

Balance B.M.S (Body, Mind & Soul)

Mobile Application for Healthy Lifestyle

Ainul Dhabitah Binti Mohammad Zainal

Universiti Kuala Lumpur
Malaysia Institute of Information Technology (MIIT)
Kuala Lumpur, Malaysia
ainul.zainal14@s.unikl.edu.my

Wan Shazlina Wan Ismail

Universiti Kuala Lumpur
Malaysia Institute of Information Technology (MIIT)
Kuala Lumpur, Malaysia
wanshazlina@unikl.edu.my

Abstract—When it comes to mobile applications, they are computer programmes or software applications that can run on any operating system or any mobile device. As a result of the lockdown, people now have a more complicated relationship with food to maintain a healthy lifestyle. Their eating habits and emotional well-being have also been influenced by working from home, resulting in less physical activity. The vast majority of people are entirely unaware of the numerous advantages of Herbalife products. According to this study, Adobe Animate will be utilised to develop a mobile application that teaches the proper way to eat healthfully and maintain a healthy B.M.S balance (Body, Mind, Soul). This method focuses on the nutritional balance of every meal. Using Herbalife products as a meal replacement helps them gain a more comprehensive understanding of what it means to live an active and healthy lifestyle. As a result, the goal of this study is to develop mobile application the most effective way for people to train balance by eating a healthy lifestyle. To assess the effectiveness of the mobile application for the balance of B.M.S. (Body, Mind, and Soul), the development application used Herbalife products in conjunction with a mobile application that was developed to promote B.M.S. (Body, Mind, Soul). The ADDIE MODEL was utilised in the current study (Analysis, Design, Development, Implementation, and Evaluation). As a result, this research will aid in improving the effectiveness of mobile applications to balance people who require proper meal replacement with Herbalife products can benefit from the B.M.S (Body, Mind, and Soul) programme, which is available through the development of the mobile application and will give an impact to society to live in a healthy life.

Keywords— Healthy lifestyle, Obesity, Lockdown, Mobile Application.

I. INTRODUCTION

Tuisyen Kurus Online's Nutrition Club methodology will develop an app that emphasises the importance of a healthy diet (TKO). It's called Balance BMS, and it's a mobile app (Body,

Mind, Soul). For those who want to know which foods are good for them, this app can help. Use TKO's nutrition club recipes and the benefits of Herbalife products for other meal replacements to help them learn how to prepare a nutritionally balanced meal for meal replacements, Herbalife's mobile app will include information about the meal's calories and the benefits of using Herbalife products in their daily dosage. Consumption control is the essential feature of this app, as it allows consumers to maintain a healthy weight during the lockdown by providing them with a proper meal.

A. Target audience for Balance B.M.S(Body, Mind & Soul)

Young adults, obese people, and Malaysians over the age of 18 are the primary demographics for this campaign. This project provides an interactive mobile application for Balance BMS (Body, Mind and Soul) for the audience's daily routine. Nowadays, people are looking for an easy way to accomplish their daily tasks. App users were able to learn how to cook nutritious meals by following the app's recipes. In addition to learning about proper nutrition meals, users will receive a meal plan tailored to their BMI category and meal timings. Users of this app will be able to learn about Herbalife products and the benefits of suspended nutrition.

B. Designing the suitable navigation

Design is critical for any mobile app, but it is also essential for how well an app interacts with its users and ensuring that it has the appropriate navigation. Make the navigation look like a conversation between the users. Users should not waste their time on a beautiful application if they don't use it. Because of this, the best way to create the best navigation is to practise the best mobile application navigation. Consequently, It has been found that 49% of smartphone users use their thumb to scroll down the screen. As a result, it is critical to follow the thumb rule of placing frequently used actions at the bottom of the screen. With one or two hands on the phone, users will access the phone's navigation button.

i. Bottom Bar Tab

Social media platforms such as Instagram extensively use the bottom tab bar navigation, making it one of their core functionalities that can be accessed with ease via the bottom tab bar. As a result, it makes switching between features much more convenient. Additionally, there are a few things to keep in mind when designing the bottom tab bar. Only the most important and frequently used navigation is displayed in the bottom tab bar. On the contrary, avoid using scrollable icons in the tab bar and different coloured icons in the bottom tab bar.

ii. Card Style Design

Layout in the form of a card A mobile application's user interface can benefit significantly from navigation. Displaying relevant content in a card-style design allows for a more natural presentation of information. When swiping to the next one, the user can feel as if they are having fun. Card-style navigation is used in the Google Primer app. A tap on each card can be used to wipe away the inside cards, *Inappitics, I. (2018, July 10)*.

iii. Full Screen Navigation

Full-screen navigation can aid in space conservation. However, it may be the best navigation design option for some mobile applications. The full-screen navigation is a home page that lists all navigation elements and good navigation for coherence and simplification. As a result, including a search box in the navigation bar is best to practise, and omitting one will make the user feel trapped in a dark room with no way out. By including a search box, users can avoid experiencing any unpleasant feelings.

C. Rules designing UI Button

When designing UI buttons, the principle of UI button design and the purpose are the most important considerations, according to JustinMind (2018). When creating user interface buttons, the three-dimensional trend and Skeuomorphism have faded into the background. In addition, the primary considerations are the needs of the end-user. It's also essential that the button is designed to look like a button in terms of its size, shape and padding. When it comes to user interaction, the size and shape of a button can make or break (JustinMind, 2018).

i. Size

According to the research JustinMind (2018) before commencing the UI button design, it is necessary to ensure that the button is user-friendly. When 'tap' is the primary input method for a mobile application, the Material Design guidelines for Android propose that the touch target for the button be at least 48 x 48dp with a minimum of 8dp between them. It will

guarantee that the information density and usability of the design are balanced.

ii. Shape

The word "button shape" refers to the form of a UI button, which may take on a variety of shapes, such as a rectangle or a circle. However, most designers utilised a rectangle for the UI button to keep it clean and attractive while not causing discomfort to the user's eyes when they pressed it. For example, Android's UI design has both flat and raised buttons. There is a button for both balanced and displayed designs. The button material should have been 36dp high, with a minimum width of 88dp and a corner radius of 2dp for flat buttons and 2dp for raised buttons.

iii. Padding, Color and Contrast

A virtual white space is created around the content or component to prevent overwhelming consumers when they engage with a UI button. Thus, to make the button look actionable, the UI button's design will use colour and contrast to assist users in comprehending the UI button's message. Consequently, the colours used in the user interface design will aid users in traversing buttons and identifying the activity associated with each click. Additionally, the contrast will be necessary to allow users to distinguish between various buttons. Assume no differentiation exists between the buttons. In such an instance, the user will have difficulty distinguishing between the functions performed by each button. It can slow down the user journey and provide a low-quality application experience to the user.

II. BALANCE HEALTHY LIFESTYLE

Since the epidemic, people's lives have grown more stressful and busy. They attempted to combine their work, families, and social life to the point of exhaustion. According to studies Sophia, S. (2020), they must relocate to a new location and experiment with different activities to maintain a balanced lifestyle. The research includes some recommendations and techniques for balancing the mind, body, and spirit as part of a healthy lifestyle balance. According to studies, ideas for balancing the body and mind include consuming foods that most people are unaware of have a substantial effect on the body and mind, Sophia, S. (2020). Consuming clean meals regularly will enhance the body in the same way as drinking a cup of coffee every hour can boost energy. Consumption of nutrients is critical for maintaining a positive mental state during demanding labour. Additionally, the advantages of consuming healthy food will assist the environment. Physical well-being in general Nowadays, people are continually pressed to work and be responsible nonstop until their mental and emotional reserves are drained. At this time, proper relaxation is required. According to Sophia, S. (2020), the first step that the body needs after depleting the mental and emotional

reserves is to spend time outside to take a break from the busy work environment during free time, go for a walk, and engage in some exercise that benefits the mind and spirit. According to a study conducted by The Editors at Chopra.com. (2012, November 16), most individuals carry their emotional poisons, unresolved anger, pain, and a feeling of self-dissatisfaction. The residue of unsorted emotional toxins in the mind, body, and soul must be eliminated. Spending time journaling about everyday life will alter how the body functions. They must realise what they have been clutching and release it guiltlessly. Apart from that, nurturing, a supportive environment, and the mind will create a new place in the body for love and self-care to be accepted.

III. THE PURPOSE OF DEVELOPMENT

The purpose of producing a mobile application emphasising the significance of leading a healthy life- style via the approach Nutrition club by Tuisyen Kurus Online (TKO) is to aid users in selecting which meal plan is most suited for their BMI category. TKO's nutrition club recipes and the advantages of utilising Herbalife products as meal replacements will be taught in the application.

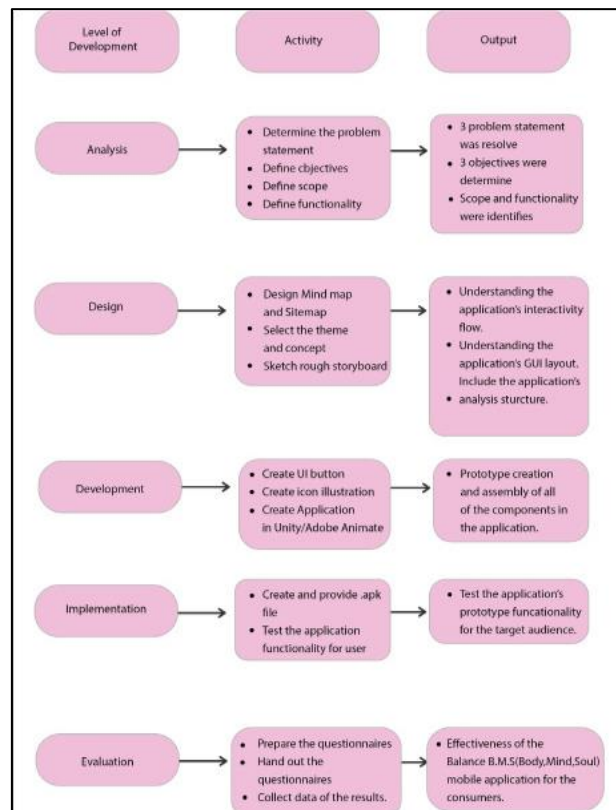


Fig. 1. Balance B.M.S Frame Work

Fig.1 is using ADDIE Model method which will show the activity of the prototype of the framework and how the output will be for the User Experience.

The research objectives will solve three problems as below:

i. Increasing Obesity rates since lockdown

Obesity rates have risen since the lockdown due to a lack of physical activity and unbalanced nutrition caused by stress-eating. It also caused people to have a complicated relationship with food and a healthy lifestyle. World Health Organization. (2020, February 21)

ii. Working from home

In response to the lockdown, the vast majority of individuals are now working from home, which has altered their dietary patterns and mental well-being, prompting them to move less while worried about their jobs and the surrounding surroundings.

iii. Lack knowledge of Herbalife products benefit

Apart from regular solid meal consumption, the majority of people are unaware of the ways in which Herbalife products might benefit individuals who are fat or overweight. The advantages of their goods as meal replacements and nutritional supplements are also well-known to the public. As a result of the comprehensive nutrition provided by the goods, athletes have embraced them, and medical professionals have endorsed them. Which will help to develop mobile application to teach a proper way eating healthy and lifestyle to give impact to the society.

IV. METHDOLOGY

The approaches that were employed to finish the project are described in this section. A framework for achieving the project's aim called Balance B.M.S. (Body, Mind, and Soul) specifies the procedures and techniques that must be used to reach the goal. One technique employs the ADDIE concept (which stands for analysis, design, development, implementation, and evaluation), which is used to represent the whole of a project in this methodology.

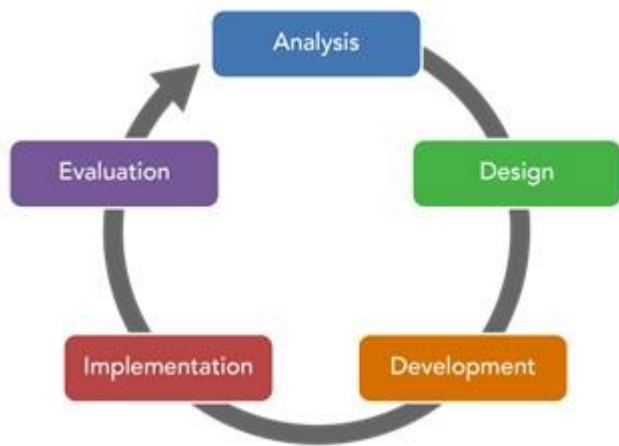


Fig. 2. Phase of ADDIE Model

Figure 2: The ADDIE approach is shown as an interactive instructional design process. The outcomes of each phase's formative assessment might direct the instructional designer to any prior stage, which serves as the beginning product for the subsequent step. According to Organization for Instructional Design, 2018, The ADDIE model is an instructional design approach that is used to assist organise research and project content development. It is the most classic ADDIE model, consisting of five phases. It was a well-known instructional design paradigm that is still in use today. The ADDIE model is divided into stages, and each stage's procedure is carried out sequentially but with a strong emphasis on reflection and iteration. The abbreviation ADDIE refers to the steps of a development process: analysis, design, development, implementation, and evaluation. During analysis phase, problem statements are identified, as well as determine the solution. Next is design phase, where storyboard is sketched and also design the interface of the application. Next step is to proceed with development of the application and follows by testing the functionality of the project during implementation. Finally, questionnaire is distributed and data collection is done during evaluation phase to get the final feedback from the end users.

A. Phase 1: Analysis

The project's objectives, problem statement, target audience, and, finally, the project's content will all be discovered during the analysis phase. Other important concerns were also argued during this period, including the significance of mobile applications in helping consumers with their skincare routine. They were encouraging young people and students to have a healthy lifestyle, Dute, D. J. (2016, May 5). Evaluating food intake and the advantages of meal replacement using a mobile app After that, the researcher examines the effectiveness of mobile apps in educating users to use Herbalife products as a meal replacement. A BMI calculator was developed for the purpose of providing users with their BMI category and calories intake recommendations while using Herbalife products.

B. Phase 2: Design

To ensure that the project is on track, researchers will look over the results of the study throughout the design phase and come up with a detailed plan, including a preliminary storyboard for instructional design and a sitemap for the content. Learning goals and content structure may be clearly defined via the design process. Every part of the instructional design strategy must be carried out carefully in the application. During the design process, it's vital to be a stickler for detail. Systematic means that it is part of an overarching strategy or set of approaches with the purpose of accomplishing the project's goals in mind.

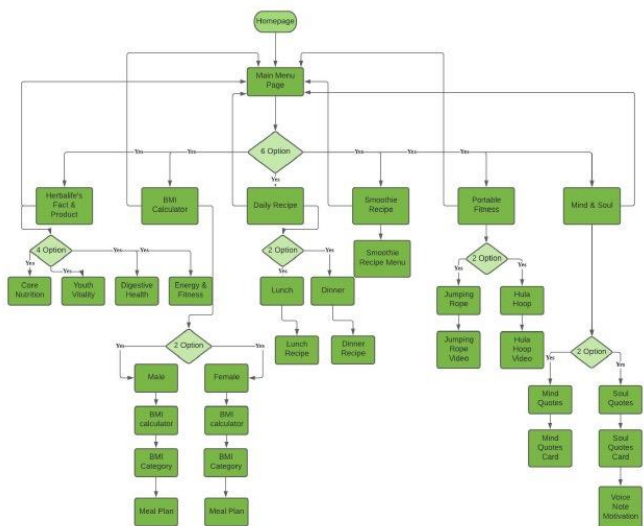


Fig. 3. Flowchart of Balance B.M.S

Figure 3: Created a flowchart of the prototype to get feedback and get the output function same as the framework table for the prototype to work successfully.

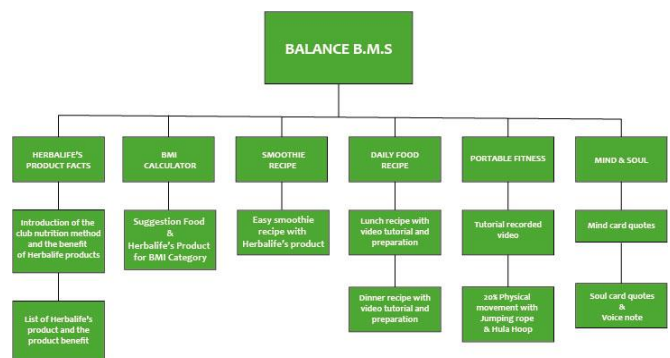


Fig. 4. Sitemap of Balance B.M.S

Figure 4: Sitemap for the details infographic and other element like images, video and audio in the prototypes.

C. Phase 3: Development

The project methodology is developed and tested throughout the development stage. The designers utilise the data acquired in the preceding two processes to construct a programme that will communicate to participants what they need to learn in this stage. Testers carry out debugging techniques, which they then examine and improve based on obtained input. Due to the complexity of the programme, developers begin this step by creating a prototype of the mobile application's UI/UX interface using Adobe Animate. Adobe Premiere Pro is utilised for video editing, while Adobe Illustrator is used by the developer. The programmes are written in ActionScript3, a scripting language.

D. Phase 4: Implementation

The implementation stage represents the program's ongoing enhancements to promote maximum efficiency and great outcomes. In other words, developers contribute significantly to the project's success at this key period. To guarantee that their products are acceptable, developers must continually analyse, rethink, and enhance them. Additionally, this phase entails a comprehensive examination of the product, course, or programme, as well as any required and timely adjustments. Kurt, S. (2018, December 16) defined formalised structured codified. A developer will oversee this procedure to verify that all data is properly stored and that the project works successfully.

E. Phase 5: Evaluation

Evaluation is the last step of the ADDIE process. The project is meticulously tested at the conclusion to determine what, how, why, and what was done (or not accomplished). It consists of two sections: formative and summative. Each level of the

ADDIE process includes formative assessment. It is a multidimensional and critical component of the ADDIE process. Summative assessment includes both exams for domain-specific criterion-related referenced items and opportunities for user response.

V. CONCLUSION

Using the ADDIE paradigm, a framework for balancing B, M, S (Body, Mind, Soul) was developed after the conclusion of the study project. This framework included steps for analysis, design, development, implementation and assessment. In summary, researchers identified the purpose, problem statements, scope, and functionality of the mobile application throughout the study phase. Following that, researchers started developing storyboards for the user experience and designing the user interface and sitemap. Following that, the prototype's interactivity was developed. The submission is constructed from the design parts.

REFERENCES

- [1] Inappitics, I. Best Practices for Mobile App Navigation: The Basics. Medium, July 2018.
- [2] JustinMind, J. 7 rules for mobile UI button design - UX Planet. Medium, June 2018.
- [3] Sophia, S. 4 Key Ways to Balance Your Mind, Body, and Soul. Gaia, 2020.
- [4] The Editors at Chopra.com. 7 Tips for Mind-Body Balance. Chopra, November 2012.
- [5] World Health Organization. Obesity. WHO, February 2020
- [6] Dute, D. J. Using Mobile Apps to Promote a Healthy Lifestyle Among Adolescents and Students: A Review of the Theoretical Basis and Lessons Learned. PubMed, May 2016.
- [7] Instructional Design Org. ADDIE Model, November 2018.
- [8] Kurt, S. ADDIE Model: Instructional Design. Educational Technology, December 2018.