

PHARMASSIST

Team Name: PHARMASSIST

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Idea/Approach Details

Existing Problem

Old , Blind,Deaf people have extreme difficulty when it comes to medication due to Confusions in taking medicines (intake timing ,name,dosage).They always need external assistance.

Solution

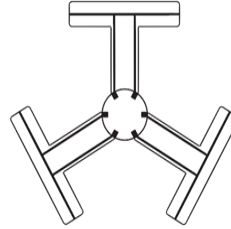
The medicines prescribed by the doctor will be **uploaded** in the **database** by the **pharmacist**.Each medicine will have a proposed **unique label** designed for it and the label will be attached to the medicine bottle by the pharmacist.The app alerts the patient to take medicine, by generating **remainder calls/messages**.

When user places the bottle on mobile screen,the **app senses the design pattern of label (distance between copper pieces of the label)** and **provide details** of medicine based on prescription in Database.

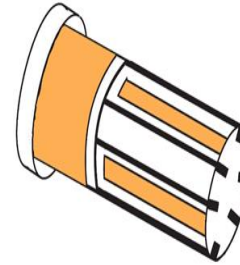
Unique features

- App can recognise the unique design of conductive copper pieces in the label.Voice Assistance for blind,old people and Text Display for Deaf(Text to speech and speech to text).

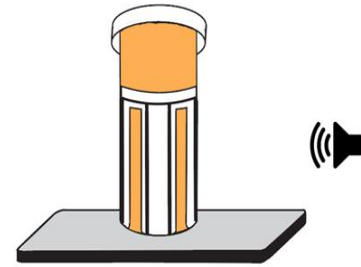
Prototype



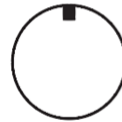
Label Design



Bottle with label



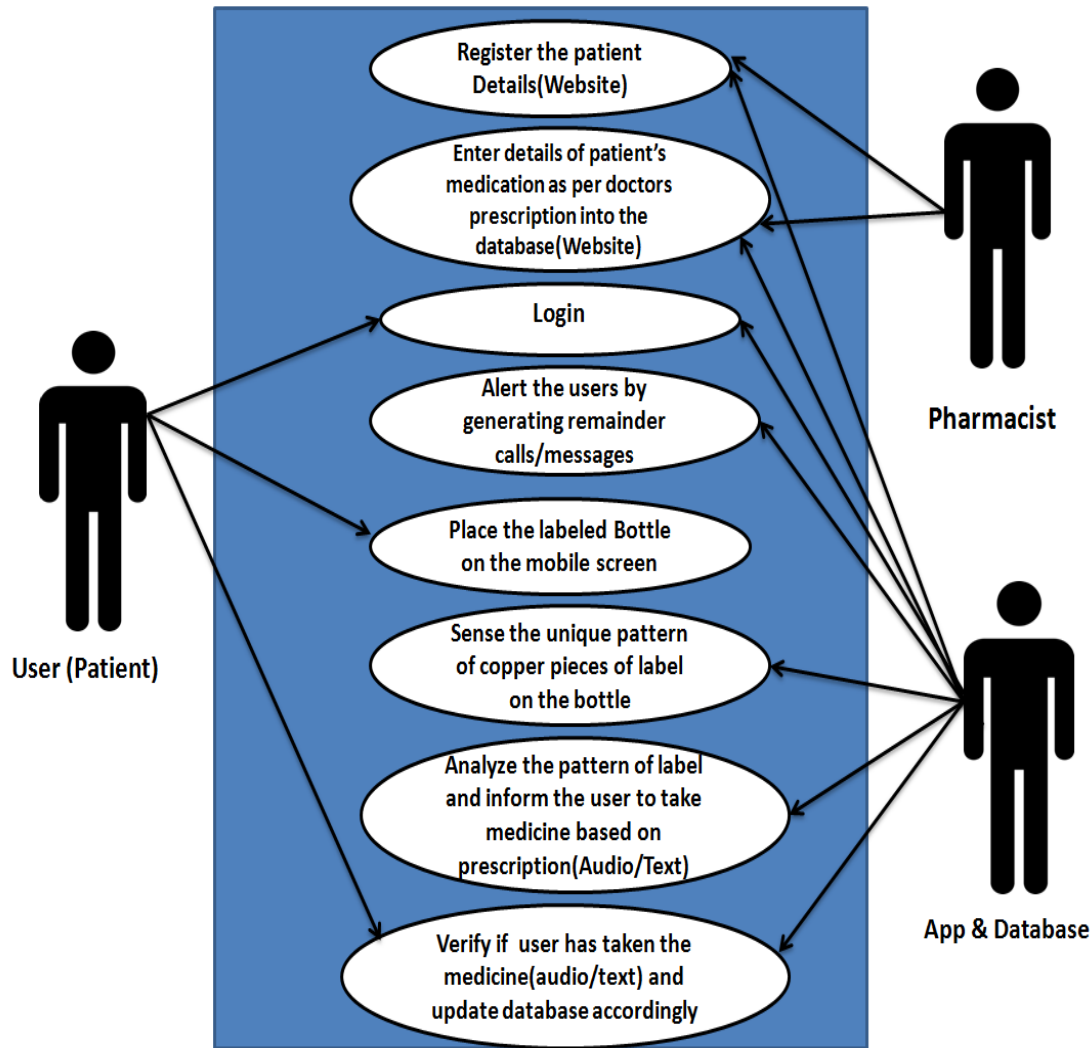
On mobile screen



These are some samples of label patterns .These patterns are made up of different arrangement of conductive copper plates.In India,there are around 1000 generic medicine names. Maximum of 720 different patterns can be generated(6 factorial). It is scalable by increasing the no.of copper pieces in label.

Technology Stack

1. Android studio (Flutter Extension).
2. Firebase.
3. HTML,CSS and JavaScript.



Dependencies:

1. Google API
 - Language Support.
 - Text to Speech.
 - Speech to Text.
 - Time zone.
1. Firebase
 - Firestore.
 - FirebaseAuth.(Firebase authentication)
 - Firebase Messaging.
 - Automatic call Generation.

Show Stopper:

1. Damaged Labels can give incorrect results.
2. Broken Mobile screens cannot sense label pattern.