## Universiti Teknologi MARA

# TickETS: A PROTOTYPE OF ANDROID APPLICATION SYSTEM FOR ETS TICKET RESERVATION

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Peace and blessings of Allah be upon Prophet Muhammad.

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### **ABSTRACT**

Intercity rail service is a service introduced by KTM Berhad over a decade ago, providing a variety of choice in terms of coaches and travel destinations in Peninsular Malaysia. The development of modern technologies especially in communication and extensive usage of Smartphone enable us to utilize numerous applications provided by the developers. The non-stop expanding of technologies have improved the transportation services by providing us a lot of applications in online trading and services such as train ticketing application, travel guide application and much more. The problem arises when process of buying ticket become time consuming and burdening the user. The needs to travel earlier for the purpose to buy the ticket that will be used next month are wasting users' time and money to go to the station. Through this problem statement, came out an objective to identify the requirements on designing and developing a prototype of Android application that can make a ticket reservation for KTM ETS service on-the-go. The scope for this application mainly intended audience is Android users who travel a lot and those who willing to travel. The scope focus on the group of user that usually travel either from KL to Ipoh or Ipoh to KL. This project is expected to create a prototype of the Android application system that able to help business-related persons and travelers in buying tickets more efficiently. It will be a great contribution to the society as it assists the process of purchasing tickets more effectively. This project proposes a developing process by using the Rapid Prototyping Model which has four major phases that should chronologically conduct. The first phase is identifying content while the second phase is building the prototype. The third phase of the development process is reviewing the prototype by conducting a live test and last but not least, the fourth phase is freeze design where the prototype being put on hold to the next process. The main intention of this study is to develop a prototype of TickETS: An android application system for ETS ticket reservation based on a rapid prototyping framework. The result indicates that the prototype application created can be implemented in KTM ETS where the probability for any new development needed is varied. This project can be extended to serve the people online as in today's world by making some changes on the prototype. The main recommendations are make joint venture with KTM Berhad to get the data integration and having integration with the bank to ease up payment process. The addition features recommendations are seat availability and real-time schedule. This prototype then can be commercialize if it has all this features.

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### **CHAPTER 1**

#### RESEARCH OVERVIEW

### 1.0 Research Background

Intercity rail service is a service introduced by KTM Berhad over a decade ago, providing a variety of choice in terms of coaches and travel destinations in Peninsular Malaysia. Many changes have been implemented to provide an easy and safe journey to the destination of their choice in the shortest time possible. In 2012, Intercity and ETS have been consolidated under a fully conducted administration of KTM Berhad. The merger led to the founding of several new products to its customers with the presentation of ETS services every two hours and standardization of existing grants.

With the increasing technology on mobile category, the development in the mobile application also increases. Various features and specifications have been identified for the response of mankind. Furthermore, with the growth of mobile platform especially Google Android in 2009, a new path for developers to build and innovate mobile technology in such a convenient environment is created. Many young developers becoming an entrepreneur, earning money by developing applications for mobile with the flexibility of the mobile platform, Nowadays, the user of smart phones is increasing due to the government's move in removing the limit to Smartphones costing RM500 or less. Jason Lo, Chief Executive Officer of Tune Talk SdnBhd, said since the announcement, demand for its smartphones has risen by over 50 percent (Bernama, 2013). "The announcement was a good move by the government. We receive around ten to fifteen new applications for the rebate daily and the figure is rising," (p. 6).