Cover page

Project title: ……**MedHero**…….. Academic Year: **2022/2023**

Group Members: ……**Alaa Hamayde**……

……**Hadi Nassar**……

Department Name: **Faculty Of Engineering And Technology**

Project Type : **Hardware**

Supervisor Name: …Dr.sufian Samara……

Format:

- Single space, Times New Roman.
- 12 pt,
- Maximum 1 page.

Abstract Body:

Items must be provided in the Abstract:

- Why do you think this project is important? Please explain the significance of this Project in brief.
- In your point of view what are the important aspects that should be covered in the project?
- Objective(s): In your view, please explain the main objectives of the project.
- Methodology: Give a brief outline of the application development process.
- Had this project been done before? Are there any similar applications available today?
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- **Note:** Please deliver this abstract early to ensure that your Project has been approved by the department's projects committee. **Registration will not be done without this approval.**

Project's Abstract:

The "MedHero" project is an innovative medication management solution that integrates a smart pill dispenser system with a mobile application, offering enhanced accessibility, user control, and medication adherence support. This report provides an overview of the project's objectives, methodology, key findings, and implications.

The main objective of the project is to design and implement a comprehensive medication management system that improves adherence and simplifies medication regimens for users. The project builds upon the existing concept of the "Hero" system, incorporating advancements and additional features to further enhance its functionality and usability.

The MedHero system consists of a smart pill dispenser that automates medication dispensing, provides customizable medication schedules, and offers real-time monitoring of adherence. The mobile application serves as a companion to the pill dispenser, enabling users to set up medication schedules, receive reminders, track adherence, and access educational resources related to their medications.

Throughout the project, an iterative design process was followed, employing user-centered design principles and usability testing. Feedback from users and healthcare professionals played a crucial role in refining the system's features and user interfaces. The final design offers a user-friendly experience, ensuring that individuals with varying technical expertise can easily navigate and benefit from the MedHero system.

Evaluation and testing of the MedHero system yielded positive results. The smart pill dispenser accurately dispensed medications according to programmed schedules, while the mobile application effectively supported users in managing their medication routines and improving adherence. User feedback highlighted the system's ease of use and its potential to simplify medication management.

The "MedHero" project builds upon the foundations of the existing "Hero" system, offering advancements and additional features to enhance medication management. The integration of the smart pill dispenser and mobile application provides a comprehensive solution that addresses the needs of individuals managing complex medication regimens. The findings of this project have implications for users, healthcare providers, and caregivers, and future research can focus on further enhancing the system's capabilities, expanding its compatibility, and exploring opportunities for collaboration with healthcare professionals.