**Pill Dispenser**

**Equipments/Materials required:**

1. Circuit
2. NODEMCU ESP8266 wifi module
3. Motor driver with stepper Motor
4. Battery 9-12V
5. Jumper wires
6. Prototype design
7. Cardboard
8. Gum
9. Cutter
10. A 3.5mm pipe for pulley construction.(Smooth movement for belt)

**Procedure:**

1. Make the outer part of conveyor belt with the support of two pulleys (Outer region of conveyor belt).
2. Attach the conveyor belt to it make sure that the conveyor belt should have ridges.
3. Then fix the product to a hexagonal shaped box.
4. Then make sure one end of pulley is connected to motor which helps to rotate the conveyor belt.
5. Make all the connections as per circuit diagram provided. And fix it to hexagonal shaped box.

**Microcontroller is coded in Arduino C.**

**And the backend service works on the code written in php.**

**This code features and working explained in other document in detail (Report for establishing connection).**

**Services and How does it works/operates?**

|  |  |  |
| --- | --- | --- |
| **S.No** | **Service/Function** | **Working/operating** |
|  | Scheduled Medication Dispensing and Dosage reminder alerts. | Synchronizes with time, it delivers medicine which was prescribed by doctor. First it checks the time of the medicine then it communicates with microcontroller that it should start dispensing the particular medicine by sending medicine conveyor belt number. First it alerts the person by a buzzer. Then after 10-15s it dispenses from the belt. The tablet which the patient consumes/dispenser delivers its conveyor belt Number sends back to server for storing. It helps the doctor, patient and pharmacist as well to track the history. |
|  | Portable | You can take this device with you. |
|  | Compatibility with various medicines | Accommodating different types of medications, including pills, capsules, and tablets of varying sizes. |
|  | Chargeable |  |
|  | Recordkeeping | It keeps a log of medication adherence, providing a record for users and healthcare providers. |
|  | Locked Compartments | Ensuring users that only designated medicine for particular time is accessible and prevent accidental overdose. |

**Languages/technologies used:**

1. PHP
2. Arduino C
3. MySQL(LocalHost) for database.