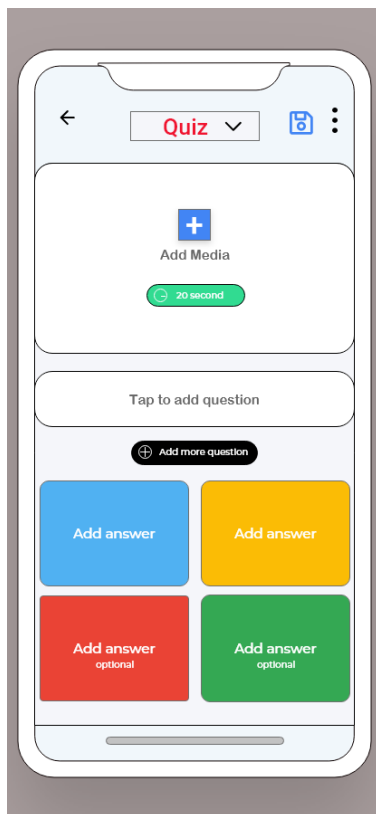
Problem 2: Using so many bright colors

Problem 2 Summary: Some users feel the color so garish that hard to see

Severity Assessment: This problem caused by the quality of screen of the team laptop used. They screen is OLED so it may increase the brilliant of colors that burn user's eyes. However, this happened not all the case but depends on the device they use.

Severity Rating: Medium – Low

Recommendation: Use a low colors or develop a new dark mode for the application that won't burn user eyes.
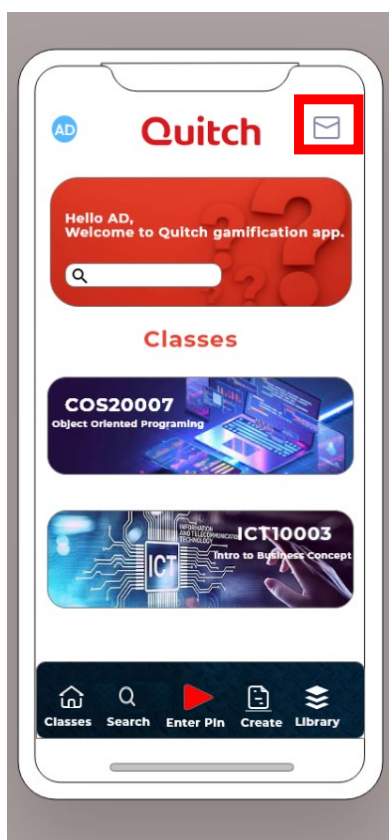
Problem 3: User will not recognize new notification

Problem 3 Summary: Some user did not notice when there is a new notification appear

Severity Assessment: Whenever a notification sent to users, there will be a red number shows the number of notification that user haven't read. Some glitch happed and that number disappear. User who did not check notification will never whether they have a new notification

Severity Assessment: Medium

Recommend: The team needs to check for the glitch and fix it.

Part 3: Method Limitation

Because this method is for student who practice to understand the process of a evaluation, so some steps might be not correctly as on the real life experience. For example, designing a prototype depends on its customer's desire, in this stimulate, there is no customer and students are practicing and learning what is the process of designing as well as evaluating the concept of user experience. Our participants mostly are student and colleague because they are the easiest subject we can invite, some will evaluate very easily so this kind of participants may affect the final SUS score. Secondly, as a process of evaluation, recording participants is required, and some participant would refuse to be recorded and it would stop the process right away, so having a communication skill is very important to explain and convince about what they are doing.

Part 4: Raw Data

The link below will store all the form of this user evaluation and all the recording from our participant:

https://drive.google.com/drive/folders/1lkVO6XU4HkNTcYfolC1zKAI0tsHkximI?usp=sharing