

# Medium-Fidelity Testing Protocol

The following testing protocol will aim to evaluate the interactivity, functionality and overall user experience of the medium-fidelity lunchbox planning system 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 medium-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. As Meg, begin planning your lunchboxes for the week.
2. Add an Egg Sandwich as your Main for Monday.
3. Add an Apple as your Fruit for Monday.
4. You decide you want to change your fruit to a banana. Follow through with this.
5. See what foods are in your favourites.
6. Add some raisin cookies.
7. Continue through the whole week.
8. View the updated lunchbox plan for the week.
9. View what you are taking for lunch on Tuesday.
10. View your lunchboxes healthiness rating.
11. Find out how to learn more about the food groups.
12. Discover some lunchbox recommendations for protein.
13. Find out more about your family's progress.

## 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. What did you like/dislike about the concept?
2. Do you understand what the application aims to achieve?
3. 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?
4. Do you think the healthiness ratings are effective?
5. 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?
6. Are there any issues with the app in achieving its purpose?
7. Would reminders be useful once a week to notify the family to plan together?
8. How would you use this concept in your daily life?
9. Would you see you and your family collaborating effectively to plan and then pack you lunch boxes?
10. Do you feel you would need groceries integrated within the app?
11. Was the navigation flow as expected?
12. How difficult did you find the app? Was it easy to understand?
13. Do you have any suggestions as to how to improve the application design?
14. Do you have any suggestions as to how to improve the social and mobile aspects of the app to better encourage within-family collaboration?
15. Are there any features that are missing in the design?
16. Please rate the app's effectiveness from 1 to 10 (very effective)