INPATCare

Submitted by:
Sahithi Akiri
Mounika Balivada
Rohan Kandikonda
Siddharth Devulapalli

INPATCare

INPATCare

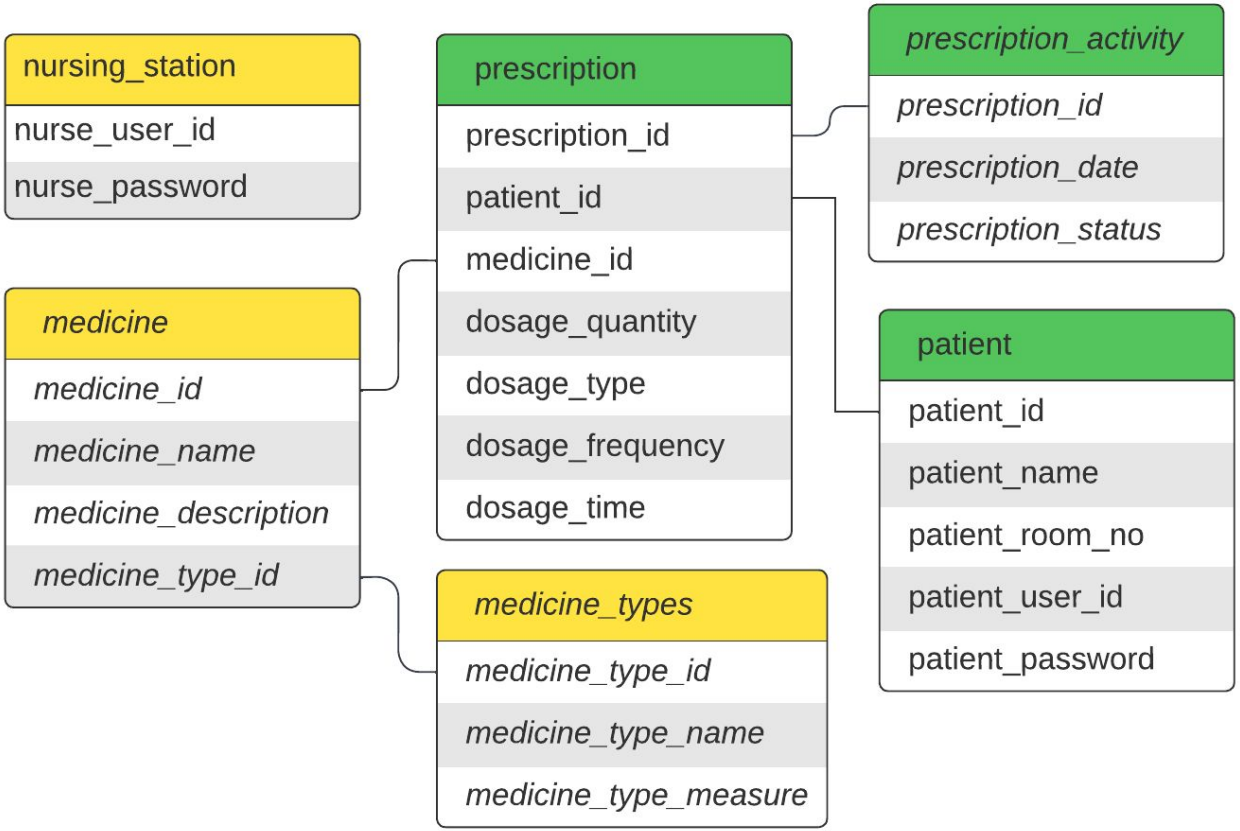
Home Login Register Contact Us

We got you!

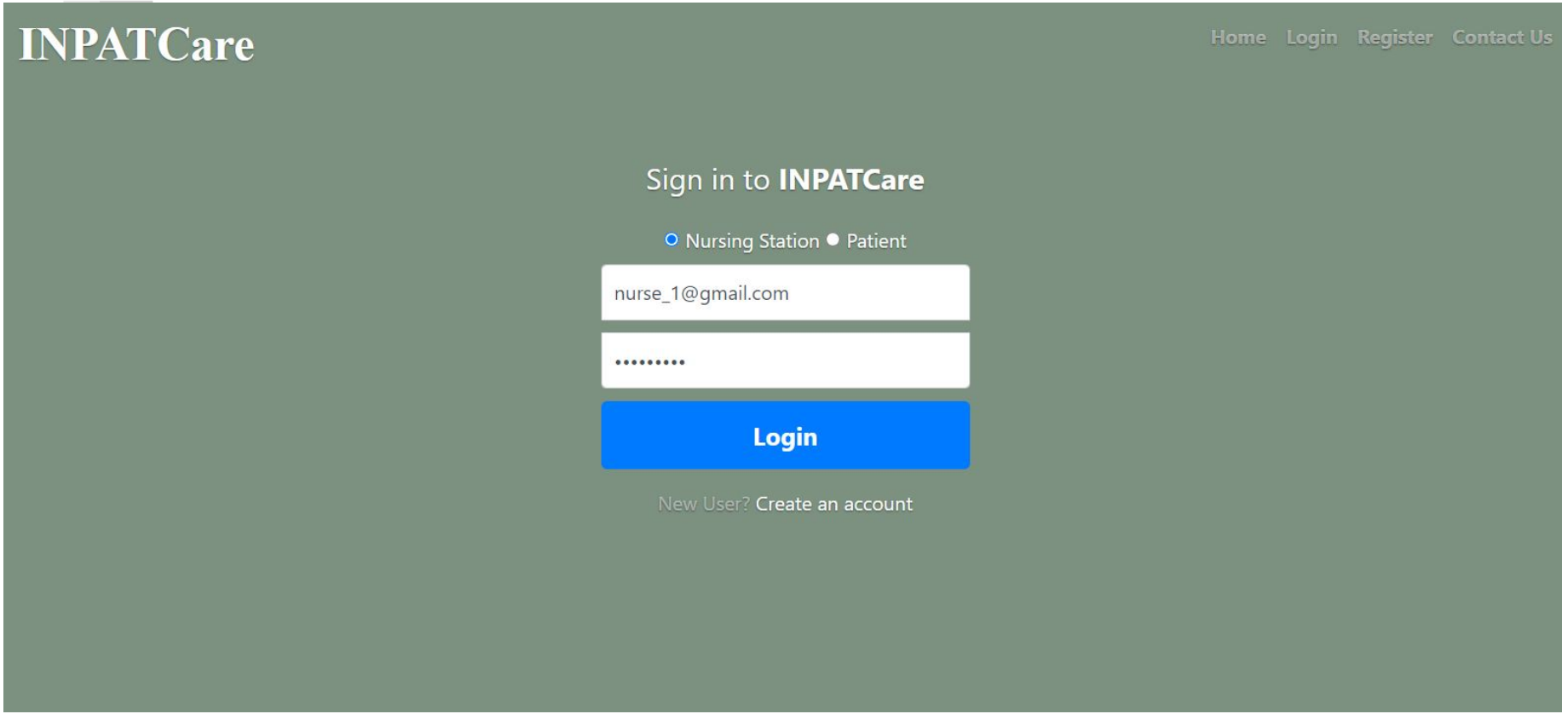
INPATCare, Our Interactive and Efficient Medicine Management System!

Home page for INPATCare

INPATCare Entity Relationship Diagram

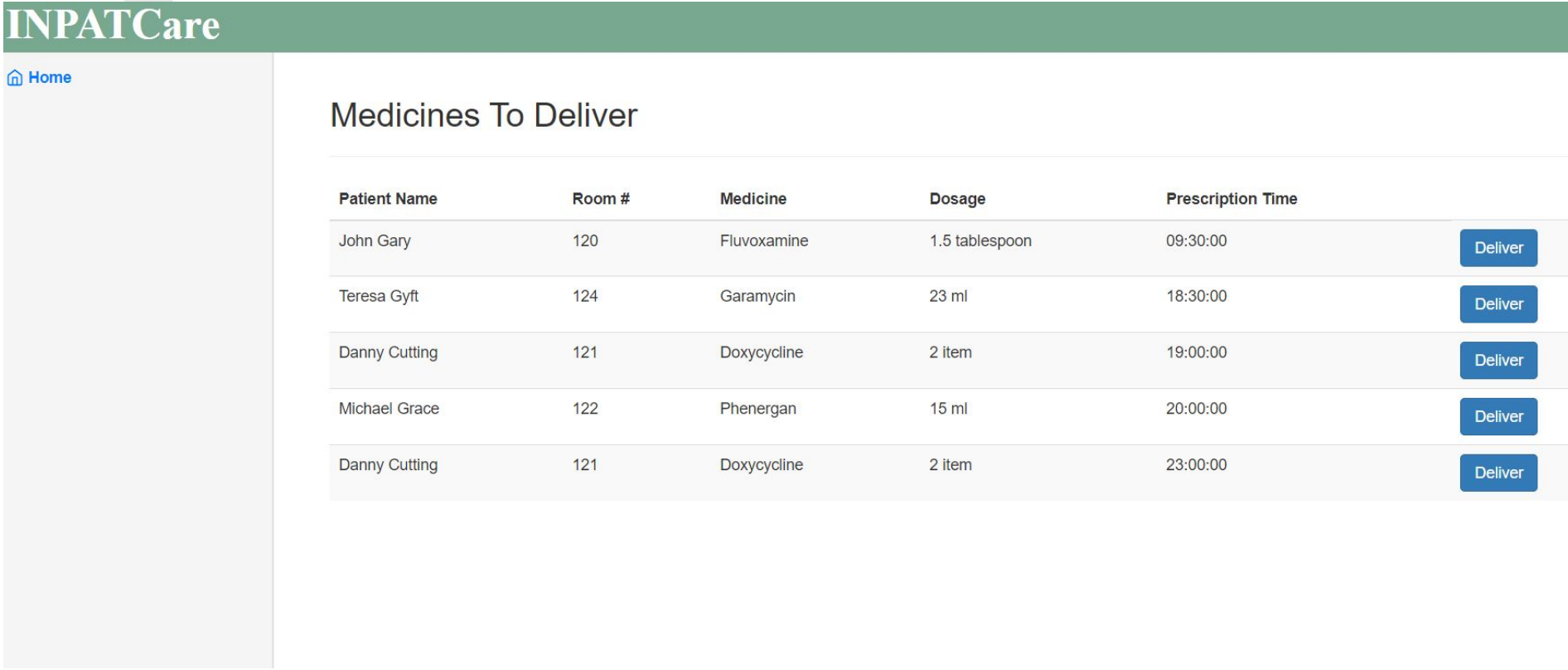


Application Login Page



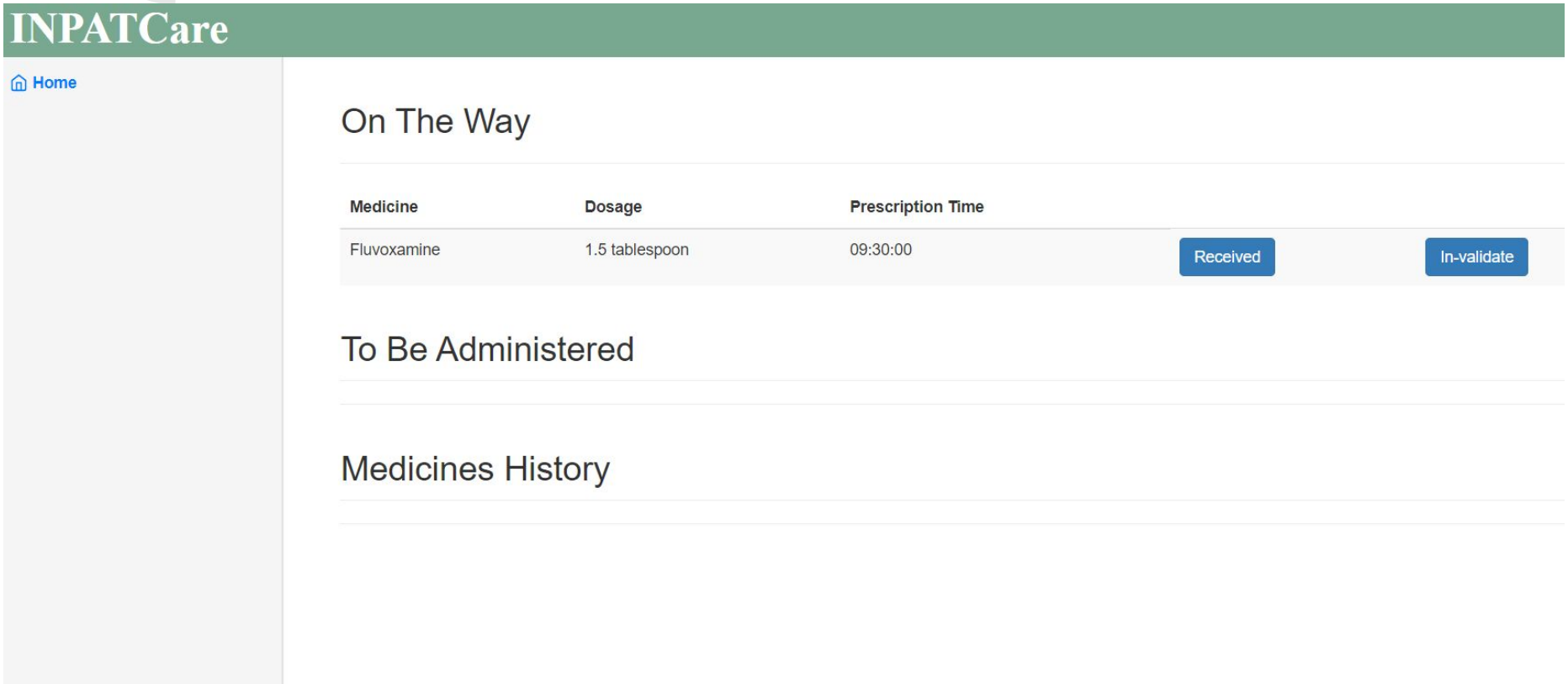
Nursing Station Home Page

Nursing Station has to facilitate the medicine delivery to the respective patient as per the prescribed medication. Once the medication is ready to deliver, the input is provided in the portal.



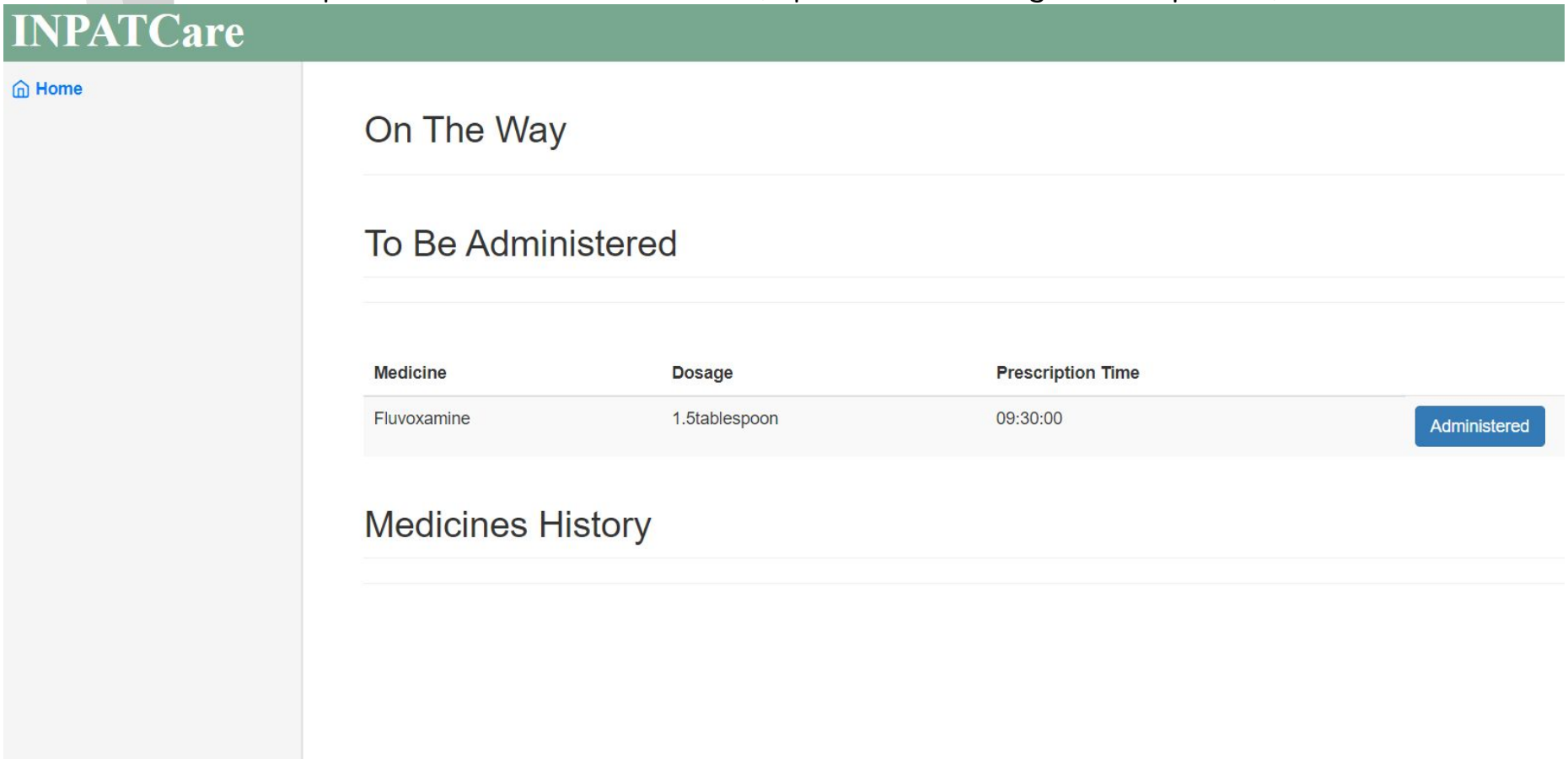
Patient Home Page(Contd.)

This is the patient home page for INPATCare. After the medicine is picked up by Nursing Station, patient can acknowledge in the portal whether the accurate medicine has been delivered or has the option to invalidate the delivery. This again reverts back to Nursing Station.



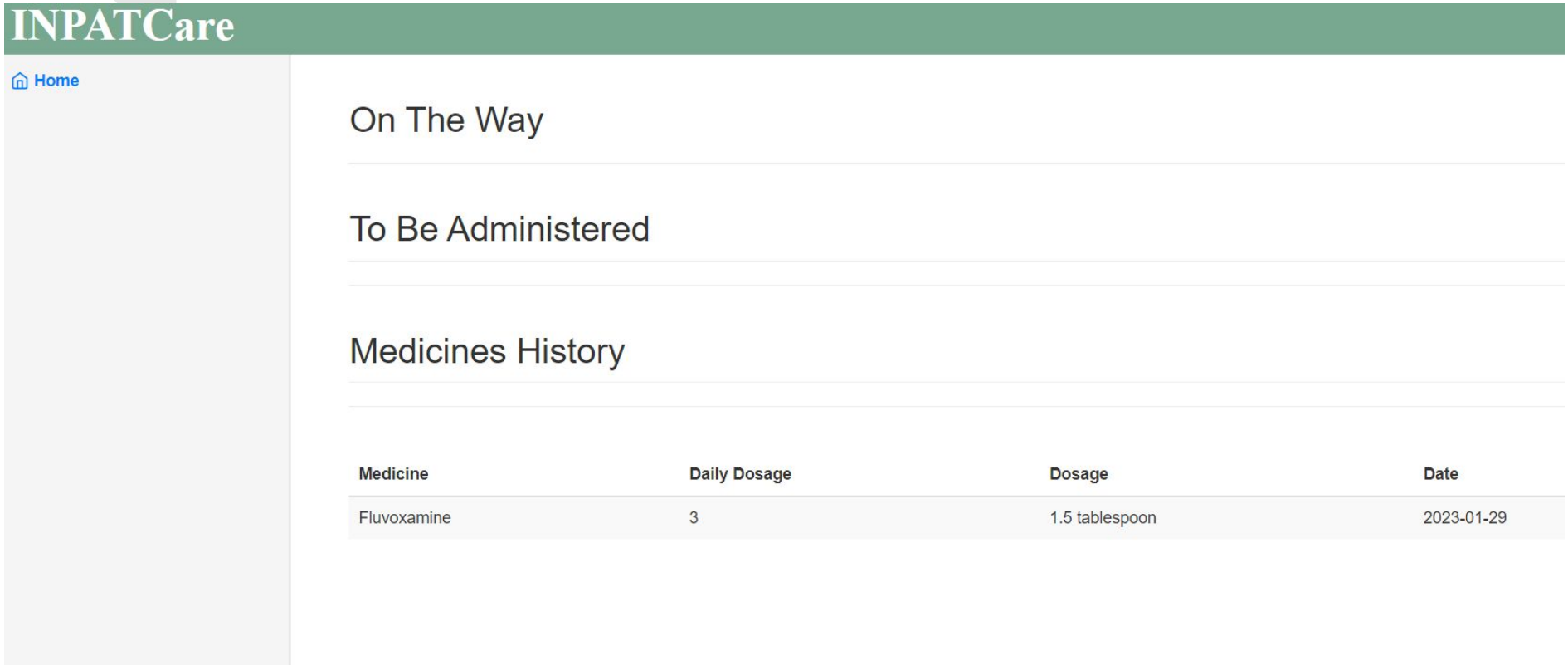
Patient Home Page

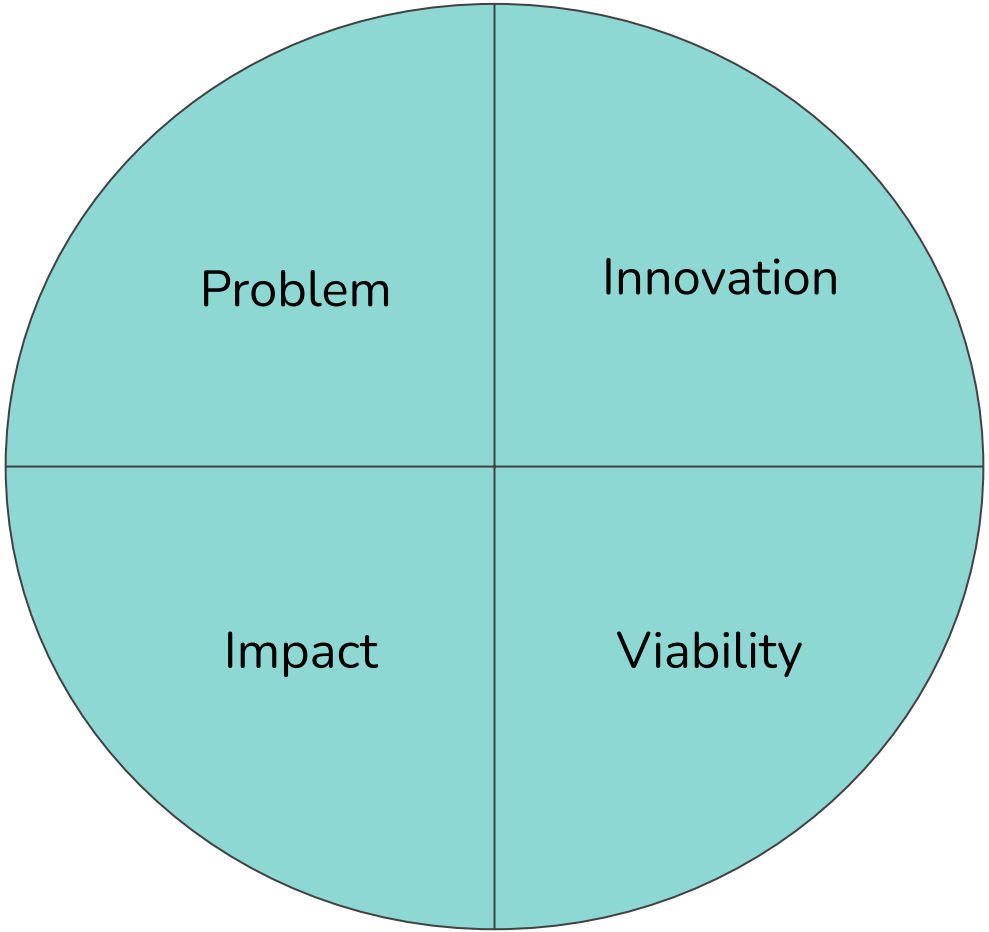
After the patient receives the medication, upon administering it to the patient, it can be noted.



Patient Home Page

All the administered medication is stored in the history.




Problem
Innovation
Impact
Viability

Problem

a) Problem statement: There is a huge chance of human error that may happen while giving medicinal doses to patients like overdosing, under-dosing, and wrong medication. The challenge is to tackle this with the best technology-enabled patient safety solution that has the potential to avert patient harm and save lives.

b) Goal: Goal of this app is to minimize human errors by keeping track of dosages and synchronizing the medicine administration between nurses and patient attendants. It addresses medication errors and errors during routine patient care.

c) Importance of solution: This application actively notifies if there is any conflict between prescribed and administered medicine. It maintains digital records of every action in this process along with time-tracking.

Innovation

a) Addresses the current solutions from multiple perspectives.

Our app empathizes with the issues of several user personas like nurses, doctors, attendants and patients. So, multiple perspectives are considered.

b) Makes a compelling case why this is a significant improvement

Right now, there is a huge scope in making manual errors in entering the dosage administration in patients by both nurses as well as attendants. Our app makes a significant improvement over this manual use case.

c) How well will this idea be implemented into care settings ?

Our app is a light-weight application which can be very easily installed in any smart device with internet connection. Given the digital capabilities of hospitals now-a-days, it can be very well implemented in the care settings.

Impact

a) Demonstrates that this solution will be value add to patient safety

Our app clearly solves the issue of imbalance in dosage during patient care. We know that a deviation from the prescription given by a doctor would be fatal in patients with serious illness.

b) This solution will be critical to the end users.

This app would be useful for the patients and attendants in clearly tracking their dosages. Sometimes, multiple nurses would deliver the same dosage twice. But through this solution, the above situation wouldn't happen which proves critically helpful to the end users.

c) Clearly shows how their solution addresses the patient safety issues.

This solution helps avoid confusion with clear action from the stakeholders and time tracking. And every prescription is stored digitally which would be useful to check the records later in the patient care. Our app can also be extended to create alerts to remind either of the parties to perform their duties with respect to dosages properly.

Viability

a) Our solution is designed considering all the constraints that hospitals might have.

b) Cost & Scalability: The solution is cost effective and the application is scalable. It is currently a web application which can be extended to all other types of devices(Android, ios, Desktop devices etc)

c) Risk: As any other software, there is chance of software malfunction but the presence of manual intervention by hospital staff will avoid this.

Way Forward

- Scope for In-App Notifications, Alerts and alarm systems for the reminders of dosage, mismatch in the prescriptions and administered dosages and also issue of overdose.

- To integrate solutions to other issues like medicine clash indication, medicine database, nutrition record and diagnostic tests timetables.

- We can include AI and Machine Learning in properly diagnosing a few diseases from the various parameters and indicators dataset of the previous patients' dataset.