MedRec

Medical Reconciliation

Team Members

- Krishna Tank (Project Manager)

- Venish Patel (Tech Lead)

- Mounika Chintanippu (QA)

Medical Reconciliation (The Safety Net)

medicarehomehealth.com

- What is the problem?
- What is the solution?
- How do we do that?

What is the Problem?

- One of the most challenging aspects of improving medication safety involves ensuring that accurate information about a patient's medications — what he or she is taking, when, and in what dose — travels with that patient throughout the health care system, and that any changes to that list are shared with other providers and then patients get notified at the particular time.
- Wrong medication, wrong time, wrong dosage, and noncompliance are just some of the major issues for patients taking multiple medications.

What is the solution?

- Medication reconciliation is essential for reducing patient harm caused by medication discrepancies across care transitions. Electronic support has been described as a promising approach to moving MedRec forward.

- The electronic tool (Web Application) supported medication history taking and the identification and resolution of medication discrepancies.
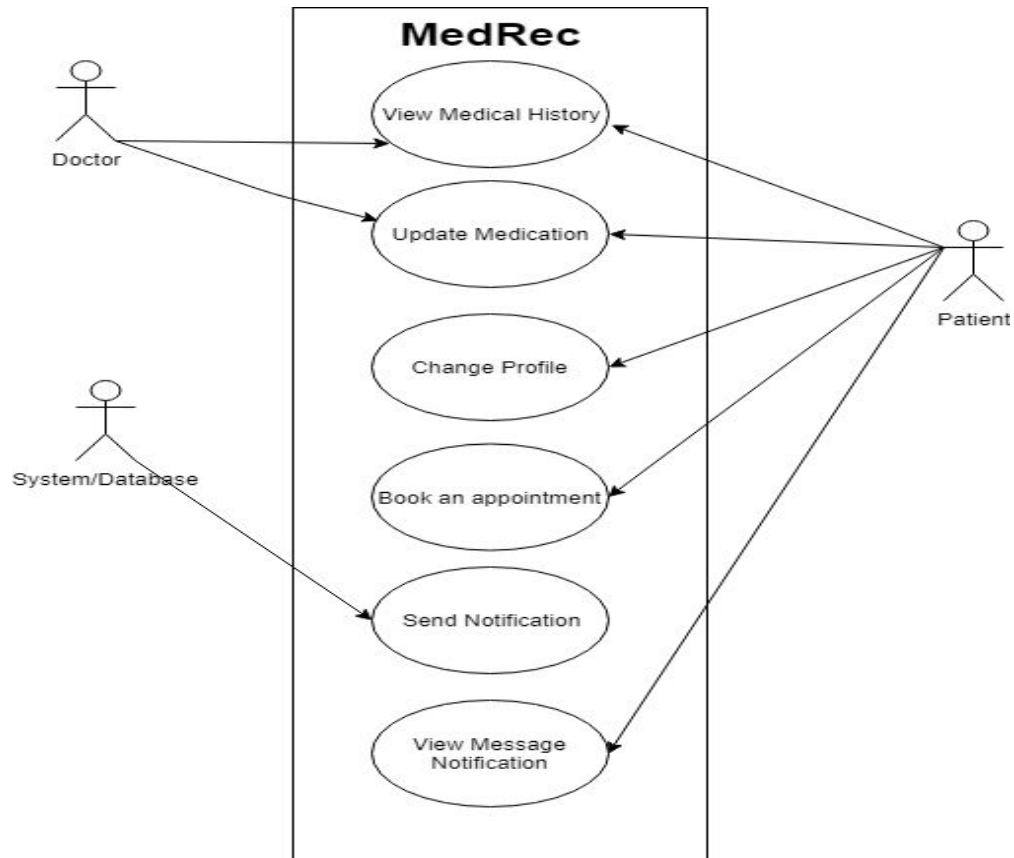
How do we do that?

- Create a platform through which elderly people get notified when it's their time to do medication.
- An opportunity exists to build a network of low-cost medication reconciliation. This web app would notify every time when a patient needs to take medicine.
- This web app will ensure the patient understands which pills to take, and at what times.
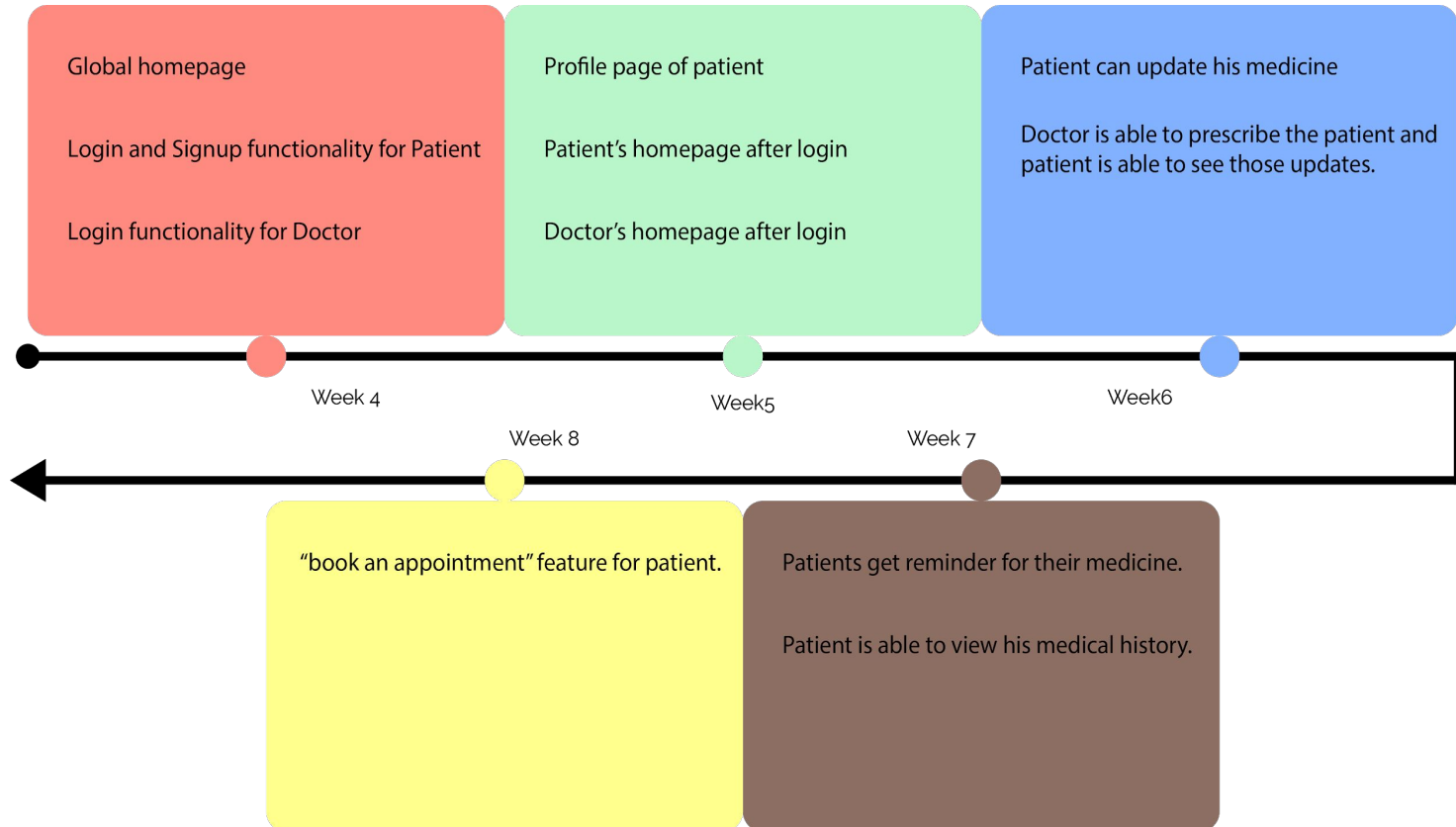
Workflow of MedRec

- We will first take details of the patient's' medical history through the web application. (i.e. What are the diseases, Which medicines he/she is taking at what time, Which doctor he/she is consulting for the medication and so on..)
- Then the MedRec Web application will save all the information of a particular patient in its database.
- And as an output, this app will notify the patient at their particular time to take the medicine.
- At the end, if needed, a patient can book an appointment of a doctor to consult regarding his medication.

Use case

Text

Timeline

Global homepage

Login and Signup functionality for Patient

Login functionality for Doctor

Profile page of patient

Patient's homepage after login

Doctor's homepage after login

Patient can update his medicine

Doctor is able to prescribe the patient and patient is able to see those updates.

Week 4

Week5

Week6

Week 8

Week 7

"book an appointment" feature for patient.

Patients get reminder for their medicine.

Patient is able to view his medical history.

Team Member's Role

Project Manager (Krishna Tank):

Takes the overall responsibilities to manage the project and play an important role in the successful completion of the projects. Communicate and coordinate with the team regarding what need to be developed and to make sure that work is done in the proper sequence.Planning the scope of the project that need to be done in the given timeframe.

Tech lead (Venish Patel):

Analyzing the requirements and build the detailed design structure. Prioritize the requirements that need to be developed and plan the execution of most important requirements based on the prioritization.Breakdown the tasks based on the complexity and assign them to the team.

QA (Mounika Chintanippu):

Ensuring the quality of the product and help the other team members in identifying the problems early before it becomes a major risk.Testing if the developed project is working as per the requirements.

Technologies

- **Front-end:** HTML, CSS, Bootstrap

- **Back-end:** Node.js, Express.js, SQL database, Twilio(SMS)

- **Deployment:** Local Environment (May be on AWS),

- **Version control:** gitHub

Prototype

MedRec

Conclusion and Future Research

- Successful implementation of electronic tool (Web Application) to support MedRec requires favorable context, properly designed tools, and attention to implementation features.

- In Conclusion the patient and doctor will be able to add the medication and the patient will be notified with the medication to be taken and also will be able to book an appointment with the doctor if needed.

- Future research is needed to evaluate the effect of these tools on the quality and safety of healthcare.

Any Questions ??