Sri Lanka Institute of Information Technology

Visual Analytics and User Experience Design (IT4031)



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Assignment 01 – Result Reports of Useberry

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Description

The use of prototypes and testing tools such as Figma and Useberry can be invaluable in ensuring that a banking application meets the needs and expectations of its users.

Initially, an open analytics test was made available where it would be monitored how the users would engage with the prototype. This enables the users to free roam throughout the application where they would be able to interact with all features as they like. This would enable the team to collect open analytics.

In this project, apart from the above free roaming test, four other critical features were identified:

- Login and registration,
- Transferring money,
- Creating a fixed deposit,
- Downloading transfer receipts.

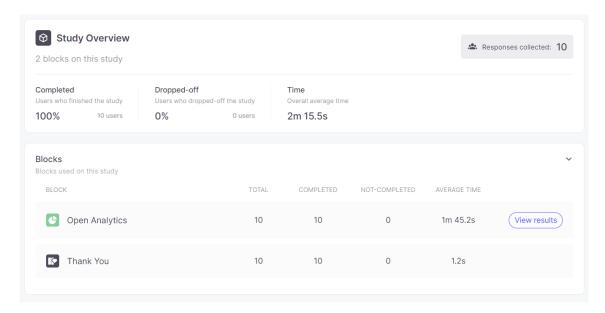
To test these features, four test cases were created and 10 users were utilized for testing each case using the Useberry platform. The users were allowed to navigate freely throughout the prototype to fulfill the testing instance.

By conducting these tests, designers, and developers were able to gain insight into how users interact with the system, identify any areas of confusion or difficulty, and make necessary adjustments to optimize the user experience.

Overall, the use of prototypes and testing tools helped ensure that a banking application is user-friendly, efficient, and effective, ultimately leading to greater customer satisfaction and engagement.

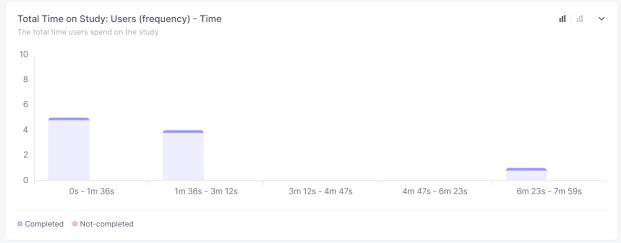
Free Navigation Test

Overview



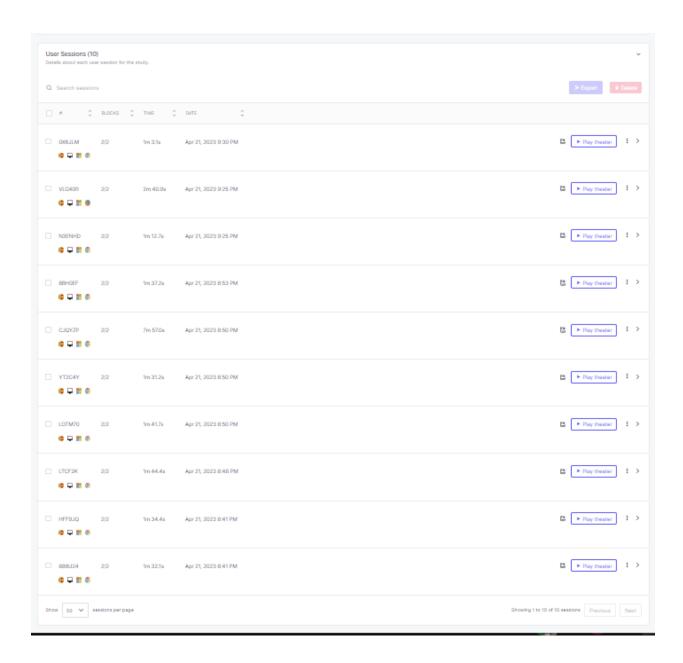
- For conducting the test, a sample of 10 participants was selected.
- The test case consisted of an Open Analytics block for users to navigate through mobile banking applications.
- On average, it took 2m 15.5s for participants to complete the entire test, including answering the questions.



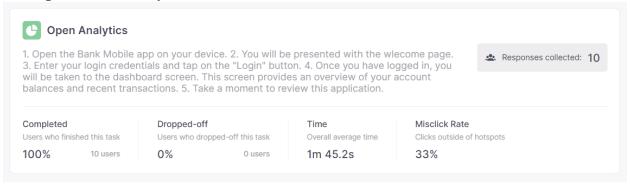


- All participants completed the testing without dropping off, indicating that the application's usability is 100% and the application is extremely user-friendly.
- Most participants were able to complete the entire testing process within 1 minute and 36 seconds.

User sessions



In-depth Task Analysis

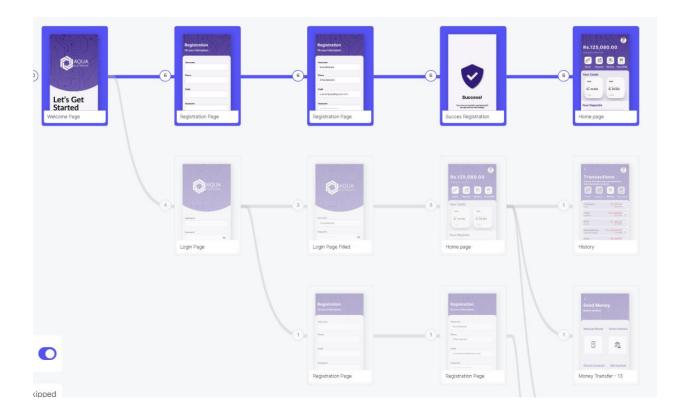


• A very low misclick rate (33%) and a low average completion time (1 Minute 45 seconds) also prove the above.

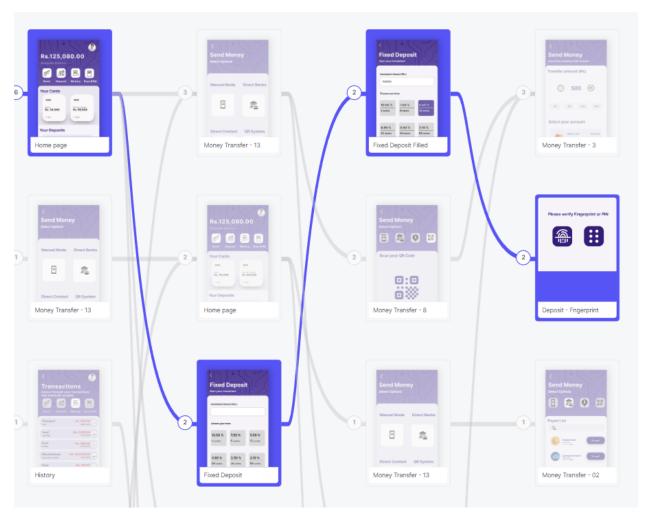
Optimal Flow Path

The below diagram shows the user's flow for login and registration to the application through the welcome page. The highlighted path is the most optimal path which is constantly used by the test audience. (Common user flow)

Out of the 10 participants, 6 users utilized the "create account" option to log in, while the remaining 4 users logged in directly to the application.



After logging into the application, the fixed deposit feature was found to be the most utilized by the majority of users.



Heat Maps

The heatmap analysis of overall user clicks on the mobile application revealed the images that were viewed, with a sample size of 10 users.

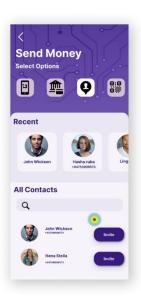










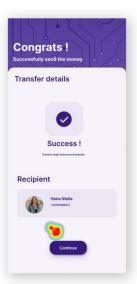


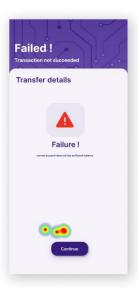




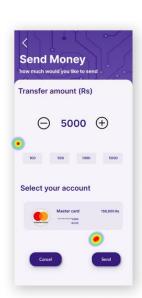










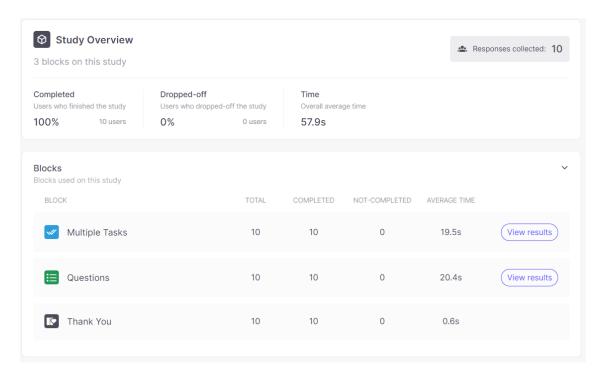




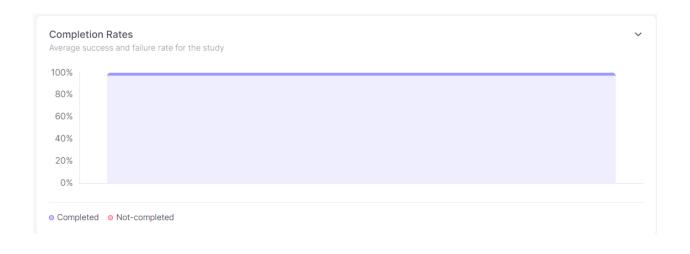


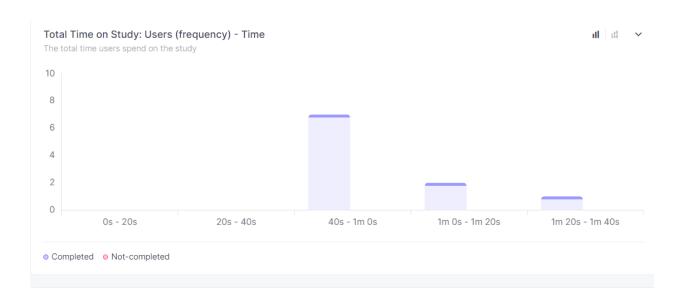
Test 1 – Login and Registration

Overview



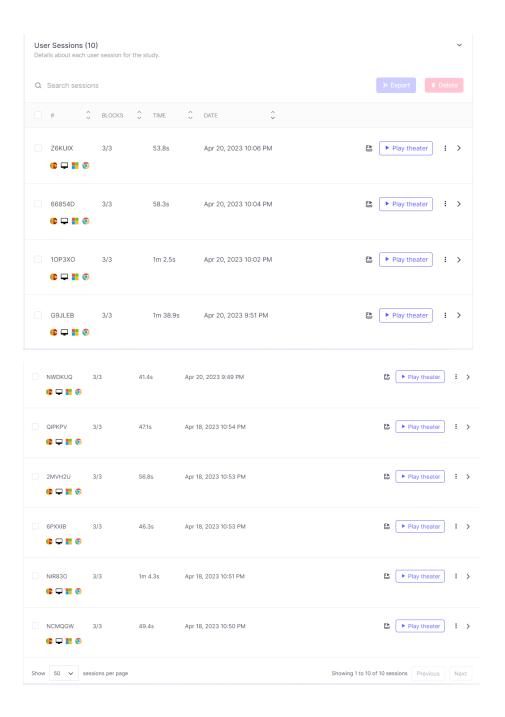
- To conduct the test, a sample of 10 participants was selected.
- The test case consisted of 3 blocks: a multi-task block, a questions block, and a thank-you block.
- On average, it took 57.9 seconds for participants to complete the entire test, including answering the questions.
- Participants completed both tasks of login and registering in an average of 19.5 seconds, which is much faster than the current average time of roughly 3 minutes for similar banking apps.





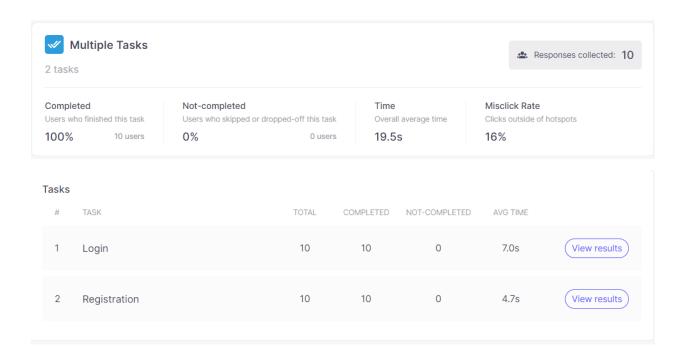
- All participants completed the testing without dropping off, indicating that the application's usability is 100% and the application is extremely user-friendly.
- Most participants were able to complete the entire testing process within 40 seconds.

User sessions



While the maximum time taken to complete the flow was approximately 1 minute and 38.9 seconds, most participants were able to complete the testing process within the expected time frame. The minimum time taken was 41.4 seconds, given that the application is intended to make a positive first impression, the overall completion time is considered favorable

In-depth Task Analysis

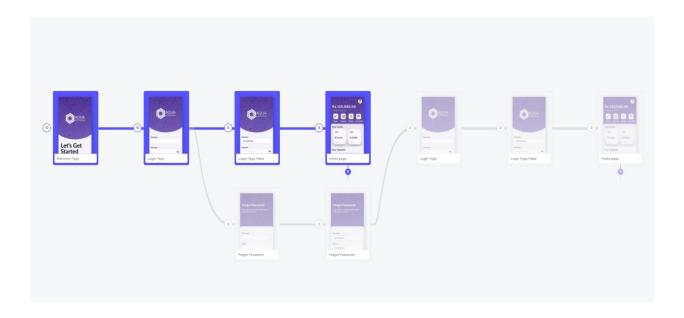


- The completion rate for both the login and registration tasks was 100%, indicating the high usability and user-friendliness of the application.
- A very low misclick rate (16%) and a low average completion time (19.5s) also prove the above.
- Logging in the subtask took an average of 7 seconds, whereas the registration subtask took an average of 4.7 seconds. It's interesting to note that some participants used the "forgot password" option to check in, which could explain why the average time for this job was slightly longer.

Optimal Flow Path

The below diagram shows the user's flow for login to the application. The highlighted path is the most optimal path which is constantly used by the test audience. (Common user flow)

Out of the 10 participants, 2 users utilized the "forgot password" option to log in, while the remaining 8 users logged in directly to the application.

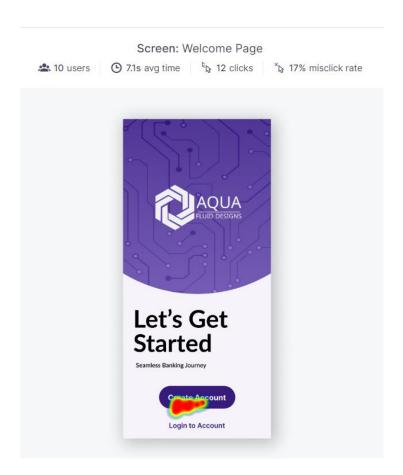


The below diagram shows the user's flow for Register to the application. The highlighted path is the most optimal path which is constantly used by the test audience. (Common user flow)



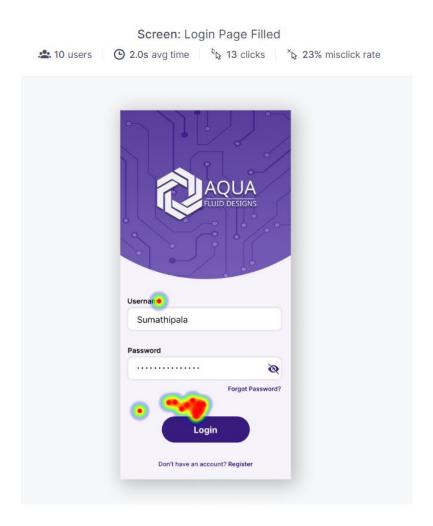
Heat Maps

The welcome page is the initial step in the login process for the mobile application and serves as the first impression for users.



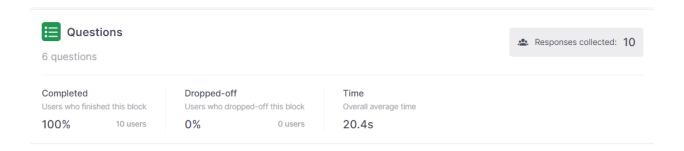
- This is the welcome page.
- The minimum misclick rate of 17% indicates that users were able to quickly and accurately navigate the UI to select the login option.
- The task was completed efficiently by the participants, requiring only 12 clicks and taking an average time of 7.1 seconds to complete. This suggests that users were able to quickly and easily navigate the login process, perhaps indicating a positive first impression of the UI design and overall user experience.

The main step of logging in to the mobile app involves filling out the login form. Once the form is completed, users can proceed to the next step by clicking the login button.



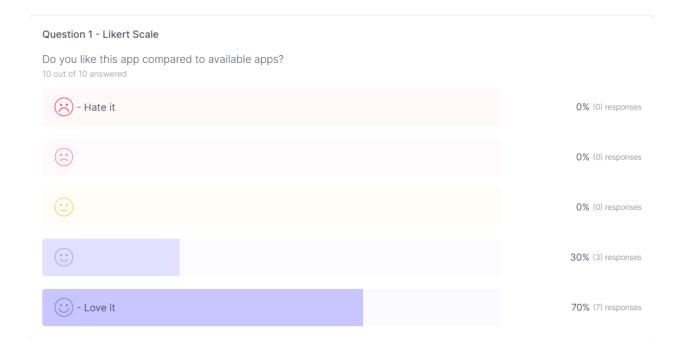
- This is the login page after filling in the required fields.
- The minimum misclick rate (23%) shows that the interface is simple and easily accessible.
- The task was completed efficiently by the 10 users, requiring only 13 clicks, and taking approximately 2 seconds to complete.

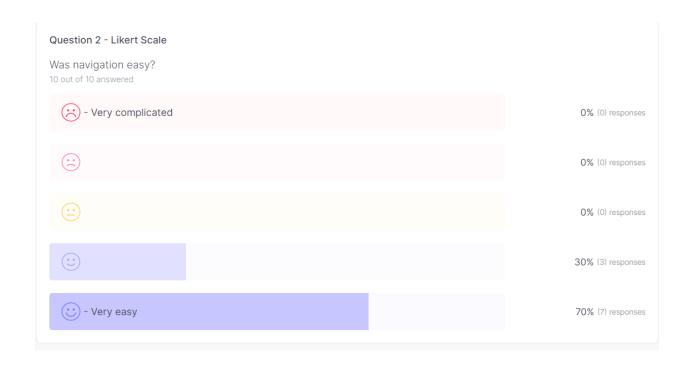
Testing Survey

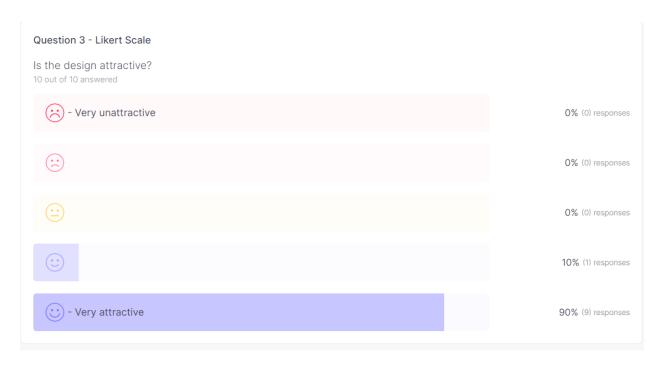


With the completion of the survey, the users were given a survey to obtain user feedback about the prototype. The survey was made short, and all the questions were made optional as it was observed and understood that participants always tend to abandon long surveys and users tend to drop off surveys when questions are made compulsory.

As a result, the test audience completely participated in the survey and provided their feedback.







Question 4 - Opinion Scale	
How do you rate the overall application? 10 out of 10 answered	
0 - Worst app ever	0% (0) responses
1	0% (0) responses
2	0% (0) responses
3	0% (0) responses
4	10% (1) responses
5 - Best app ever	90% (9) responses

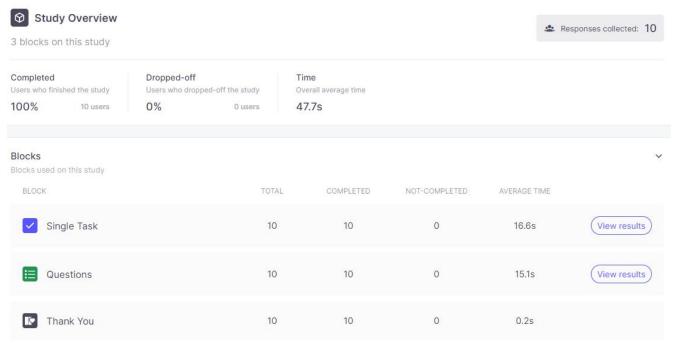
Question 5 - Likert Scale	
How do you rate the colors and visual aspect? 10 out of 10 answered	
- Hate the aesthetics	0% (0) responses
	0% (0) responses
	0% (0) responses
	10% (1) responses
· Love the aesthetics	90% (9) responses



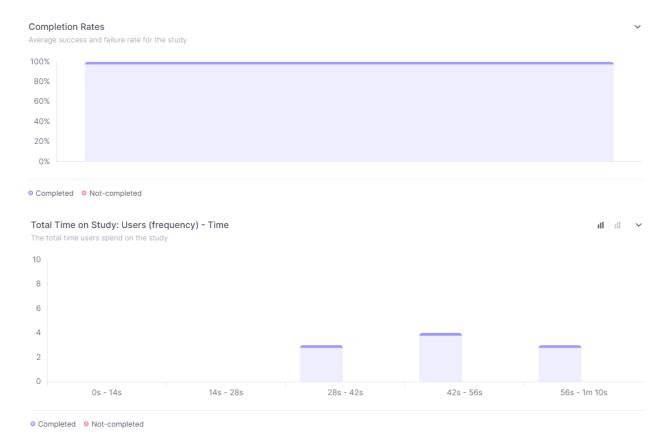
- Based on the survey results, most users expressed a preference for the mobile application compared to other available apps on the market.
- According to the survey, it was evident that the users were highly satisfied with the design and color combinations of the application.
- All users agreed that the navigation of the application was optimal, and the majority preferred the application over others that are available in the market.
- The application received a high Net Promoter Score (NPS), with all users indicating that they were willing to recommend the application to others.

Test 2 - Sending Money.

Overview

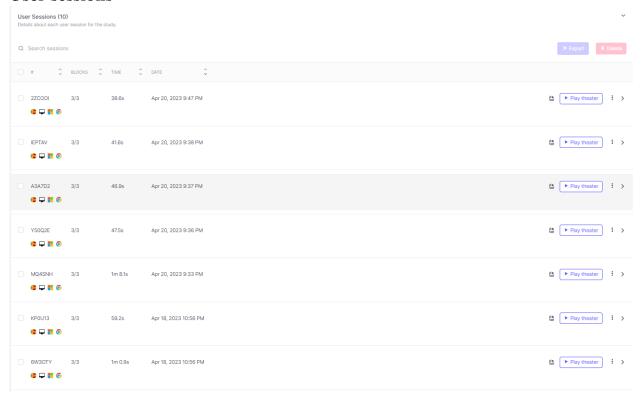


- For the conduction of the test, 10 users were selected.
- The test case was created using 3 blocks as shown above.
- An average time of 48s was taken to complete the entire test (Including the question answering)
- A successful average time of 16.6s was taken to send money.



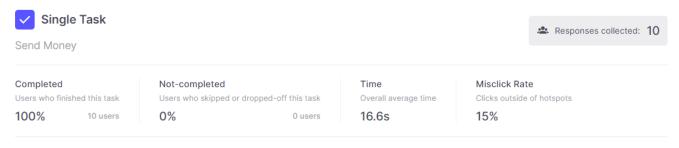
• All participants completed the testing without dropping off and most users have taken less than a minute to complete the flow, indicating that the application usability is 100% and the application is extremely user-friendly.

User sessions



The maximum time taken to complete was approximately 1m8.1s for the flow. This shows the flow is very straight forward users can easily navigate through our app.

In-depth Task Analysis



VIEW DETAILS Y

• A low misclick rate (15%) and a low average completion time (16.6s) prove that the app is user-friendly and easy to navigate.

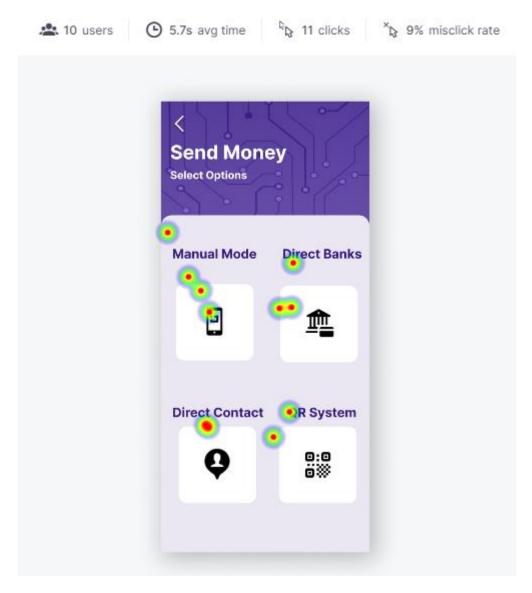
Optimal Flow Path

The below diagram shows the user's flow through the application. The highlighted path is the most optimal path which is constantly used by the test audience.



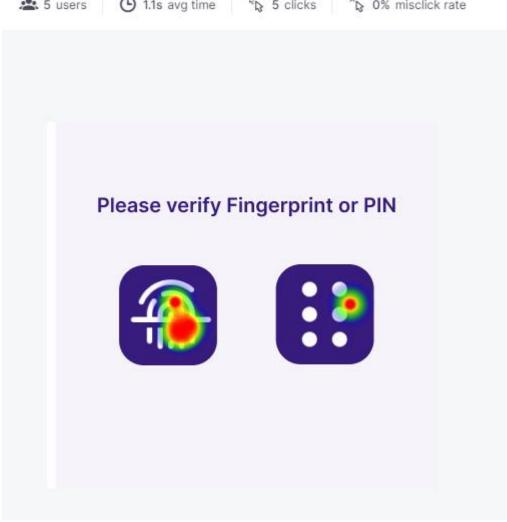
Heat Maps

A fixed deposit could be created easily and efficiently and securely using 2 interactive steps. The following shows the user's interactions with the user interfaces.



- This is the money-sending mode selection page.
- The large buttons provided on this page helped reduce the misclick rate to 9%.
- This shows that some users click on the button with the icon and some click on the option text we made the app in a way it doesn't matter if you click on the text or button with the icon it works in both ways.

Screen: Overlay - Fngerprint 1.1s avg time 5 clicks 5 0% misclick rate

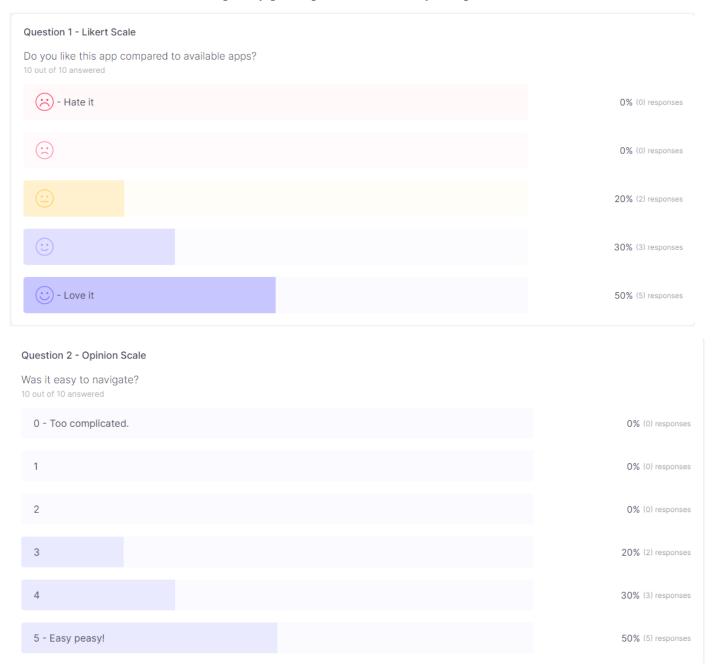


- This is the authentication page.
- This shows that most users prefer fingerprint authentication over PIN which makes the authentication process easier and faster.
- There is an impressive 0% misclick rate on this page.

Testing Survey

With the completion of the survey, the users were given a survey to obtain user feedback about the prototype. The survey was made short, and all the questions were made optional as it was observed and understood that participants always tend to abandon long surveys and users tend to drop off surveys when questions are made compulsory.

As a result, the test audience completely participated in the survey and provided their feedback.



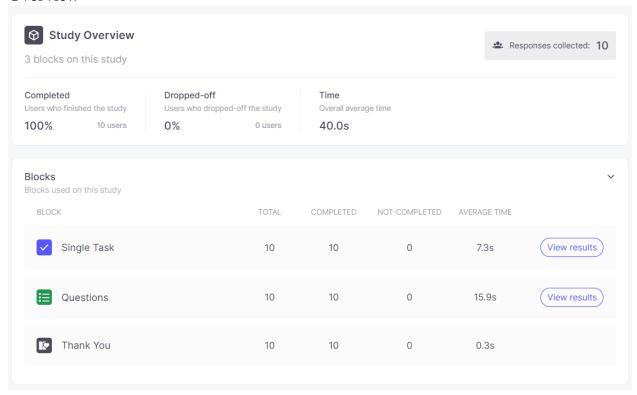
Question 3 - Likert Scale Is the design attractive? 10 out of 10 answered	
- Very Unattractive	0% (0) responses
	0% (0) responses
	20% (2) responses
	10% (1) responses
· Very Attractive	70% (7) responses
Question 4 - Opinion Scale How do you rate the colors and visual aspect? 10 out of 10 answered	
0 - Worst	0% (0) responses
1	0% (0) responses
2	0% (0) responses
3	10% (1) responses
4	50% (5) responses
5 - Best	40% (4) responses



- According to the survey, it was evident that the users were highly satisfied with the design and color combinations of the application.
- All users agreed that the navigation of the application was optimal, and the majority preferred the application over others that are available in the market.
- Application scored a high Net Promoter Score (NPS) of +60 with only one detractor among the 10 users who took part in the survey.

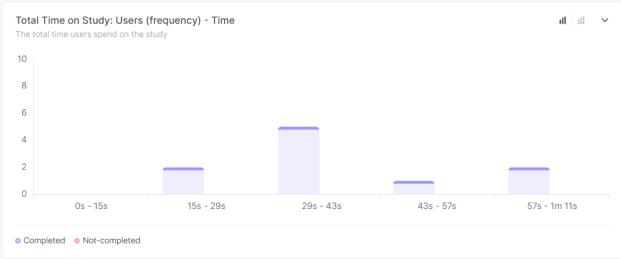
Test 3 - Creating a fixed Deposit.

Overview



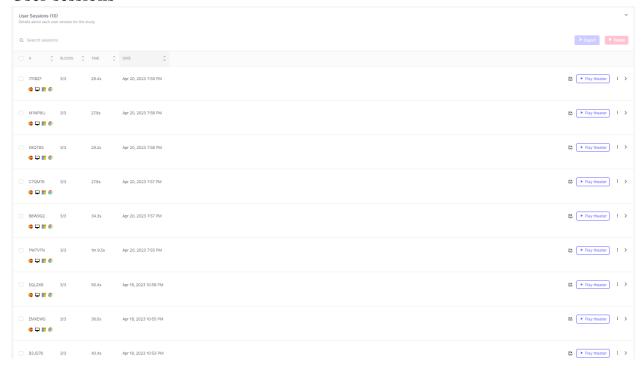
- For the conduction of the test, 10 users were selected.
- The test case was created using 3 blocks as shown above.
- An average time of the 40s was taken to complete the entire test (Including the question answering)
- A successful average time of 7.3s was taken to create a fixed deposit. (Normal average time would be > the 20s for currently available banking apps).





• All participants completed the testing without dropping off, indicating that the application's usability is 100% and the application is extremely user-friendly.

User sessions



The maximum time taken to complete was approximately 1m9.5s for the flow. Since most of the tests were completed on time and given the application is tested for the first impression the time is favorable.

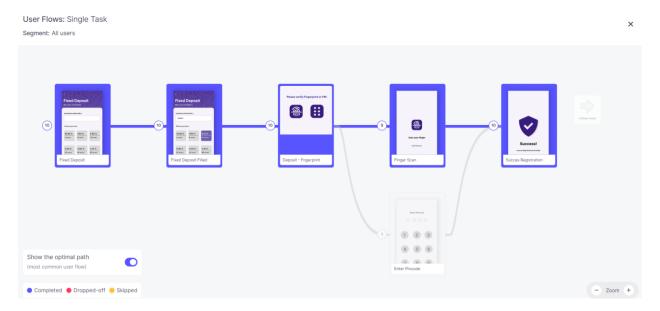
In-depth Task Analysis



- The task of Fixed Deposit Creation has a completion rate of 100% proving the high usability and user-friendliness of the application.
- A very low misclick rate (33%) and a low average completion time (7.3s) also prove the above.

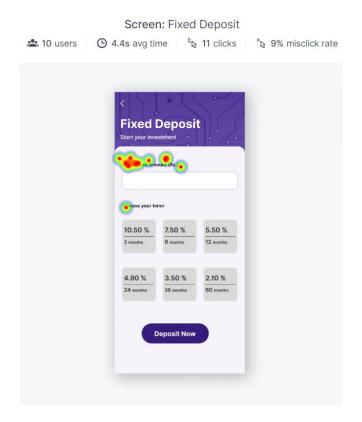
Optimal Flow Path

The below diagram shows the user's flow through the application. The highlighted path is the most optimal path which is constantly used by the test audience.

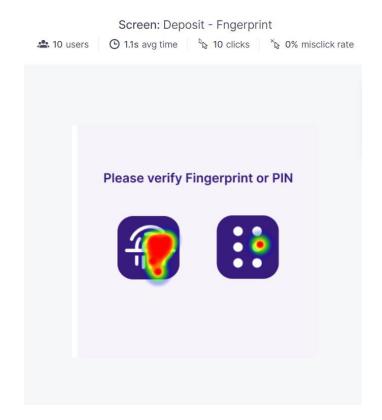


Heat Maps

A fixed deposit could be created easily and efficiently and securely using 2 interactive steps. The following shows the user's interactions with the user interfaces.



- This is the fixed deposit creation page.
- The minimum misclick rate (9%) shows that the interface is simple and easily accessible.
- The task could be completed with a low number of clicks (11) and quickly (4.4s)

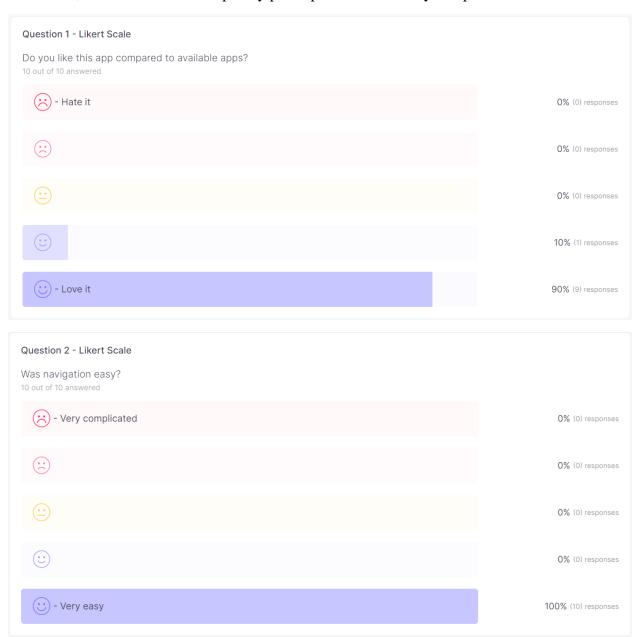


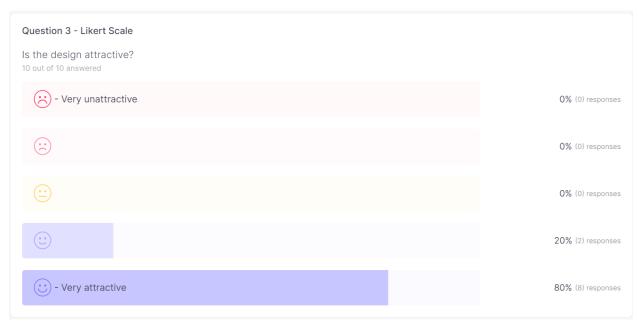
- This is the authentication page.
- Excellent misclick rate (0%) shows that the users were able to utilize the UI to authenticate quickly and easily.
- The task could be completed with a low number of clicks (10) and quickly (1.1s)

Testing Survey

With the completion of the survey, the users were given a survey to obtain user feedback about the prototype. The survey was made short, and all the questions were made optional as it was observed and understood that participants always tend to abandon long surveys and users tend to drop off surveys when questions are made compulsory.

As a result, the test audience completely participated in the survey and provided their feedback.





Question 4 - Opinion Scale	
How do you rate the overall application? 10 out of 10 answered	
0 - Worst app ever	0% (0) responses
1	0% (0) responses
2	0% (0) responses
3	0% (0) responses
4	20% (2) responses
5 - Best app ever	80% (8) responses

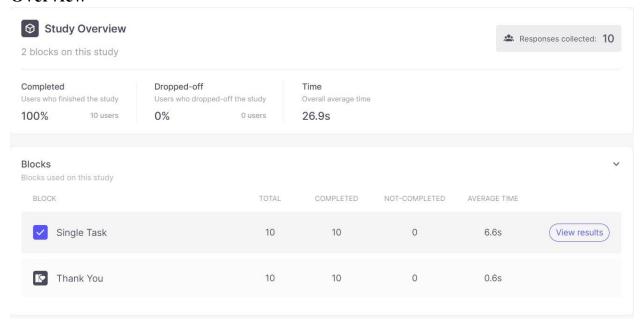




- According to the survey, it was evident that the users were highly satisfied with the design and color combinations of the application.
- All users agreed that the navigation of the application was optimal, and the majority preferred the application over others that are available in the market.
- The application scored high in the Net Promoter Score (NPS), where all users agreed that they were willing to recommend the application to others.

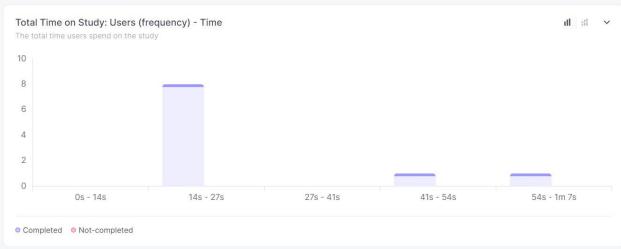
Test 4 – Downloading Transfer Receipt.

Overview



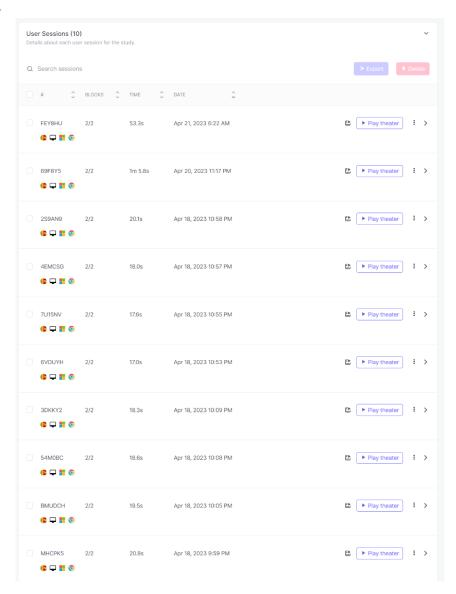
- 10 users were selected to conduct the test on downloading the transfer slips scenario.
- An average time of 26.9s was taken to complete the task for users (This includes the loading time as well.)
- To download the transfer receipt the users have taken 6.6s which is a comparatively smaller time when compared with the current applications.





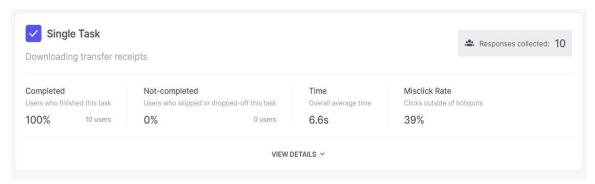
All the users completed the test without any issues. As depicted in the above graphs, any
of the users have been dropped off when testing. This depicts that the app is 100% userfriendly.

User Sessions



• Most of the users have taken 14s – 17s to complete the flow of the application and the task. This time includes the loading time of the application as well. So, this is comparatively a favorable situation.

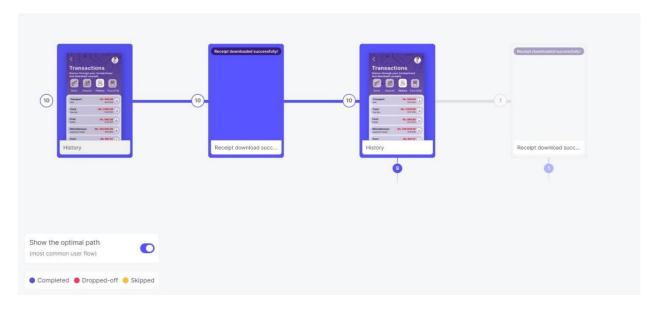
In-Depth Task Analysis



- This indicates that there is a low percentage of the Misclick rate which is 39%. Also, an average time of 6.6s has been taken for this task.
- This shows that this is an extremely user-friendly task because all the users have been able to complete the tasks without dropping them off.

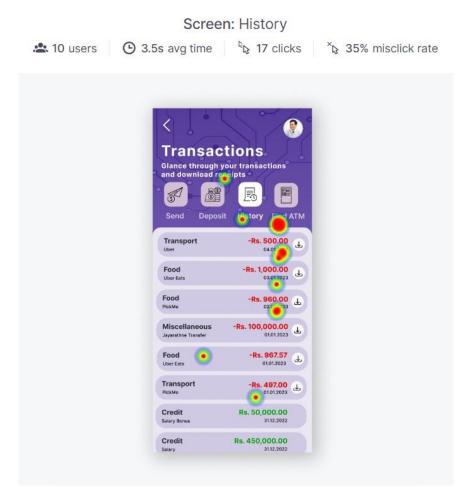
Optimal Path Flow

The below diagram shows the optimal user flow path of the specific task. It can be seen that most of the users have used a common path that is easy to navigate.



Heat Maps

Downloading the receipt should be an easy task for the customer as it should be there to view for the customer as soon as he/she desires it.



As can be seen here, the receipts can be downloaded with a single click by clicking on the specific transaction needed to get the receipt.