



## Cover page

Project title: MediMate

Academic Year: 5<sup>th</sup> year

Group Members: Hadeel Bani Jaber

Department Name: computer engineering

Raghad omair

**Project Type: Hardware**

Supervisor Name: Suleiman Abu Kharmeh

### 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?
- **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:

With the elderly population rapidly increasing and memory issues such as Alzheimer's becoming more common, there's a pressing need for solutions to help seniors manage their medications and health. The MediMate project aims to address these challenges by creating a comprehensive system for medication intake and vital signs monitoring.

Firstly, a medication scheduling machine is at the core of the system. This machine schedules medication doses at specific times throughout the day based on the patient's needs. Users or their caregivers can input dosage information, including timing and amount, through a mobile application.

Secondly, vital signs monitoring is integrated into the system. Sensors measure important indicators like temperature, blood oxygen level (SpO2), and heart rate (BPM). This data is displayed on an LCD screen and transmitted to a mobile app.

An alert system ensures medication adherence (buzzer, mobile notification) it's time to take a medication.

Additionally, a water dispenser is incorporated into the system for medication consumption. Sensors detect water levels and notify the caregiver when they are low.

To maintain security and privacy, access to the machine is secured with fingerprint, preventing unauthorized access.

