

Universiti Teknologi Mara

Habit Formation Application using Android Platform

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Science (Hons) of Computer Science Faculty of Computer and
Mathematical Science**

STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Some people want to develop a positive habit to improve their lives, such as reading a book, studying, or working out. This project proposes a solution by creating an application that promotes user habit formation on the Android platform. The mobile application promotes habit formation and the appropriate development approach has been investigated. The project includes features that assists with habit formation, such as a streak, calendar, reminder notification, habit tracking, and implementation intention. Other features include the ability to add, edit, and remove habits from the list. Before using the app, the user must also be authenticated. The database is hosted in the cloud by using Cloud Firestore, which implements non-relational database. The mobile app was created on Android Studio and uses Flutter framework, which utilises the Dart programming language. The application was developed with a number of shared packages by other developers. The user interface was created using the Flutter widget. The data in the app is extracted from Cloud Firestore and can be manipulated using the features developed in the app. The notification appears at the time and day specified by the user. Findings show that the respondents believe the app's functionalities are working well and the user interface is good. 16 out of 20 or 80% of the respondents strongly agreed that the app assists the user in forming a new habit. Based on the observations, it is possible to conclude that an app promoting habit formation has been developed.

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