

Fitness and Nutrition Buddy Project Requirements Summary

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The project requirements of the fitness and nutrition buddy incorporate many factors towards this application such as many features in terms of legal issues, security, and the list goes on. The first situation deals with the use case diagram in terms of the user and certain inputs as well as the account settings. In the diagram it provides necessary information towards what features are important and needed in this application in order for it to function properly. The sample use case diagram orders the actions of what exactly the user can do and each action that they're able to apply. Individual product cases include certain actions such as "input fitness information, and certain goals." Functional requirements that begin are examples of diet style and the importance of location services. Meal creation is an essential part of this application for users to be able to navigate throughout this application and its functionality.

The data requirements needed for this application are being able to have the data of the local restaurants around them in order for them to create their custom meals. System must be able to provide this because without the restaurant inputs around their location service, this application's main purpose would not be able to function. With all software applications and functions must require specific speed requirements. No user would want to run an application with the speed time of a very slow application AKA the running time. With the goals in mind of this company we would be able to provide the runtime and speed time of providing specific meals towards the user in less than 2-3 seconds. Precision of this application is very important and necessary for the user to have an accurate tracker of what restaurants are located around their specific location. The user wouldn't want a custom meal built around them from a restaurant that is 45 minutes away. That way the application must provide accurate information on the users location services and where they are located for the restaurants to be accurate around their location. The capacity of this application would not be that big at all since it is just an application providing custom meals towards their macronutrients and location services. The expected space requirement towards this user's device would be between 50-100 MB, and this wouldn't be an issue at all since in the current generation, most cellular devices are capable of holding at least 128GB of memory, and in this case 50-100 MB is not an issue at all.

Dependability requirements of this application must include loading data from restaurants and location services. This product must also be available to most platforms that are common to most cellular devices in the modern day era. In the case of a fault tolerance or any issue, there shall be an offline mode required for the user. The offline mode may not be able to have all functionality, however the user will be able to input some certain things that are saved onto their local servers, and once servers are back up they will transfer towards the main server of the application. Safety issues could

include in the case of COVID-19 where mask mandates are required and users need to be alerted of certain restaurants required of mask mandates, also the outbreak of salmonella in certain restaurants as well.

The servers will have regular maintenance during low hours to ensure smooth operation. There will also be ongoing support for new features such as new popular foods that people start to track more. The app will also be available primarily on the iOS and google app store. If there are updates to the users operating system the app will sync to that version within 1 week and be full optimized in a month. Server strength should be enough to process 10,000 users on launch and 100,000 within 2 years. Server and dev funding will be guaranteed for 3 years and possible renewal after.

The dev team will have access to anonymous user data but only managers and senior devs will be able to access the encrypted database where sensitive user data is stored. Along with security clearances there will be weekly backups of user data to prevent any large losses of data and user progress. Users may not access other users data and developers can only access user data if they agree. The app will also be compatible with current audit laws and provide audits upon request. Security is needed for accessing websites for information such as menus, so the app will have a firewall for all internet communication.

The software should maximize its organization and intuitiveness in order to create a user-friendly experience. This means requiring the least training possible for users who understand how to use a smartphone or tablet, as to not scare them away with scientific data and calculations that may be useless to them. Users from around the globe should have access, and should be able to customize their preferences in order to assimilate with the technology. Tips and helpful guidelines will be displayed along with these settings in order to quickly adapt the user to the system. Users of all different fitness and nutritional backgrounds will be using the app, so it is important to make sure the language and information they are presented with is relevant and makes them feel comfortable. Those with disabilities such as hearing and visual impairments should also feel the same level of comfort. Also, every user should be provided with thorough documentation regarding the calculations and data provided by the app to ensure clarity. Finally, little to no training should be required to use the app.

The style of the application is geared towards young adults interested in some level of fitness and nutrition, so catching their eye with aesthetic colors that pop will be important. Having a modern feel to the app will ensure that users feel comfortable with the data and information presented to them, as it should feel modern and relevant.

Compatibility with apps like the Health app made by Apple in order to keep track of specific metrics for data calculation. Compatibility with new updates, as well as old, will ensure that all users are provided with information that is correct, and personalized to them. The app should be available on relevant app stores to ensure ease of access

by all users. This will allow for frequent updates as well, in order to keep releasing new wanted content and to provide bug fixes.