

High-Fi Testing Protocol

The following testing protocol will aim to evaluate the interactivity, functionality and overall user experience of the high-fidelity *Lunchbox Thyme* prototype. Feedback will be obtained from target users regarding overall application design, UI, interaction flow and appeal. This will assist in determining current user expectations, needs and thoughts surrounding the concept design as well as to determine potential improvements and changes to the concept, especially in terms of social and/or mobile computing features.

The following evaluation plan was followed with users from the target group of High School Students (year 7-12) and their working parents:

1. Thank the user and discuss the design concept to the user, answer any questions regarding the purpose of the application and this testing session.
2. Ensure user consent is given to proceed with the testing session.
3. Give the user the high-fidelity prototype.
4. Inform the user on each interaction task to be completed.
5. Record user observations as well as Think Aloud evaluations.
 - a. Observations that will be recorded include any issues or confusions with the interaction tasks or navigation flow, body language, clarification questions, time taken to complete a task as well as user comments on thoughts on the overall design.
6. Record comments made by the user.
7. Continue each interaction task.
8. Finish the evaluation session by asking several post-evaluation questions.

Interaction Tasks:

1. Enter the app
2. As Meg, you see the notification that it's time to plan your lunchboxes for the week, begin planning your lunchboxes.
3. You now want to check your family progress so far.
4. You see your weekly goal. Find out some dairy recommendations.
5. You see custard pudding as an interesting lunchbox snack, add it to your favourites.
6. Check out the rest of the food groups in Learn.
7. Continue to the community page
8. You really like what Ava took to lunch and you spot her on the leaderboard, give her a like.
9. Save Ava's lunchbox to your favourites so you can try it out next week.
10. In the family feedback chat, send a message saying you loved Ava's lunchbox idea
11. Now Jen has come past the kitchen and is ready to plan her lunchboxes.
12. As Jen, come to community.
13. Congratulate your school friend Joe on being first place and tell him you like the stir fry he took.
14. Now Tom has come past the kitchen and he is wanting to plan his lunchboxes.

15. After planning his lunchboxes, Tom sees a notification that another family has sent a cheer, continue to community.
16. Send a cheer to the other families in response.
17. It's now a few days later and, as Tom, after seeing everyone's healthiness ratings you realise you have the lowest stars in the family, you want to find out why so you head to family progress.
18. You want to see what your mum and sister Jen have been taking in their lunchboxes, so you go back to the main home page and check out some of their lunchboxes in more detail - you see they have healthy fruit options which you might consider for next week.

Post-Evaluation Questions

After the testing session is completed, the following questions will be asked as well as any additional questions that may form through natural discussion.

1. How did you find using lunchbox thyme?
2. What did you like/dislike about the concept?
3. Do you understand what the application aims to achieve?
4. How effective do you think the concept is in helping users to develop healthier eating habits and encouraging social collaboration within the family by raising family awareness?
5. Do you think the healthiness ratings are effective?
6. How did you find the lunchbox community?
7. Do you think this app would help students and parents to plan their lunchboxes and then each morning pack their lunchbox according to the plan on the kitchen bench?
8. Are there any issues with the app in achieving its purpose?
9. Would reminders be useful once a week to notify the family to plan together?
10. How would you use this concept in your daily life?
11. Would you see you and your family collaborating effectively to plan and then pack you lunch boxes?
12. Do you feel you would need groceries integrated within the app?
13. Was the navigation flow as expected?
14. How difficult did you find the app? Was it easy to understand?
15. Do you have any suggestions as to how to improve the application design?
16. Do you have any suggestions as to how to improve the social and mobile aspects of the app to better encourage within-family collaboration?
17. Are there any features that are missing in the design?
18. Please rate the app's effectiveness from 1 to 10 (very effective)