**Nutrition Guide**

**EVALUATION REPORT**

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# Overview and Evaluation Description

The NutriLife application is a nutrition and lifestyle in development and as such, prototypes will be developed and will need to be tested and evaluated. Apps need to be tested for debugging purposes, to gain insight on what extra features can be added to it and to also gain an understanding of what users might perceive about the application and how others might use it.

The NutriLife application was taken to 10 willing participants for its evaluation. These participants were not selected specifically based on age nor based on gender; this is due to the fact that the application is primarily made for anybody who wishes to improve their diet and nutrient intake and while keeping track of changes they achieve while using the app. The tasks were completed on the prototype of the app on a laptop.

The evaluation involved two methods of measuring the app’s performance according to the reviewers’ perspectives. These were observation during task completion and a follow-up questionnaire. The observation techniques allowed for an up-close monitoring of the user’s actions taken to complete the tasks. This enabled for a close look at how the user’s performed to evaluate the ease of carrying out a task or to see the frustration that the user went through in order to learn how to fix the application’s shortcomings. The questionnaire allowed for users to give their own evaluation and thoughts of the app to be used as praises and criticisms.

The user evaluation involved a number of benchmark tasks that needed to be completed. These tasks range from performing common application features, such as signing up, changing profile pictures and changing passwords, to more application specific features such as finding dishes or details of foods for specific nutrient consumption and entering values of weight loss for the app to update. Users were also asked to enter previous meals eaten and then view them and the details entered from a history list. They were also given the opportunity to “communicate” with other users within the community of NutriLife users.

These tasks were specifically chosen due to the nature of the application. The application is not overly complex; it is an aid for improving health through proper eating and nutrient consumption. The tasks had users create a profile that would be used to store the information about their diet and body goals. The searching tasks had users looking for food items that do help to better what they eat to see if the feature worked to the designers’ vision. A meal history allows users to see what they ate in past and to compare it to the meals eaten in more recent times. To see that feature working properly tells that the storage component works correctly.

# Evaluation Results

The survey participants were all helpful in understanding how the system operated. They took part in a questionnaire and gave mostly positive reviews of the app but their observed actions also aided in understanding how users will navigate the application. Most users seemed to have a good idea of how to move through the application, with minimal help necessary. One user, however, seemed to struggle more so than the other users. They seemed not to become slightly lost a few time while navigating through the application and they seemed to be slightly flustered towards the end of the evaluation. But for the most part, users were able to travel the features and sections of the apps, while giving slight commentary stating that they liked certain features, such as the food nutrient displays and the food and calorie recommendations for different meals of the day. Some users also commented stating their wishes for certain improvements or new features that could be added such as a picture sharing feature for the community tab.

The questionnaire also allowed users to present their thoughts of the application in a more tangible manner. The users stated that the application’s colours were vibrant and eye-catching, but not all of them agree with that sentiment.

However, the respondents all believe that the application’s utilities are in sensible positions.

The respondents indicated that locating the app’s features was mostly easy and that the flow of the system’s layout was mainly clear to them.

Overall though, the users were mostly satisfied with the app’s appearance, but saw it fit to withhold high ratings for it.

Users also filled out pre-stated opinions given about the app by either agreeing, disagreeing or having a neutral opinion with the statements.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Response |  | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|  |  |  |  |  |  |  |
| I think that I would like to use this app. |  | 0 | 8 | 2 | 0 | 0 |
| I think the app is unnecessarily complex. |  | 0 | 2 | 2 | 5 | 1 |
| I think that the app is easy to use. |  | 1 | 7 | 2 | 0 | 0 |
| I think I would need help to operate and navigate the app. |  | 0 | 1 | 0 | 9 | 0 |
| I think the application's functions work properly. |  | 0 | 8 | 2 | 0 | 0 |
| I think the system does not connect its functions well. |  | 0 | 1 | 4 | 5 | 0 |
| I think most people would learn how to use the app quickly. |  | 1 | 6 | 2 | 1 | 0 |
| I feel confident using the app. |  | 1 | 5 | 3 | 1 | 0 |

Table Showing the User’s Varying Opinions about the Application

Users were also asked to state their beliefs on the ease of learning how to operate the application, with mixed results being given.

The users were also split evenly in stating their beliefs that the ‘Diary’ and the ‘Recipes’ features were the most appreciated. Along with this, most users indicated that they believe there is no redundant feature in the app. However, two users expressed their dislike of the Community tab, citing reasons such as “I don’t need others to know my personal information”.

When asked about features that could improve the application, four users indicated a want of a feature to share their pictures so that they “can show the growth [they] made”. In addition, one user made mention of adding more colour options to the app.

Overall, the users mostly stated that they would definitely recommend the app to others to use with two responders stating “maybe” or they were “unsure”. The respondents gave the app an overall rating of 7.6 out of 10.

# Results Discussion

The application was found to be in the realm of a ‘Good’ app by the respondents. Most of the users believe that the colours used in the app do grab and hold their attention, which is makes the app captivating and indicates that users will want to use the app instead of ignoring it in favour of a competing application. This is also indicated by the users stating their belief that the utilities used by the app are in logical positions, so it can be said that the utilities are in positions that make sense, most importantly, to the users.

The features used by the application, along with the apps overall layout was pretty good by the users’ standards. It appears to be easy for the users to find where features were, albeit with some users taking a short while longer to locate them when compared to other users, which indicates that the design locations for the feature were ideal for an average user locate. The layout of the entire app was fairly clear for most users, with one dissent from this view. So the layout of this app functions, but does have room for improvement. However, the users appeared to have enjoyed the application for the most part, given that it averaged a 7.6 out of 10.

The users have agreed that the app does have its strong points and it weaker points. Most agreed that it would want to use the app themselves, showing that they have been impressed by it thoroughly enough. The majority indicated that they feel the app is not too complex to use but not all share that view, showing that a review of the app’s complexity would be in its best interests. None of the users indicated that the app is outright difficult to use but some apparently think that there are a number of ways in which the app is a bit difficult to use. The users mostly agree that they could navigate the application with no external help, with one person stating that it would be best for them to have help. The users also appear to agree in thinking that the functionality of the app is ideal and most indicated that the functions do connect well. However, a good number of users responded with a neutral opinion on the function connecting well. This could indicate that the users saw that the functions connecting to the app had some issues but there were also a number of functions that connected properly. The ease of learning how to use the app seemed to be mostly agreed upon by the users, showing that the app does have a natural ease of learning. To this end, many users agree that they would be confident in using the app, but some are not convinced that they would be able to use it properly.

The users gave final thoughts on the overall functionality of the application. There were mixed results found when they were asked to indicate the difficulty of learning how to use the app, contrasting with an earlier, similar question. This may suggest that the question itself was presented in a poor manner. On the other hand, the users had a split agreement on both the ‘Diary’ and ‘Recipes’ features within the app on being the most appreciated ones, showing that they have left the best impressions on the users. Most users indicated their thoughts that all the functions in the app are useful but two have noted that they believe the “Community” Section could be removed, since they do not wish to share personal information about themselves. One indicated that they do not wish to know about others’ personal business either. Also, the users gave two ideas for improving the app in the form of an option to share pictures with other app users to show the gains that came from using the app and also in the form of adding an option to change the colours in the application itself for a variety of appealing looks that the app could have.

Overall, the app appears to be solid. The users indicated that they would still recommend it, despite its shortcomings, and they also gave the prototype a decent score average of 7.6, showing that they believe the app is good, it has potential, but there are a number of issues that should be fixed for normal functionality of the application.

# Implications of the Results

Users were seemingly satisfied with what the app had to offer. However, as seen in the results, there is much room for improvement possible but it is not necessary everywhere. For starters, the visual appearance is good; responders believe it is good so we have no current need to improve upon it. Nor do we need to improve on the utilities’ positioning as indicated by the users themselves. The app also appears to be set up in such a manner that learning how to use it is not a big problem. The fact that only two options were selected as most appreciated is telling that they are excellent but at the same time, the other features should be improved so that they are on par with the two selected ones. A good rating along with the users indicating that they would mostly recommend the app is a fine outcome for this application.

It should be noted, however, that help could made for certain sections of the app altogether. As a result of the questionnaire and from the observations made, the features in the app should be better organized for an easier time of locating them. The layout appears to not have a large need for improving it, but something can always be done for improving even a small problem. The functions have a big need to be improved, given that their connectivity to the app is faulty in some cases. The app could include a feature that would allow users to block their use of the ‘Community’, so that users can utilize it while those who wish to avoid it can do so.

Overall, the app has much done well but there is also a need to fix issues present. The design itself seems to be enjoyed by the users but they have basically indicated that it needs much more work to be done in order to fully prepare it for commercial use. Designing an application takes much effort and needs to constantly be reviewed, edited and evaluated before it can end up being “good enough” for launch. There is always room for improvement, even if designers and/or users believe that a feature is done well.

# Closing

In closing, the application offered much to both the users and to the designers. Upon review, the designers realized that there are a number of issues that could be fixed or changed to create a well-functioning app. The prototype delivers itself nicely for most part but to get all the feature running in time is impossible and the same goes for getting all of the functions to run correctly. Getting a proper searching feature for some of the food and dishes planned is hard to complete and would have been ideal to do. In addition, not all of the features planned were able to be programmed in, such as an exercise regimentation feature to help better a user’s health or even ‘Exercise Tips’ to go along with the ‘Diet Tidbit’ feature.

In addition, during the implementation of the prototype, the possibility of new features that could be added were constantly thought of. The possibility of creating a tutorial for novice users that could be selected for use at the time of creating the account or logging in for the first time. In addition, a barcode scanner to scan then view the foods was also thought of. To go alongside what one responder stated, the idea of an option for users who are colour-blind was also bounced around the designers.

Overall, this application offered a large opportunity to learn about the process of designing an application. Design processes such as these take time to prepare, given that deciding on the requirements takes a massive amount of time for the team to settle on. Following that, doing research on the area took much more time than anticipated to complete but also the idea of what the design should look like changed as a result of the extra research completed, especially given that there was little to no consideration of how the social and technical environment should have tied in together initially. It was also an eye-opener to see how difficult creating unique design sketches for the prototype can be for a design team. The preparation for the prototype and the eventual evaluation was anticipated to be difficult yet still complicated to complete. This development project has been a telling experience that has left the designers tired but it left behind much useful knowledge.