## **ABSTRACT**

Telemedicine in Indonesia in recent years has grown quite significantly, the use of telemedicine in Indonesia has existed since the 1990s. In that era, the development of telemedicine was still using standard telephone technology. In the current era, telemedicine is growing more rapidly. The most common form of telemedicine today is real-time interaction, where patients can contact doctors or health professionals using smartphones and the internet, patients can also make voice calls or video calls. There are problems with health services in Indonesia, namely equitable access to health, people who live in hard-to-reach places still have difficulty receiving health services because of Indonesia's geographical constraints, which has a very large area consisting of islands with poor transportation infrastructure and the associated costs. and medical services in remote areas where there is a shortage of medical staff. Based on this phenomenon, developers take advantage of opportunities in the field of telemedicine by creating health-based digital information technology that makes it easier for the public to consult with doctors, one of which is Halodoc. Halodoc is one of the leading telemedicine applications in Indonesia. Halodoc provides online health services such as consultations, search services for the nearest hospital and doctor, ordering schedules with hospitals and shopping for health needs. Therefore, using the Iterative Incremental method, a prototype telemedicine application was made based on references from the Halodoc application. Furthermore, at the design stage, business process design, data design and user interface design are made. Based on the results of unit testing, usability testing and system usability scale (SUS) with validation of all user needs, the research results are in the form of a user friendly telemedicine application prototype.

Keywords: Information System, Telemedicine, Mobile Application, Iterative Incremental, Usability Testing, System Usability Scale