

ABSTRACT

This research aims to develop an effective ambulance management website using an iterative incremental approach. The background of this study highlights the urgent need for a more structured and efficient system in managing ambulance operations, considering the challenges faced by Ambulance Heads, such as difficulties in monitoring ambulance positions in real-time, ineffective schedule management, and lack of integration between various operational functions.

The website is designed to assist Ambulance Heads in carrying out operational tasks, with key features including ambulance data management, real-time ambulance location tracking, operational schedule management, booking status monitoring, as well as driver assignment and appropriate ambulance selection. The location tracking system, integrated with GPS, allows Ambulance Heads to monitor ambulance movements in real-time, enabling quick and accurate decision-making in emergency situations.

Testing results show that this website effectively meets operational needs. Black Box Testing revealed that all system functions operate according to specifications without critical bugs. In the System Usability Scale (SUS) test, the website achieved a score of 90, indicating a very high level of usability. Usability Testing also revealed that 90% of Ambulance Heads involved could easily use the system after a brief training session, demonstrating ease of navigation, fast access to information, accurate tracking, and efficiency in managing operational data.

Keywords— Ambulance, Website, ambulance management, Asset Management