



Faculty of Computer Science and Information Technology

**HobbyLooki ACG: Development of Mobile Event Application Related to
ACG (Anime, Comics, and Games)**

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**Bachelor of Computer Science with Honours (Multimedia Computing)
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HobbyLooki ACG: Development of Mobile Event Application Related to
ACG (Anime, Comics, and Games)

Rupert Wong Liang Hao

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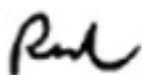
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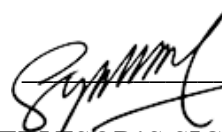
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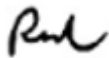
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ABSTRACT

Many hobby businesses, organizations post their information regarding hobby event news, announcements existing social media platforms. Sharing posts or make announcements through these platforms sometimes can be overwhelming due to too many random or irrelevant information and sometimes it can be distracting. Searching or discovering new ACG events can be troublesome thus, there is a need to introduce a better way to improve the ACG events discovery. The aim of this project is to build a new application prototype for ACG hobby events. The objectives for this project are to design and develop a prototype that able to share and discover information for local ACG related hobby events as well as to evaluate the usability of the prototype in efficiency, effectiveness, and satisfaction. In this project, a mobile application called “HobbyLooki ACG” is developed with the combination of both Flutter and Firebase, this application prototype serves as a library for users to share and discovers information regarding ACG news. Later, this prototype was tested with a total of 10 participants for its efficiency, effectiveness, and satisfaction. The results collected from the questionnaire done by the participants in satisfaction with 4.0 in mean (0.667, standard deviation) and efficiency with 4.2 in mean (0.632, standard deviation), the highest ratio was rated 4 out of 5, and the following by 5 out of 5 in second highest. 100% of the participants agreed this application is overall useful too. From the results shown, it can say that participants were overall satisfied with this prototype and agreed that serves well enough to fulfil the goals and purposes.

Keywords: Event-based social networks, Flutter, Hobby, Firebase

ABSTRAK

Banyak perniagaan hobi, organisasi menghantar maklumat mereka mengenai berita acara hobi, pengumuman platform media sosial yang ada. Berkongsi siaran atau membuat pengumuman melalui platform ini kadang-kadang boleh menjadi luar biasa kerana terlalu banyak maklumat rawak atau tidak relevan dan kadang-kadang boleh mengganggu. Mencari atau menemui acara ACG baru boleh menyusahkan, ada keperluan untuk memperkenalkan cara yang lebih baik untuk meningkatkan penemuan peristiwa ACG. Tujuan projek ini adalah untuk membina prototaip aplikasi baru untuk acara hobi ACG. Objektif untuk projek ini adalah untuk merancang dan mengembangkan prototaip yang dapat berkongsi dan menemui maklumat untuk acara hobi berkaitan ACG tempatan dan juga untuk menilai kebolegunaan prototaip dalam kecekapan, keberkesanan, dan kepuasan. Dalam projek ini, aplikasi mudah alih yang disebut "HobbyLooki ACG" dikembangkan dengan kombinasi kedua Flutter dan Firebase, prototaip aplikasi ini berfungsi sebagai perpustakaan bagi pengguna untuk berkongsi dan menemui maklumat mengenai berita ACG. Kemudian, prototaip ini diuji dengan jumlah peserta 10 untuk kecekapan, keberkesanan, dan kepuasannya. Hasil yang dikumpulkan dari soal selidik yang dilakukan oleh para peserta berpuas hati dengan rata-rata 4,0 (0,667, sisihan piawai) dan kecekapan dengan rata-rata 4,2 (0,632, sisihan piawai), nisbah tertinggi dinilai 4 dari 5, dan yang berikut adalah 5 daripada 5 dalam kedua tertinggi. 100% peserta bersetuju bahawa aplikasi ini juga berguna secara keseluruhan. Dari hasil yang ditunjukkan, dapat dikatakan bahawa peserta secara keseluruhan berpuas hati dengan prototaip ini dan setuju bahawa berfungsi cukup baik untuk memenuhi tujuan dan tujuan.

Kata kunci: *Rangkaian sosial berasaskan acara, Flutter, Hobby, Firebase*

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LIST OF ABBREVIATIONS

ACG	Anime, Comics, and Games
EBSNs	Event-based Social Networks
UI	User Interface
SDLC	Software development lifecycle

CHAPTER 1

INTRODUCTION

1.0 Overview

The purpose of this project is to develop a mobile application prototype for local ACG (Anime, Comics, and Games) community that able to share and discover events information. This mobile application prototype will be developed based on the Android operating system environment. The mobile application prototype of this project is used for sharing and discovering new events related to ACG hobby. Since there are more and newer coming ACG events, new sources for gathering these related information is needed to improve the way of searching these type of events.

1.1 Introduction

Japanese pop-culture related conventions have been started organizing in Malaysia since the 2000s. The hobby categories of these conventions are anime, comics, and games which known as ACG in short. Activities in ACG events such as cosplay which known as costume play of the fictional characters that fans like, selling artwork, ACG related merchandise attracted many visitors especially the youth (Yamato, 2016).

With the growth of the ACG community in Malaysia, more ACG related events or conventions are planning to be organized. Many local hobby businesses, organizations usually post announcements or information for hobby events and goods on existing social media such as Facebook or Instagram. Being a hobbyist myself, I often found that sometimes it is hard to keep track of or find local ACG events or hobby goods from these social platforms because of too many random contents. With the rapid increase of data among the

social media platform, it is necessary to filter out the important events from it (Gao, Zhang, Zhao, & Yan, 2017).

For this project, the development of a new mobile application has been proposed. The application prototype that will develop in this project is specifically for the ACG hobby community. A mobile application that allows local hobby businesses, stores, organizations to share ACG related hobby events or goods. The intention of this project is to build an alternative platform for the ACG hobby community that expected to help local fans or hobbyists to find or discover ACG related event news or information about the hobby goods easier and effectively.

1.2 Problem Statement

Many local hobby businesses, organizations post or share their information regarding hobby event news, announcements or goods on existing social media platforms for examples like Facebook, Instagram or Twitter. Sharing posts or make announcements through these platforms helps but sometimes it can be overwhelming due to too many random or irrelevant information and sometimes it can be distracting. Social media fatigue can occur when there is too much information and make users pull back from social media because tired of the massive amounts of information (Bright, Kleiser, & Grau, 2015).

As an ACG fan and hobbyist, I often found that searching or discovering new ACG events can be troublesome. Especially for those not widely known or newly organize events that most only known by the local ACG community or people who are involved with the event. There is no specific source that gathers or update information regarding local hobby-related events. Most of the time the events can only be found by knowing the title or name of the events. Finding or discovering newly announced ACG events sometimes can be

troublesome. Unless for those well-known events that organize every once a year for at least 5 years and above, for example, Comic Fiesta. Local ACG organization, hobby store mostly relies on existing social media platforms that full of random content. Sometimes the posts or announcements can be easily overlooked. Thus, there is a need to introduce a better way to improve the ACG events discovery.

1.3 Research Questions

The research questions of this project are about:

- How to provide a better solution for ACG events discovery?
- How to evaluate the effectiveness of the prototype that improves ACG events discovery?

1.4 Aim and Objectives

The aim of this project is to build a new application prototype for ACG hobby events.

And the objectives are:

- i. To design and develop a prototype that able to share and discover information for local ACG related hobby events using Android Studio with Firebase as a database server
- ii. To evaluate the usability of the prototype in efficiency, effectiveness, and satisfaction

1.5 Brief methodology

The methodology that will be used for this project is the Agile Methodology. The agile methodology consists of six phases in the lifecycle which are Planning, Analysis, Design, Implementation, Testing, and Maintenance. The reason to choose Agile Methodology for this project because it is more suitable for mobile application development. This methodology provides more flexibility for system development. It can respond to changes more quickly and deliver better results. Further explanation of methodology will be done in Chapter 3 of final year project 1. Figure 1.1 shows the Agile SDLC (software development lifecycle).

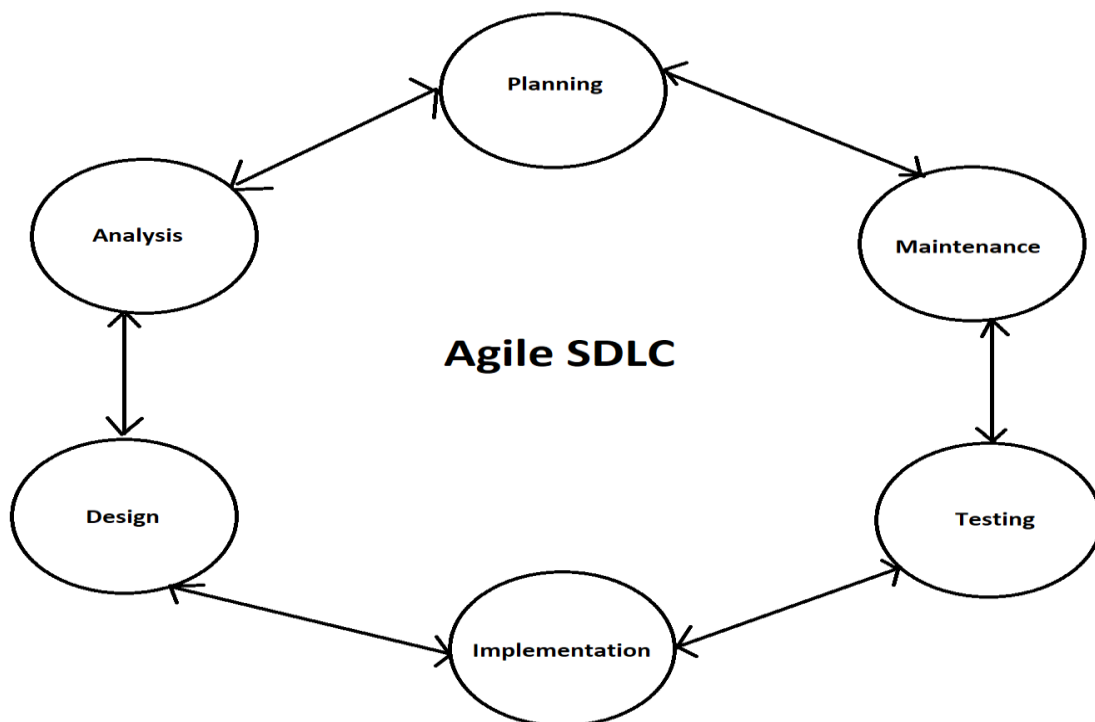


Figure 1.1 Diagram of Agile SDLC Model

1.6 Scope

The purpose of this project is to develop a new application for ACG (Anime, Comics, and Games) related hobby events and goods, therefore target users can be anyone who is interested in ACG related hobby. To be specific, it can be any regular people who are interested in this hobby or hobbyist, any ACG organization, and the owner of the hobby store.

As for final year project purposes, the scope of this project will only focus on local ACG related hobby communities. For the testing phase, this project is planning to be tested within UNIMAS. The product of this project requires at least two users to test. One acts as the creator who posts new events and another as a normal user to discover the event. Since the application prototype will be developed using the Android studio, thus android mobile devices with internet access are needed.

1.7 Significance of the Project

The application prototype of this project will benefit the local ACG hobby community. With the assists of the application allows fans, hobbyist discovers local ACG events or hobby store easier. This project prototype will also act as an inspiring, consideration, a catalyst for future ACG related application development that helps the growth of the local ACG hobby community.

1.8 Project Schedule

The full project schedule will roughly take about 8 months to complete. This project started from 13th September 2019 which is the first Final Year Project 1 briefing date. Submission of Final Year Project 1 final report (softcopy) will be on 11th January 2020. The

final year project is divided into two parts, Final Year Project 1 and Final Year Project 2. Final Year Project 1 consists of 3 chapters, Introduction, Literature Review, and Methodology. And Final Year Project 2 has 2 chapters, Implementation and Testing, and Conclusion and Future Works. Gantt Chart of Final Year Project 1 is provided below.

1.9 Expected Outcome

The expected outcome of this project is to present an application that allows users to search, share, discover or post information regarding ACG related hobby events or goods.

1.10 Conclusion

This chapter basically explains deeper details about the proposal of the project. The goal of this project is to build an application prototype to share ACG related hobby events and goods. The original purpose of the project is to build a system to improve the way of discovering of ACG events and goods to help the ACG community.