

Social Mobile Applications Design: Case Study of Social Hikers Community

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Abstract

The development of technology growth in mobile technologies and applications leads to a challenge and opportunity to a new trend of numerous creative individuals and also the company to create relations with consumers through a portable application. Social mobile application is one of the popular applications and has become essential in human daily life. Sneak Peak social mobile application is a platform for hikers' enthusiasts. Therefore, the purpose of this paper is to identify the limitation of hikers to access information of hiking activities in Malaysia to design social mobile applications for the hiker's community. Moreover, this research aim extensively focuses on hiking recreation experiences, connecting with nature among the Malaysian hikers' community as well as lead to exposure for the social media design elements in executing the outdoors activity for the Malaysian hiker's mobile app. Social mobile application or as a mobile social-activity app, encouraging users to connect with friends and family. A Participatory Design approach was selected to conduct this research and to develop Sneak Peak social mobile application for the hiker's community in Malaysia. This paper provides an explanation and better understanding of the hiking knowledge among hikers and especially beginner hikers to prevent more dangerous problems comes afterwards because of the lack of hiking knowledge through the best medium that is effective in influencing Malaysian Hikers.

Keywords - Technology, Mobile Applications, Social Media, Malaysian Hikers

1. Introduction

The rapid growth of evaluation of technology giving an opportunity for high demand mobile applications. Therefore, this situation offered researchers the ability to pursue their studies in this area. In addition, encouraged individuals to use mobile apps that enabled them to learn from their mobile phones everywhere and at any time (Hujainah, Dahlan, & Al-haimi, 2013). A mobile application becomes very essential to utilise as a medium for communication and become trending as one of the usual mass-market products and also act as an interface between the organisations or community. There is three identified advantage of using a mobile application for any reason especially business: speed, the volume of information advertising (Shahir, 2015). Mobile communications and social media, users are connected to interact with other people, and often obliged to be socially active as technology drives to connect us.

Challenging communities in large cities most often lack social coherence. Social media is a platform for communicating and sharing knowledge or information in written or visual form. Supported by previous research, in recent years, social media, such as Twitter, Facebook, and Sina Weibo (a popular Chinese version of social media synonymous with Twitter), has become a major communication channel in our society (Jiang,

Wang, Tsou, & Fu, 2015). Social media have become increasingly attractive towards numerous users either normal users such as students or companies that providing that system itself. Social media can be the ultimate game-changer for brands, whether they wish to participate or not.

Engaging user is very important in the development of a mobile application. Loads of mobile app was abandoned and has been uninstalled due to lack of method in engaging user because of unfriendly user interface design and others some factors. The majority of American and European countries had established mobile applications regarding tourism locations and places to visit in their own countries. This practice would boost the economic growth, good health and well-being of the country. There are three identified advantages of using a mobile application for any reason especially in business: speed, volume of information and advertising. The researcher believes that mobile applications would be the best platform for Malaysian hikers especially, beginner hikers with visual information and plenty of features. Visual communication is created to deliver information through visual artwork involving images and language use and a combination of graphic elements such as shape, colour, composition, text and so on (Daimin, 2015).

To achieve Sustainable Development Goals which is the 3rd is to improve good health and well-being, Malaysia's support for mountain tourism was part of the 11th Malaysia Plan with the theme 'Anchoring Growth on People', focuses on the prosperity and wellbeing of the "rakyat" as well as a part of 12 economic sectors in The National Key Economic Area (NKEA). Malaysia's mountains may not be the tallest in the world.

Up to now, far too little attention has been paid to hiking mobile applications because of existing public social media such as Facebook and Instagram. Most hiking organiser event promote their trip via social media such as Facebook and Instagram. Even so, those applications have limited features then they will move to another app such as WhatsApp and Telegram for other needs (Sulaiman, 2020). Although those social apps were very widely use, the researcher found an opportunity to create and design an social mobile application specialize for the Malaysian community.

2. Methodology

The researcher chose a qualitative approach as a method for the design research. Qualitative methods are "used as a synonym for any data collection technique or data analysis procedure that generates or use non-numerical data" (Saunders, et al., 2009). In this study, the researcher managed to interview the mobile application design practitioners, outdoor experts and the public regarding social mobile applications design and effective solutions to influence the hikers' community to get engage among them. In addition, researcher gathers all data collection and data analysis procedures with detailed description accordingly to research questions and objective. Along with this research, Participatory Design (PD) approach is used as the development methodology.

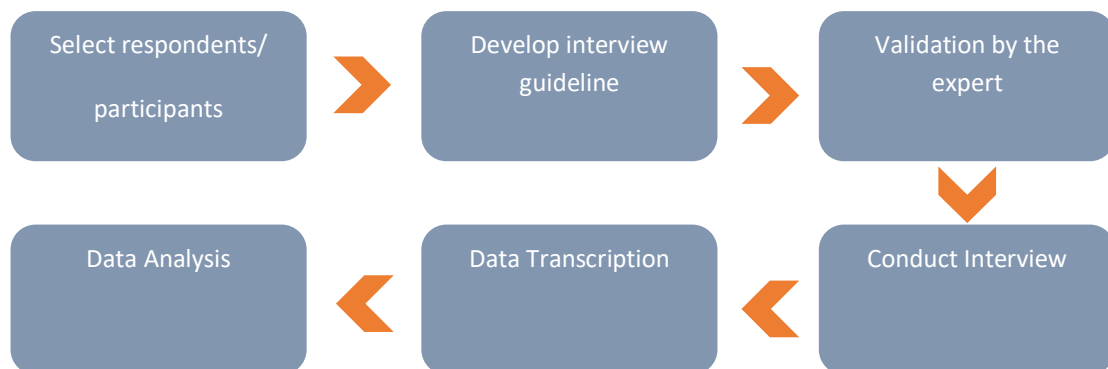


Figure 1. Research Procedure

The researcher chose Participatory Design (PD) as an approach. PD is a design approach that focused on processes and procedures of design and is not a design style. Participatory Design (PD) is also known as co-creation, co-design and cooperative design (Participate in Design (P!D), 2020). According to Greenbaum and Kyng, (1991) Muller and Kuhn, (1993) Schuler and Namioka, (1993), Participatory design is a set of theories, practices, and studies related to end-users as full participants in activities leading to software and hardware computer products and computer-based activities. The participatory design aims at including users in the design process so that users' voice is reflected in the design of a technology they use.



Figure 2. Four steps Participatory Design

3. Project Outcomes

Sneak Peak social mobile applications was developed using both Adobe Illustrator and Adobe XD. All design such as logos, icons and other design elements was made using Adobe Illustration while making wireframe and designing apps layout was made from Adobe XD.

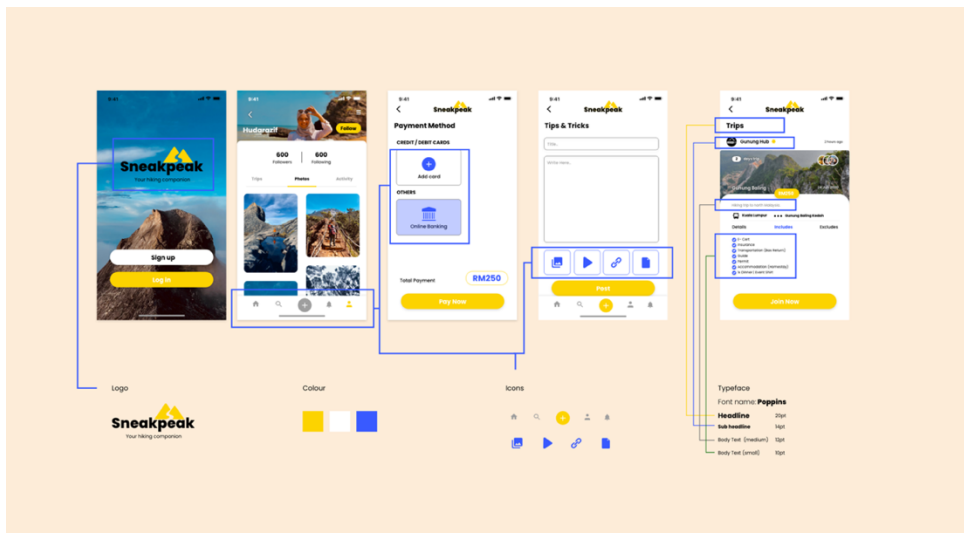


Figure 3. User Interface Design

A complimentary choice of the colour yellow and blue in the colour wheel has been chosen for Sneak Peak Apps. The yellow selected is one of the shades from gold. The yellow colour represents sunshine, happiness and fresh which are represented by nature as well. While blue is Neon blue and white as a background colour to make all content looks visible and appealing to the mood look and feel of the apps. Plass recommends to "Follow perceptual guidelines for good colour usage. Examples: use warm colours for advancing elements and cool colours for receding elements; avoid requiring users to recall in short-term memory more than 5±2 different coded colours." (Plass, 1998). The tone and voice of the icon design selected in Sneak Peak Apps is Glyph Style. Glyph style is simpler and also create corporate looks towards the mobile application. The font selected is Poppins is san-serif typeface creating a mood of clean, modern and engaging.

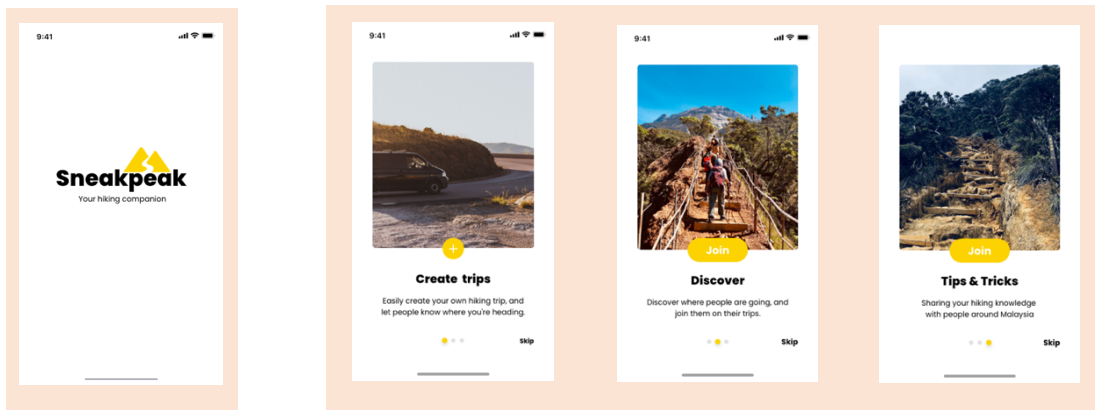


Figure 4. Splash and Benefits-oriented onboarding screen

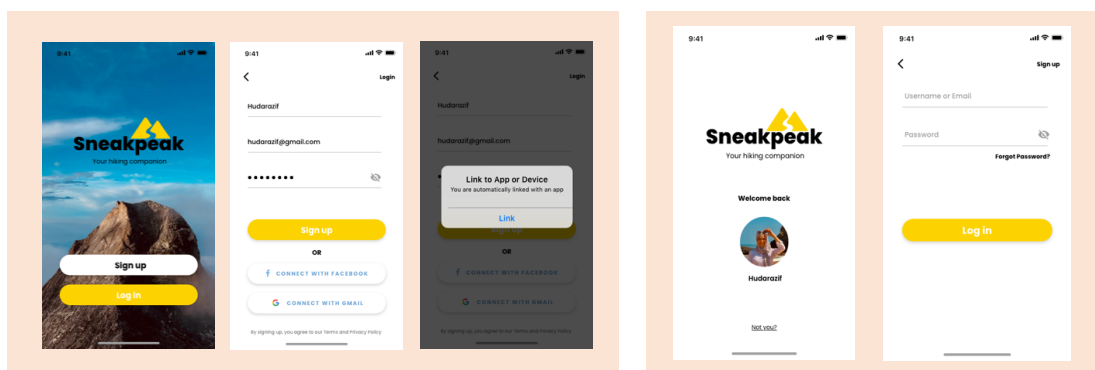


Figure 5. Sign Up and Login UI

Users need to sign up before entering the apps and explore the function and features inside the Sneak Peak apps. Users are given options for sign up which are sign up by creating an account in the apps inside or sign up automatically via Facebook and Google account which are users can choose which are more comfortable for them. After successfully sign in users need to link their Sneak Peak account with any native health app such as Apple Health apps for iOS or any devices.

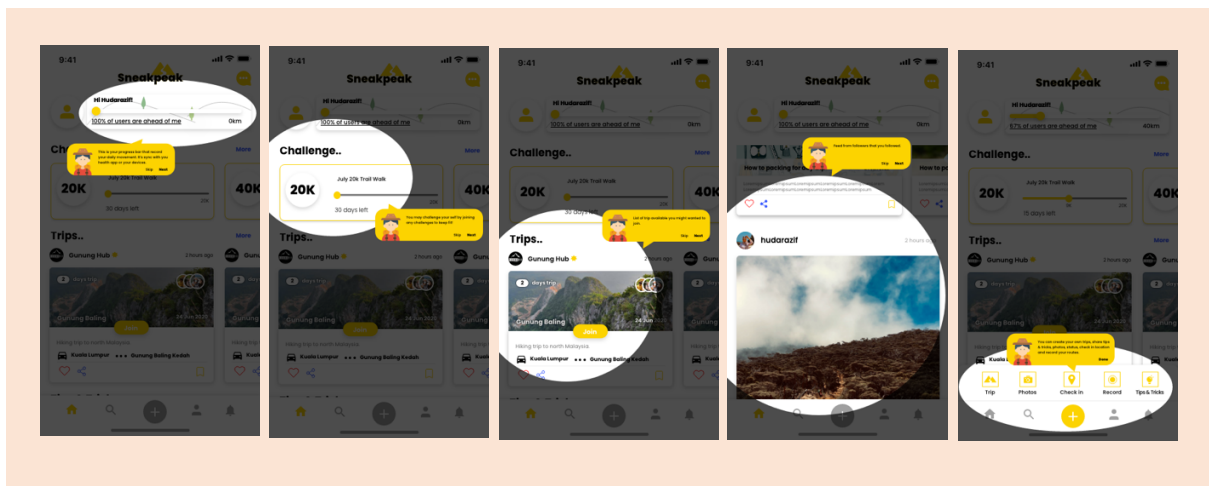


Figure 6. Onboarding screen UI

After signing in or login the apps, users will be greeted with a progressive onboarding screen which can be referred to as the simple walkthroughs that introduce users to how an app can be used and what it can accomplish. This increases the likelihood that new users understand what it is about, what tasks it can do and how to use it to do them before starting to use the apps.

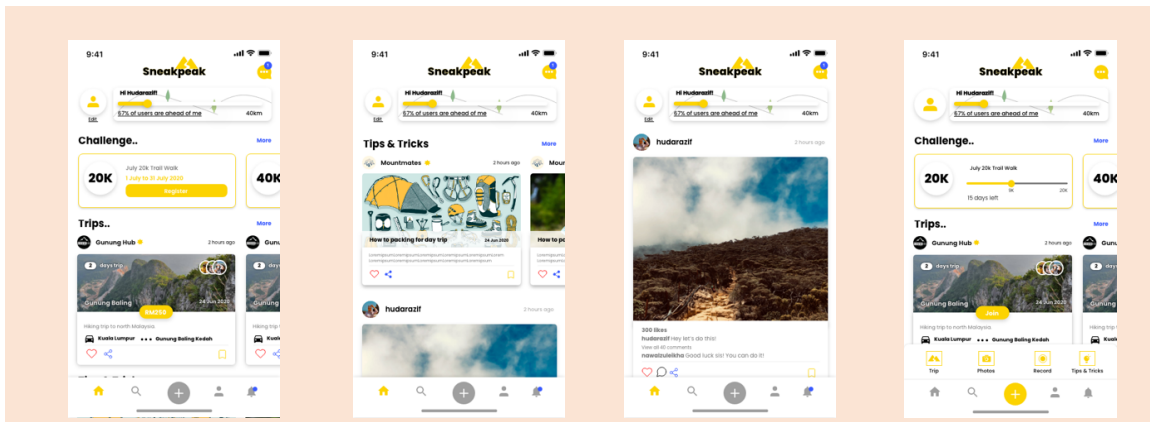


Figure 7. Home Screen

Home screen consists of the latest feeds or contents on the Sneak Peak social media apps including progress walking/trekking status on top of the screen, chat, edit profile, list of challenges available, list of events and users' photos sharing. It is separated into five core features movement tracker, challenges, trips, tips & tricks and feeds. At the bottom of the screen shown menu icons that navigate which screen is user are at the moment that been highlighted. The bottom menu consists of others features which explore/search, profile notification and add. Add features includes add trips, add photos, add tips & trick and sharing photos.

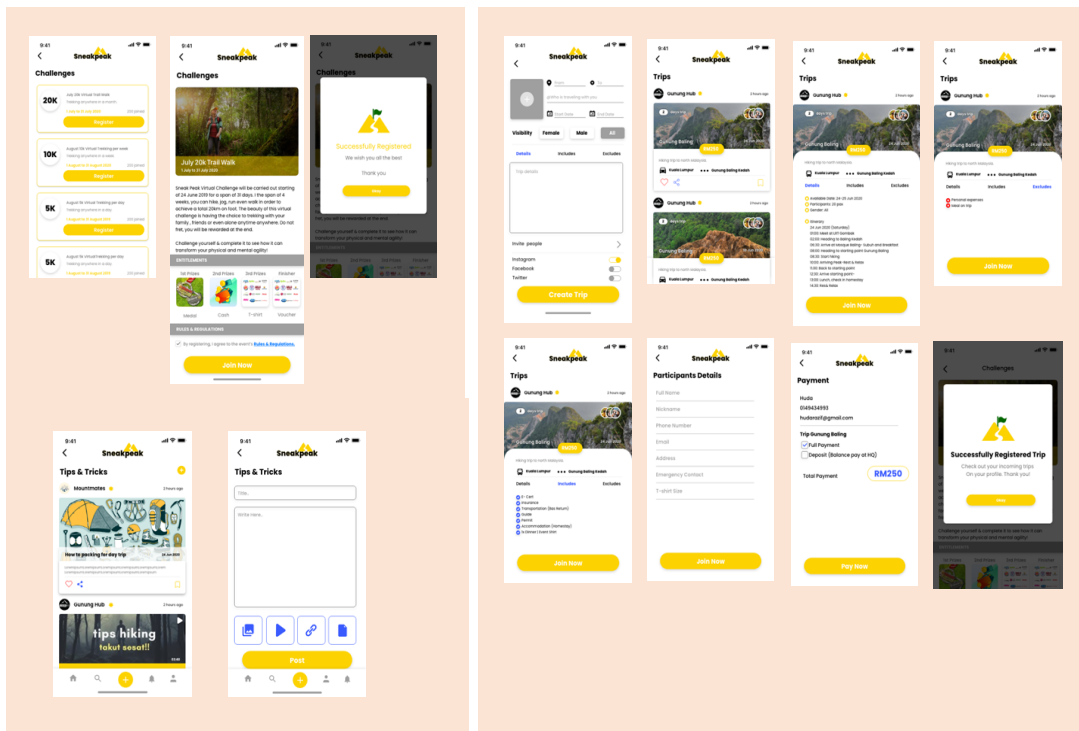


Figure 7. Challenges, Trips, Tips & Tricks Features

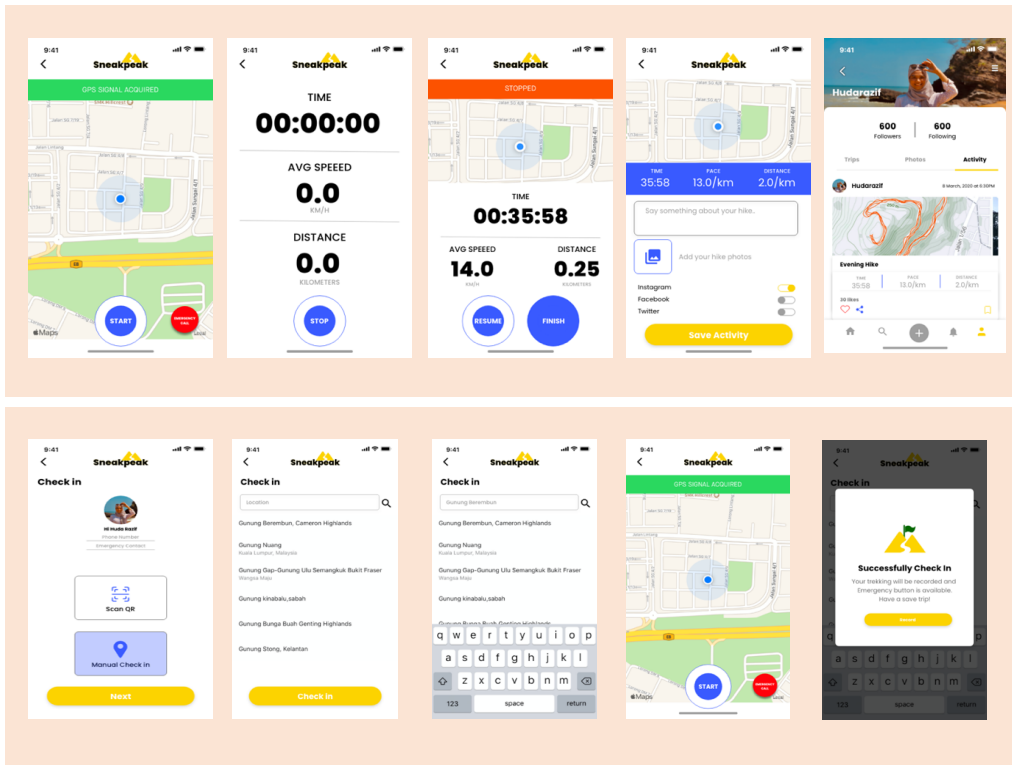


Figure 8. Record Activity & Check in Features

Other than that, Sneak Peak is also available for record trekking and hiking activity around Malaysia. The recorded activities will gain the progress bar of the movement tracker on the home page. User also can check in their self via QR scan or manual location check-in every hiking places around Malaysia. This is early prevention from loss of hiker's incidents. Trekking or hiking activity will be recorded once check-in success and the emergency button will be available.

4. Conclusion

Sneak Peak provide information and as well as hiking companion anywhere and anytime since it is a handy product. Users are unable to access any hiking information inside the social mobile apps. Furthermore, users among the hiker community in Malaysia can share their experiences either written or visual. Sneak Peak was tested by target users from the hiker's community in the Klang Valley area and also public users. User testing was held virtually to collect feedback from a user by performing several tasks. The interface was designed as per user needs which is very user friendly. This testing evaluates the app's user interface, interactivity and how the app helps them in their tasks.

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