Title: Automatic Medicine Dispenser with a Reminder System

## Rationale:

Nurses and doctors give patients drugs to ease pain, boost immunity, and lessen symptoms of COVID-19. This puts our healthcare warriors at risk when they deliver medicine to patients. Therefore, researchers invented a machine that can take in the medicine doses of an entire week, store them, and supply them to the patient at the time designated by the doctor once, at the machine's start-up. This will prevent nurses from risking their lives to treat infected patients. Once the drug is on the rack, a speaker alerts the patient to take it. Doctors can use an SD card to monitor the effect of a certain dose on symptoms. This equipment can be utilized in homes where elderly individuals forget to take their medications and need a caretaker. For home use, the system can save the patient's exercise and food timings as a reminder and operate as an alarm clock with 3 alarms. Certain drugs must be taken before or after food, so eating on time is vital.

## Statement of the Problem:

The goal of this research is to design, build and test a self-dispensing medicine machine with a reminder system. To obtain all necessary information, the research ought to answer the following questions:

- 1. How convenient is it for patients to have a medication dispenser with a reminder system?
- 2. What features may be included in this system to provide a more convenient user experience in terms of:
  - 2.1 Safety
  - 2.2 Notification Capability

- 3. What are the percentage of the project's accuracy with regard to:
  - 3.1 Classifying different medicine
  - 3.2 Administering the precise dosages of a certain medicine at the appropriate time
  - 3.3 Notifying designated personnel when medication is not consumed

## **Scope and Limitations:**

This research focuses on the development of automated dispensing machines that will provide secure medication storage as well as a reminder system. A medication reminder and organizer can assist in avoiding these potentially fatal mistakes. This device will remind the user or a loved one to take the appropriate medication at the appropriate time.