

Evaluation of the Cross-Platform Framework Flutter Using the Example of an Enhanced Cancer Counseling App

Anisha A S TKM23MCA-117

26 July 2024

Abstract

The advancement of digital technology offers innovative solutions in healthcare. Traditionally, developing separate mobile apps for iOS and Android is costly and time-consuming. Cross-platform frameworks like Flutter simplify this by allowing a single code base for both platforms.

This mini-project focuses on enhancing a cancer counseling app using Flutter, building on a prototype from the University Medical Center Freiburg. Key improvements include a chatbot for real-time support, a meditation module for relaxation, emoji feedback for better interaction, and a glassy effect for improved UI aesthetics. Dialogflow and Google Cloud Platform support the chatbot, while Firebase provides backend services.

Evaluated against existing mobile app development criteria, this project highlights Flutter's efficiency and potential in creating user-friendly healthcare apps. The enhanced app aims to improve patient well-being through interactive digital features.

References

- [1] L. Lovrić, M. Fischer, N. Röderer, and A. Wunsch, "Evaluation of the Cross-Platform Framework Flutter Using the Example of a Cancer Counselling App," Department of Psychosomatic Medicine and Psychotherapy, Faculty of Medicine.
- [2] A. Ahmad, A. Yousif, S. Ge, K. Kanli, C. Feng, and S. Mohammadasim, "An Empirical Study of Investigating Mobile Applications Development Challenges," School of Computer Science and Technology, Beijing Institute of Technology, vol. 40, p. 102655, 2021.