ABSTRACT

Some individuals face difficulties in establishing meaningful social connections and are at risk of loneliness. In today's era, technology offers various solutions to address mental issues through mobile applications and chatbots. The use of chatbots has proven effective in alleviating feelings of loneliness. Religion also plays a role in enhancing an individual's resilience against mental disorders. The use of mobile applications to access religious information has also become widespread.

This capstone project focuses on developing a mobile application with two main features: an interactive chatbot and an additional feature of prayer menus for the Islamic religion. Muslim.in *is an all-in-one Islamic application that offers various Islamic features. The primary feature of the* Muslim.in *app is a psychological chatbot based on deep learning methods. This application provides innovative solutions for coping with daily life challenges using a psychological approach grounded in Islamic teachings. The* Muslim.in *chatbot employs deep learning methods to provide advice, support, and solutions for user's psychological and emotional problems. The app is compatible with both iOS and Android platforms. With its responsive chatbot and advanced learning capabilities,* Muslim.in *aims to enhance the mental and spiritual well-being of the* Muslim *community.*

The testing of this application involves aspects of UI/UX, deep learning model accuracy, and the connection between the mobile app and cloud services. The product meets the criteria of usability, novelty, and sustainability. User evaluations using the System Usability Scale (SUS) indicate an average score of 87,75, while the accuracy and F1-score of the deep learning model reach 0,90. Testing using Postman and Black Box also yielded results in line with expectations. Thus, Muslim.in *app effectively provides solutions to address social, health, and usability issues associated with loneliness and meaningful social connections.*

Keywords*: Deep Learning, Cloud Virtual Machine, Multiplatform Mobile Application,* Muslim.in, *Psychological Chatbot.*