ABSTRACT

Only a little group of people knew the importance of calorie consumption through diet plan. When body does activities throughout the day, there are calories being burned in order to produce energies. To balance those calories, we need to consume the right amount of calories from our food consumption. Every body has a different condition and different number of calories needed. Based on conducted survey to 89 respondents, 31.5% said that unknown information about suitable diet plan become a reason to not implement a suitable diet plan. Followed by 30.3% respondents said that they do not have time to create the right diet plan. A lot of research has shown that somebody's diet plan which is not being plan correctly has a high correlation with body's health. People who are busy with their daily activities do not have time to plan their food consumption. To manage diet plan that suits calorie needs, education and media are needed to make it easier for people to plan their diet. To meet that requirement, Foodritious startup is encouraged to develop an Android based application that could help it's user to calculate how many calories their body need to consume in a day, record their body condition history, see their diet plan that suits their minimum calories consumption, and get food ingredients that suits the diet plan.

With a percentage of Android based mobile phone users in Indonesia that is more than ninety percent, the developed application could be used by many users. To develop Foodritious Android application, team uses iterative incremental method to give clear guideline and activity. In iterative incremental method, development will be divided to several iteration or cycle. Each iteration will produce a product in form of an Android based application that had tested by black box testing method. Test that already conducted to the application shown that 80% testers already feel satisfied with the function of the application. Application will work to manage user interaction and data process. To handle that, Foodritios application implements the architectural pattern of model, view, presenter (MVP). MVP will separate the business logic code and the user interface code of the application. With this separation, developers could modify and maintain the application quicker.

Resource requirement of application also need to be monitored before being released. Application with good performance will give it's users a good experience and doesn't use resource that supposed to not be used. Resource analysist conducted to Foodritious Android application has shown that application need a low up to medium of battery energy, 15 MB up to 30 MB of storage, and 178.5 MB of RAM to run.

Key words: minimum calorie consumption, diet plan, startup, Android application, iterative incremental, black box testing, model, view, presenter architectural pattern.