

ABSTRACT

Parking is a problem that has become more complex over the years due to the increasing number of private vehicles that are not equivalent to the availability of proper parking spaces. This usually causes congestion and wastage of time for people who drive four-wheeled vehicles have difficulty finding a regular parking space. This research aims to design a mobile parking application as an effective parking search and management solution in Bandung City. This application is designed with key features that can help drivers find parking more efficiently and safely such as car parking location search, complete information about parking locations in real-time, and a non-cash payment system. The design of this prototype application was carried out with a design thinking method approach through the stages of empathising potential users to testing the UX prototype application by showing a heatmap of the use of the prototype. The results of this study show that this application is able to help participants find car parking locations well because of its practical nature to use. This application is expected to help improve people's parking experience, and reduce congestion.

Keywords: *Application, Car parking, Bandung*