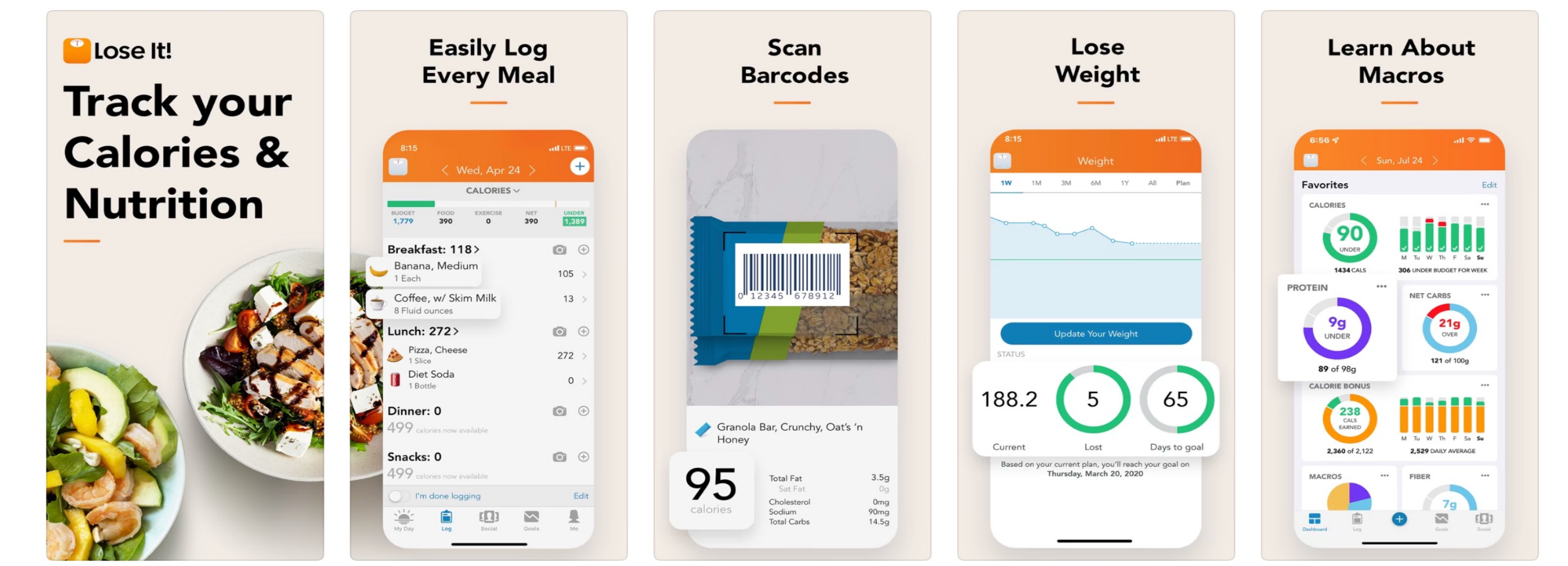


Heuristic Evaluation of Lose It! Calorie Counter App

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- No. of downloads on Google Play Store: 10M+
- Rating: Google Play Store - 4.6; Apple App Store - 4.1
- App Version: 16.4.400

ABSTRACT


Adopting a healthier lifestyle requires effective calorie monitoring and nutritional balance, particularly given the rise of lifestyle-related diseases such as diabetes, hypertension, and thyroid disorders. Modern fast-paced living makes tracking calorie intake essential for better health management.

Lose It! Calorie Counter is a digital solution designed to support weight management by helping users understand their calorie needs and customize their intake based on their lifestyle. By integrating user profile details—such as lifestyle habits, goal weight, and timeline—the platform personalizes recommendations, fostering healthy habits and guiding users toward optimized weight goals. Using an intuitive algorithm, the app tracks key elements of weight management and provides users with actionable insights, enabling them to meet their milestones effectively.

To evaluate the effectiveness and user experience of the Lose It! platform, HITLAB conducted a heuristic analysis focusing on critical design and usability elements, including interface design, navigation intuitiveness, terminology clarity, and error handling. The analysis highlighted the platform's strengths while identifying areas for improvement.

Based on the findings, targeted recommendations were developed to enhance user guidance, address usability challenges, and optimize data organization. These improvements aim to refine the overall user experience, ensuring seamless interaction with the platform and maximizing its utility in promoting sustainable weight management.

User Persona for the Study

Name	Age	Gender	Occupation	Location
Joel Patel	49 years	Male	Research Scientist	Boston, US
 <p>Joel is a research scientist, who is willing to lose weight and lead a happier lifestyle. Joel is a family man and has responsibilities. He is recently shifted to being vegan with advice of the health care provider to live a healthier and sustainable lifestyle.</p>		Goals <ul style="list-style-type: none"> • Need to lose weight • Need to keep a count in calories • Need to keep in control cholesterol level • Need to maintain the weight. 	Needs <ul style="list-style-type: none"> • Having access to a toll that helps in keeping a track of calorie intake • Support to creating daily goals in order for weight management • Regular notifications on reminding the meals log in • Having access to community with similar needs 	
		Motivations <ul style="list-style-type: none"> • Desire to lose the extra weight and feel healthy • A sense of responsibility by leading a healthy life • With increase in age, would like to have a life without medication and be responsible to the family. 	Frustrations <ul style="list-style-type: none"> • Not having consistency in maintaining weight • Not able to keep a track of “how much of food intake is needed” • Anxiety of developing lifestyle diseases as age progresses due to unhealthy lifestyle. 	
Quote "I am able to reduce my weight if being watchful of what I eat. But with work and responsibilities I am not able to sustain the weight I lose. I would want a system which could help me lead a sustainable and healthier lifestyle."				

OBJECTIVES

- To assess the usability of the Lose It! Calorie Counter app through a comprehensive heuristic evaluation, identifying specific challenges that impact the user experience.
- The goal is to provide actionable recommendations to address these challenges, enhancing the app's usability and overall effectiveness in supporting users' weight management goals.

STUDY METHODOLOGY

Three type of assessment instruments were used to provide a comprehensive understanding of the app's usability, effectiveness, and user satisfaction:

- **Nielsen's Heuristics:** These heuristics encompass criteria such as visibility of system status, match between system and the real world, user control and freedom, consistency and standards, error prevention, recognition rather than recall, flexibility and efficiency of use, aesthetic and minimalist design, help users recognize, diagnose, and recover from errors, and help and documentation.
- **System Usability Scale (SUS):** The SUS questionnaire consists of 10 items designed to assess the perceived usability of the system. User rate each item on a 5-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree." The SUS provides a quantitative measure of usability, allowing for comparison across different systems and iterations.
- **Utility Assessment:** The utility questions are adopted from Arhippainen Heuristics' questionnaire to assess the alignment of the app with user values and intended contexts. These questions probe the extent to which the app provides utility matching with the user's values and whether it is designed to fit the intended contexts of use.

RESULTS

Heuristic Evaluation Overview

Strengths

- **Daily Calorie Intake Notification:** The system effectively provides feedback when calorie intake exceeds the limit, aligning with the visibility of system status heuristic.
- **Error Correction for Profile Details:** Users can easily correct typographical errors in their profiles, which ensures error recovery and provides a forgiving interface.
- **Simplified Meal Logging and Calorific Value Calculation:** The app calculates caloric values based on food names and quantities entered, leveraging match between the system and the real world for intuitive use.
- **Comprehensive Diet Food Options for Logging:** A variety of diet food options are available, supporting flexibility and efficiency of use for diverse dietary needs.

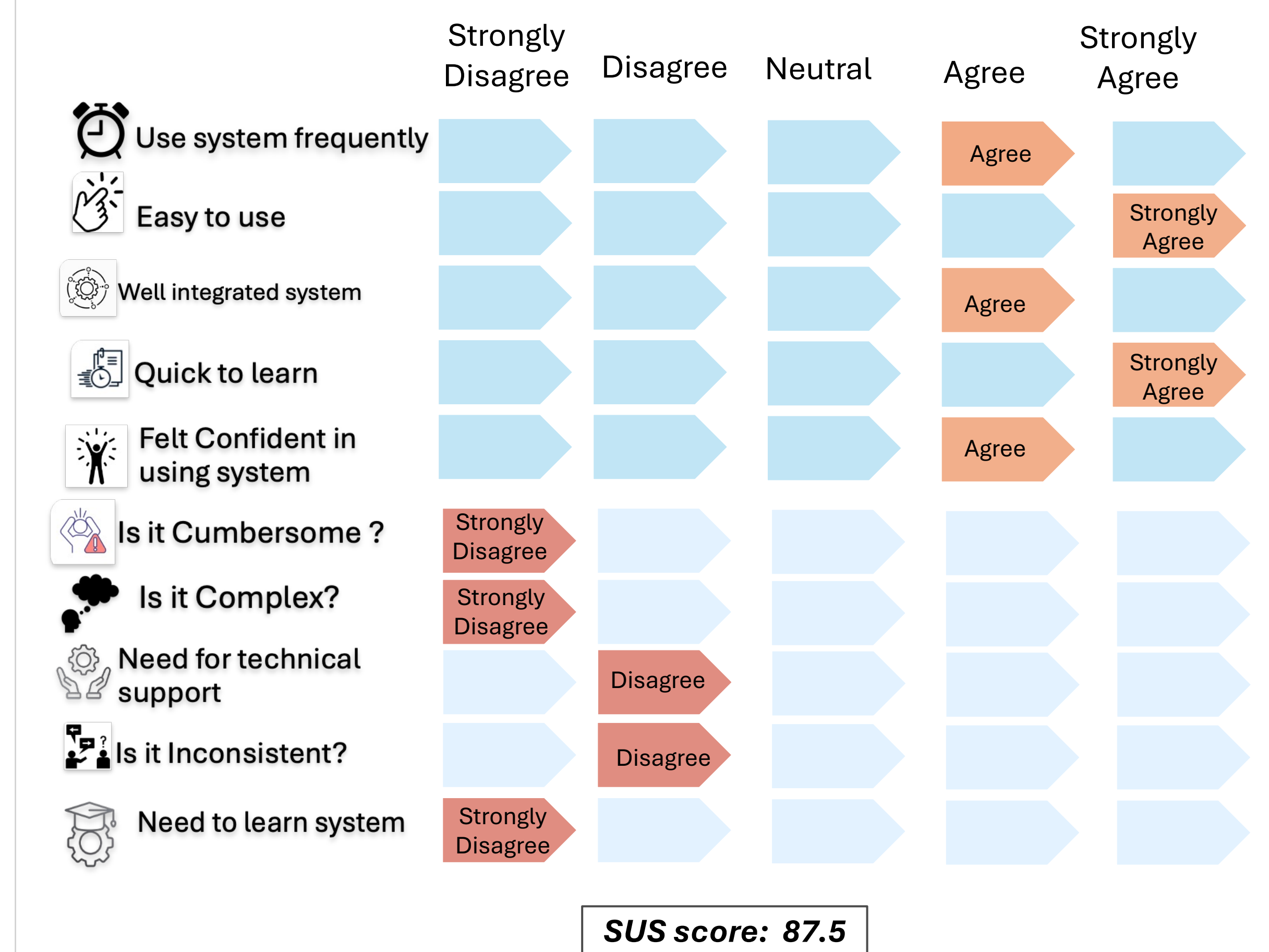
Improvement Areas

- **Accessibility of Chat System:** The chat system is not easily accessible, which violates the help and documentation heuristic. Users need a simpler way to contact support.
- **Input Validation for Profiling Information:** The system accepts invalid values for key parameters like age or blood pressure, contradicting the error prevention heuristic.
- **Calorie Value Mismatch:** There is inconsistency in the representation of caloric values between percentages and numbers, breaking consistency and standards.
- **Absence of Direct Representative Contact:** No direct communication with representatives is available, limiting help and documentation accessibility.

Evaluation and Recommendations

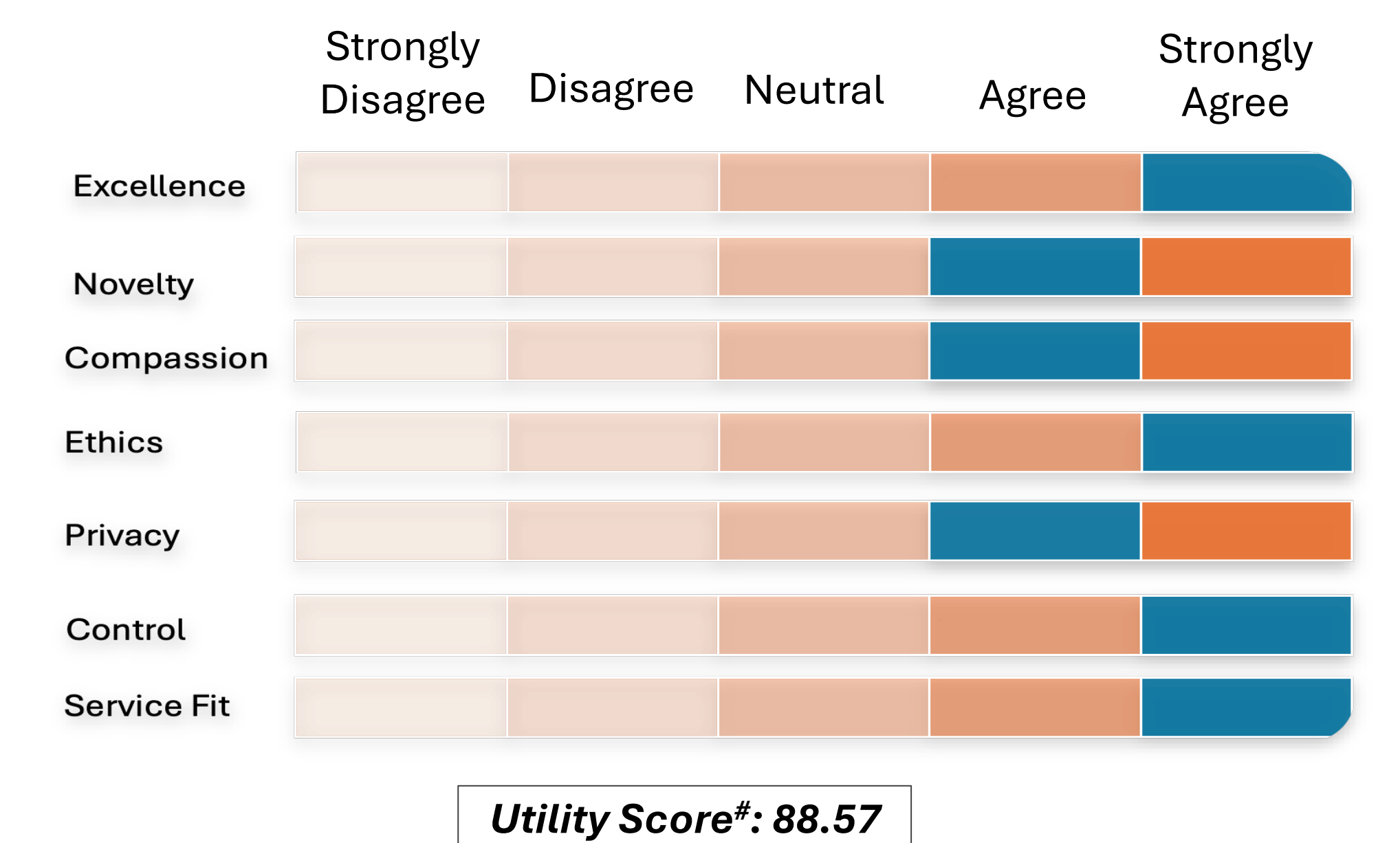
- The app provides clear notifications for calorie intake, user-friendly meal logging, and an intuitive interface that aligns well with users' real-world expectations. However, accessibility to the chat system and direct support is limited, and input validation for profiling data is inadequate, leading to inconsistencies in calorie values.
- To enhance usability, the app should standardize calorie representations, improve error prevention with stricter input validation, and ensure recovery through clearer error messages.
- Adding a more accessible chat feature and representative support will strengthen help and documentation.
- Additionally, expanding flexible meal logging options, such as barcode scanning, and maintaining a minimalist design can further optimize the user experience. These changes would make the app more responsive, efficient, and user-centered.

System Usability Scale Rating



Utility Assessment

Adopted from Arhippainen's Heuristics



A = (Sum of the points for all sub-sections of the first question/35) X 50; B = Point for second question X 10 = 50
Utility score out of 100 = (A+B)

CONCLUSIONS

The Lose It! app effectively supports weight loss by tracking calorie intake, nutritional values, water, and micronutrients based on individual profiles and lifestyles. With strong usability scores and ease of use as key strengths, the app provides an intuitive platform for weight management.

However, addressing minor issues such as visibility and error prevention could further enhance its usability. By refining these aspects, the app can better support users not only in losing weight but also in maintaining a healthier, sustainable lifestyle tailored to their needs.

ACKNOWLEDGEMENTS

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