

ABSTRACT

Alamendah Village is a village in the Rancabali sub-district, Bandung, West Java, Indonesia. One of the most advanced agronomic villages and is in the Rancabali sub-district with the majority of the residents' livelihoods being farmers and traders. Alamendah Village was designated as a tourism village by the Decree of the Regent of Bandung Number 556.42/kep.71- DISBUDPAR/2011 dated February 2, 2011. With the stipulation as a tourist village, Alamendah Village has officially become a tourist village. Alamendah Tourism Village is a program that aims to empower the village's economy by turning it into a tourist location. One way to empower and develop the tourism sector in the Alamendah Rancabali tourist village is to sell tickets online or commonly called E-tickets (electronic tickets). E-tickets are widely used at large events because access and getting them are easy because visitors or buyers do not come directly to the ticket purchase location, they just need to order via the internet and pay according to the agreed price for the e-ticket and produce effective and efficient products. Currently e-tickets have replaced conventional tickets in many fields, and one example is in the world of tourism. With e-tickets, buyers or users will find it easier to print tickets and make purchases easier. In addition, with the development of Information Technology, to empower the Alamendah tourism village requires a different method and follows the development of Information Technology itself. Many people have portable electronic devices, such as smartphones and tablets that can transmit various kinds of information. Smartphone users in Indonesia are increasing every year. In 2017, there were 103 million smartphone users in Indonesia. Smartphone users in Indonesia are very diverse, ranging from the middle to the upper class, from the young to the old. Therefore, in addition to following the trends and developments of the times, marketing and development of a tourism place can also be done using software systems and mobile applications in order to further expand the reach of marketing and can be easily accessed by the public. The development of software systems and mobile applications can be done by several methods and using several tools such as Android Studio, Unreal Engine, Unity, Adobe Phone Gab, Flutter, Manifoldjs,

and many more. Android studio is one of the many software systems that work for the development of mobile applications, especially on Android. In addition to the many tools for mobile application development, there are several methodologies for developing software systems and mobile applications. The method that will be used in this research is Extreme Programming from Agile, because of the characteristics that match this research which has a small number of teams. This method is also flexible to future changes because the application will be made according to the wishes and needs of customers who will use this application. Therefore, the researcher chose to use the Extreme Programming method in developing a mobile application for the Alamendah Rancabali Tourism Village because it supports the development of complex applications and is developed by a team that has few members. From the results of this study by applying the Extreme Programming development method, researchers succeeded in developing a mobile application for selling tourist tickets to Alamendah Rancabali Village. The results of implementing the application on Android devices can be seen in the Appendix. These results are expected to be useful for subsequent research literature studies and to improve the performance and functionality of the mobile applications that the researchers have successfully developed.

Keywords— E-ticket, Portable, Smartphone, Mobile Application, Android