

## Project Idea Submission Form

<b>Student Ids (In ascending order)</b>
<u>1505076</u> <u>1505091</u>
<b>Project Name</b>
<u>Automated Medication System</u>
<b>Brief Project Description</b>
<p>This project is mainly made for the sick and elderly persons who face trouble in taking medicine on time. This system provides them medicine on time which is ensured by an alarm system.</p> <p>1. <b><u>Alarm Setting</u></b> : Alarm is set (at max 3) using buttons and will be shown in <b>LCD display</b>.</p> <p>2. <b><u>Placement of Medicines</u></b> : There will be three boxes of medicines, with <b>LED</b> lights inside each of the boxes.</p> <p>3. <b><u>Buzzer</u></b> : The <b>buzzer</b> starts buzzing along with the <b>LED</b> of the box at the predefined time.</p> <p>4. <b><u>Box Controller</u></b> : Three <b>stepper motors</b> will be attached to the bottom of the three boxes. These motors will control the bottom parts of the boxes. The bottom parts will be connected to a tunnel and at the end of the tunnel there will be a <b>sonar sensor</b> to detect hand of the consumer . When the buzzer starts buzzing the sonar sensor will be enabled. When the sonar sensor will detect the hand, appropriate box will be opened with the help of stepper motor and medicines will be handed to the consumer.</p>
<b>List of sensors/input devices used</b>
<u>1.Sonar Sensor (HC-SR04)</u>  <a href="https://www.techshopbd.com/product-categories/miscellaneous-98724/1343/sonar-sensor-hc-sr04-techshop-bangladesh">https://www.techshopbd.com/product-categories/miscellaneous-98724/1343/sonar-sensor-hc-sr04-techshop-bangladesh</a>  <u>2.Buttons</u>

<b>List of Actuators/output devices used</b>
<p>1.DC 5V Stepper Motor  <a href="http://store.roboticsbd.com/home/573-dc-5v-stepper-motor-uln2003-driver-board-robotics-bangladesh.html">http://store.roboticsbd.com/home/573-dc-5v-stepper-motor-uln2003-driver-board-robotics-bangladesh.html</a></p> <p>2.Buzzer  <a href="https://www.techshopbd.com/product-categories/buzzers/177/buzzer-techshop-bangladesh">https://www.techshopbd.com/product-categories/buzzers/177/buzzer-techshop-bangladesh</a></p> <p>3.LCD Display (16X2)  <a href="https://www.techshopbd.com/product-categories/lcd/254/lcd-display-16x2-techshop-bangladesh">https://www.techshopbd.com/product-categories/lcd/254/lcd-display-16x2-techshop-bangladesh</a></p> <p>4.LED</p>
<b>Miscellaneous &amp; Discussion (If Any)</b>