Venture Project

ForgetMedNot – Text reminders to increase medical adherence

A system connected to doctor's portal that will send text message reminders to take medication with option to reply to track mediation intake

About the project

- The idea was born after talking to John Hopkins Medical staff whose main complaint was that ”the patients don’t take their medication as prescribed” at a Hackathon
- Since then I have developed the idea further, conducted market research and presented it in venture competitions
- Project Status: Rewriting the codes for the system. Old codes can be found at Github
- Tools and Languages used: Python, HTML, CSS, JavaScript, Bootstrap, Django, Angular and Twilio

* Local angel investors have shown potential interest

Overview

Problem

- Medical non-adherence is estimated to cost health care industry $100 - 289 billion per year
- 50% of the drugs prescribed are not taken accurately
- Cause for 125000 deaths and 10% of hospitalization per year

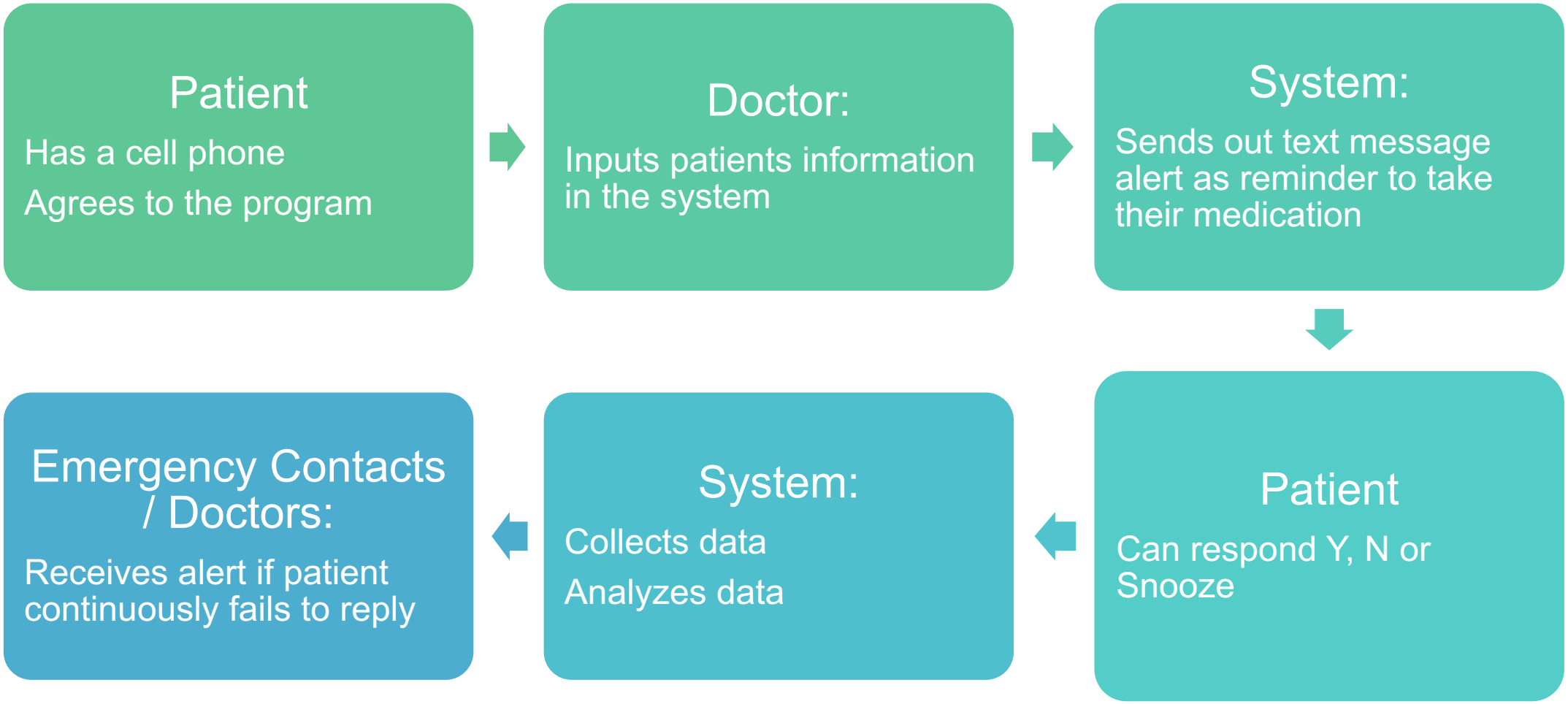
Solution

- A system that sends out text message reminders to take your medication
- Requires feedback for tracking and data analysis

Goal

- To increase medical adherence amongst patients
- To improve the health of people
- To save (possibly) millions of dollars of the healthcare industry

The Process


Patient
Has a cell phone
Agrees to the program
Doctor:
Inputs patients information in the system
System:
Sends out text message alert as reminder to take their medication
Patient
Can respond Y, N or Snooze
System:
Collects data
Analyzes data
Emergency Contacts / Doctors:
Receives alert if patient continuously fails to reply

BMC

Key partners

1. Hospitals, Clinic, Nursing homes
2. Doctors, Nurses, Caregivers
3. Geriatric patients
4. Healthcare administrative staff
5. Emergency contacts of patients
6. Insurance companies
7. HIPAA

Key activities

1. Develop the system
2. Build and manage customer relationship
3. Marketing
4. Sales and Customer Service
5. Data collection and analysis
6. Secure financing
7. Scope for app
8. Medical staff and geriatric patients training

Key resources

1. System
2. Sales and customer relations
3. Team (Engineers, software developers, operations)
4. Data Analytics
5. Patents
6. Venture Capital

Value proposition

1. Make people healthier by increasing medical adherence in geriatric patients
2. Save medical industry $$
3. Make it easy for doctors to provide outpatient care
4. Reduce financial burden of patients

Customer relationships

Customer acquisition – build relationship with hospitals, clinics and insurance companies.
Customer Retention - emphasis on timely delivery of the system and it working well.
Customer relationships – patients, hospitals and clinics

Channels

Through hospitals and clinics
Word of mouth

Customer segments

1. Geriatric patients who own and can use their cell phone
2. B2B with hospitals and clinics
3. Hospital and clinic staff and care givers
4. Geriatric patients emergency contacts who can persuade them to sign up

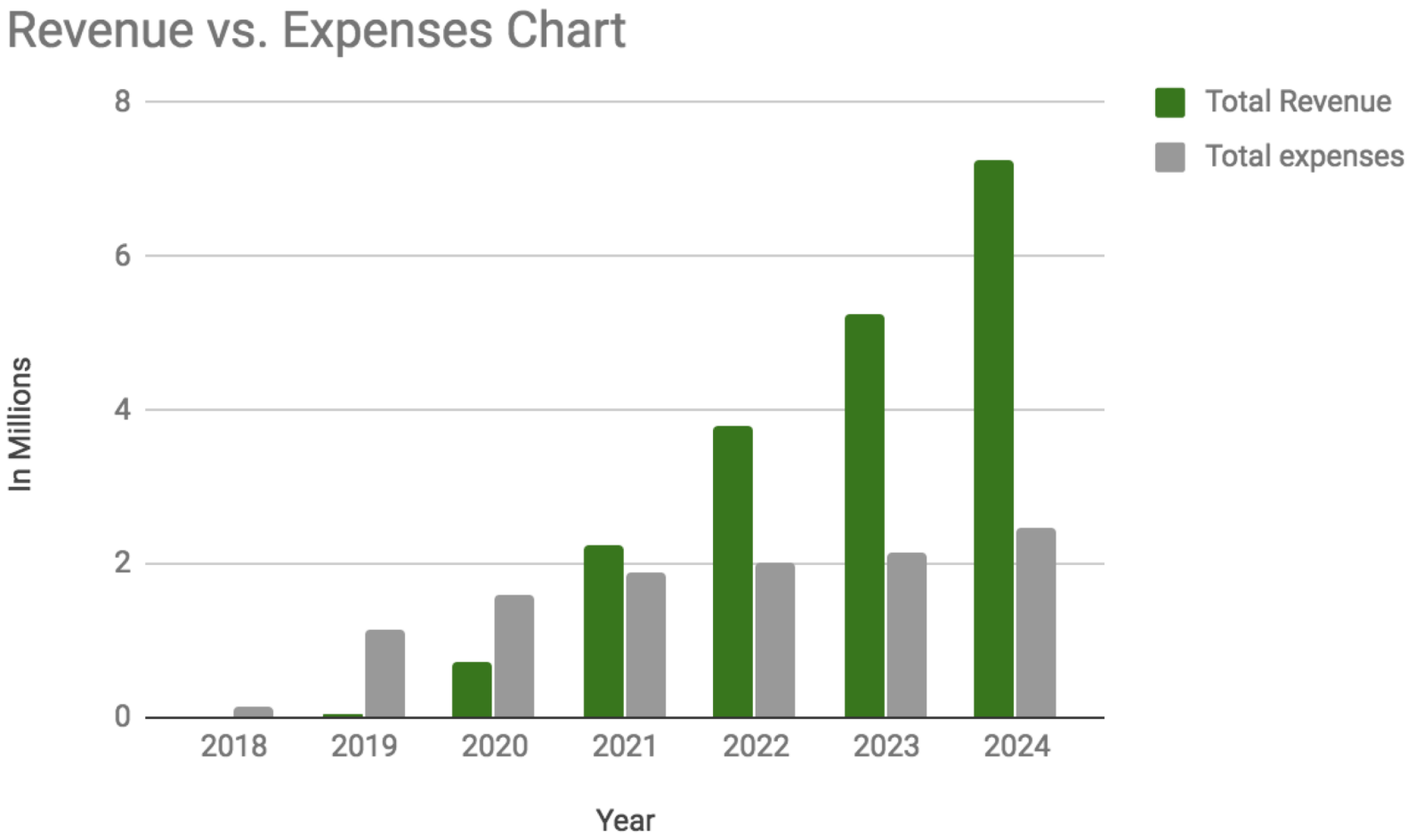
Cost structure

1. Human Resources
2. Technology development and maintenance
3. Variable costs derived from demand, PR/Marketing, and customer acquisition costs
4. Research, consultation and acquisitions
5. Data maintenance and security
6. Fixed costs of building, amenities and more

Revenue streams

1. Charge hospitals a fixed amount per month based on the amount of users (patients)
2. Offer a trial period
3. Sell the data analytics back to hospitals, insurance companies and pharmaceutical companies

Finance


Revenue vs. Expenses Chart
8
6
4
2
0
In Millions
2018
2019
2020
2021
2022
2023
2024
Year
Total Revenue
Total expenses

Funding

- **Bootstrap:** Participating in venture competitions. $250,000 - $500,000
- **Seed:** Angel Investors, Friends, family and personal investments: $300,000 - $500,000
- **Series A:** Venture: $1 - 2 Million

Note: There is interest from Angel Investors with large capitals in Washington DC

Scalability

- App Development
  - Targeting younger demographic
- Linking with pharmacies
  - Prescription refill option
  - Choosing brand
- Selling Data Analytics
  - Pharmaceutical Companies
  - Insurance Companies
- Use blockchain and AI to secure data
  - IoT security for healthcare industries go-to-market (GTM) strategy

Window of Opportunity

- Growing Baby Boomer
  - Technically inclined
- Growing number of prescriptions

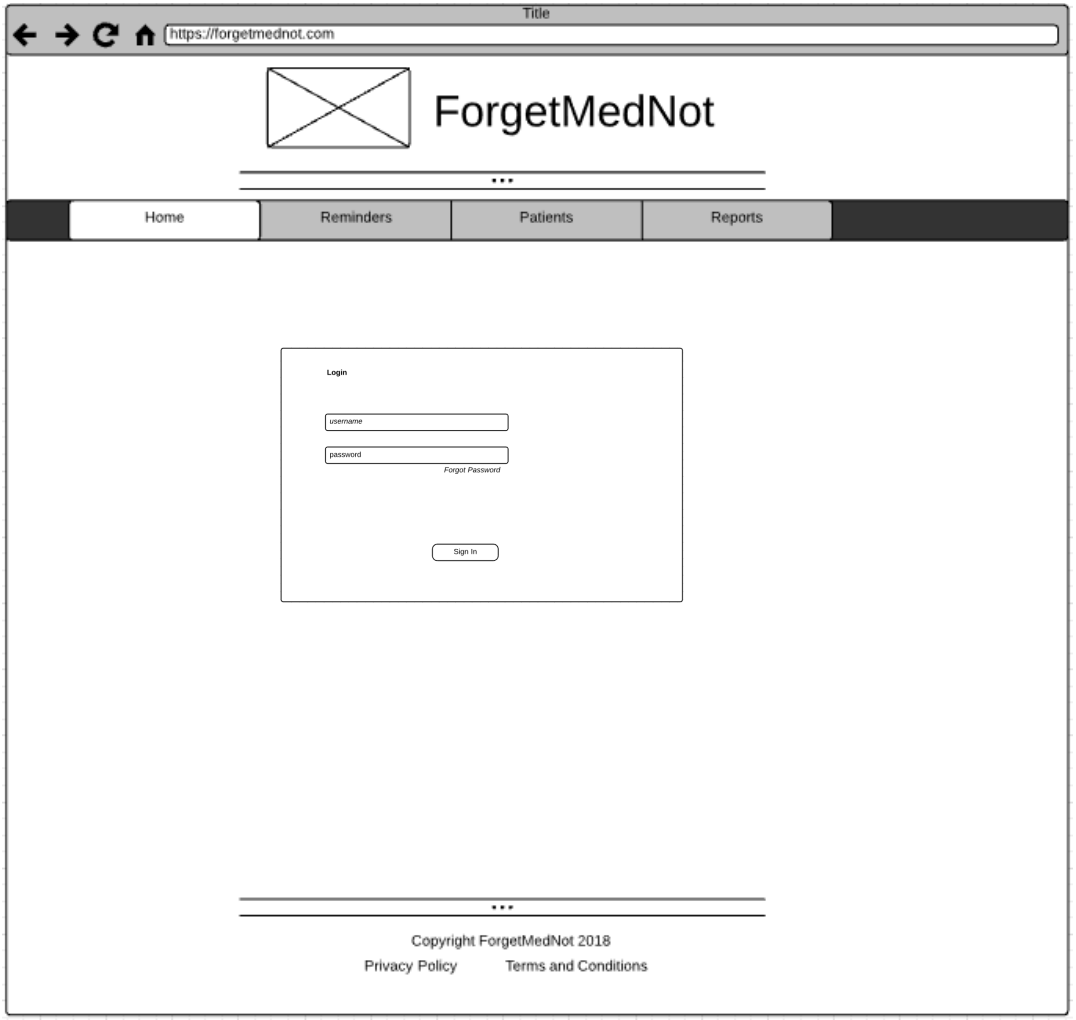
Exit Strategy

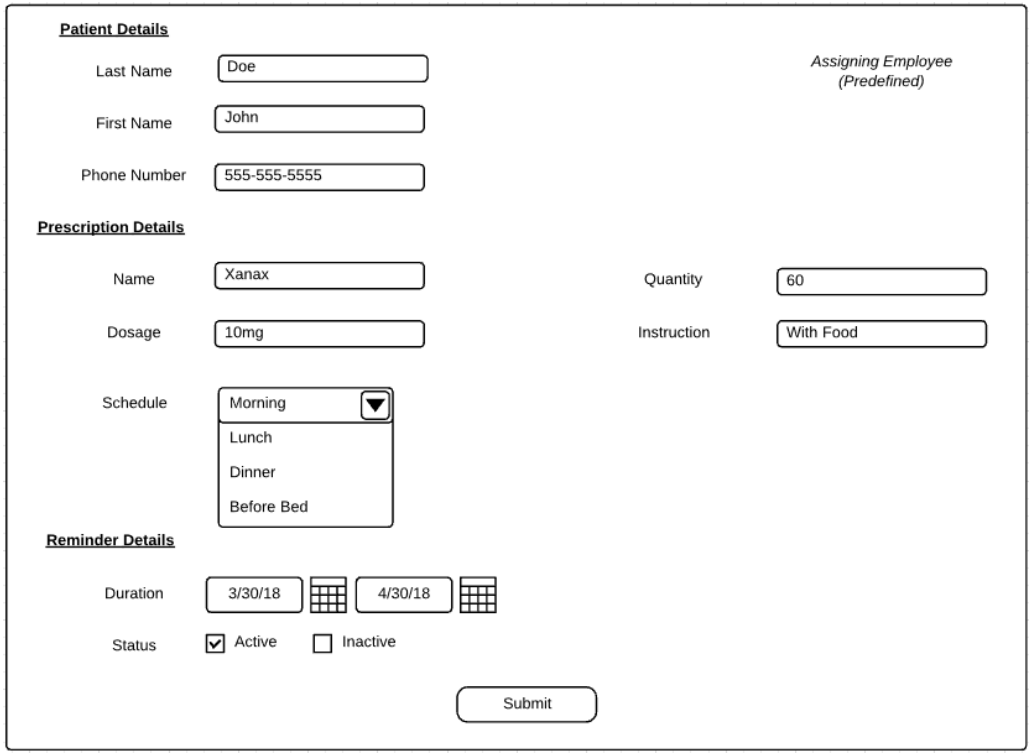
- Merge with a large hospital network

Appendix: ROI

Items	2018	2019	2020	2021	2022	2023	2024
Subscription	-	50,000	240,000	1,500,000	2,550,000	3,750,000	5,250,000
Data Analytics			500,000	750,000	1,250,000	1,500,000	2,000,000
Total Revenue	**-**	**50,000**	**740,000**	**2,250,000**	**3,800,000**	**5,250,000**	**7,250,000**
System developers	150,000	600,000	700,000	700,000	700,000	750,000	900,000
Rent, supplies & other	-	24,000	30,000	36,000	42,000	48,000	54,000
Data maintainence, storage, security	2,000	50,000	75,000	90,000	105,000	115,000	130,000
Equipment and instalation		75,000	100,000	120,000	135,000	150,000	200,000
Sales and marketing		400,000	700,000	950,000	1,050,000	1,100,000	1,200,000
Total expenses	**152,000**	**1,149,000**	**1,605,000**	**1,896,000**	**2,032,000**	**2,163,000**	**2,484,000**
Total Profit	**(152,000)**	**(1,099,000)**	**(865,000)**	**354,000**	**1,768,000**	**3,087,000**	**4,766,000**
Metric # Users	0	25,000	120,000	500,000	850,000	1,250,000	1,750,000
New Users	0	25,000	95,000	380,000	350,000	400,000	500,000
NPV	5,478,378						
IRR	50%						
Cash needs (2018-2020)	2,116,000						

Appendix: System design prototype

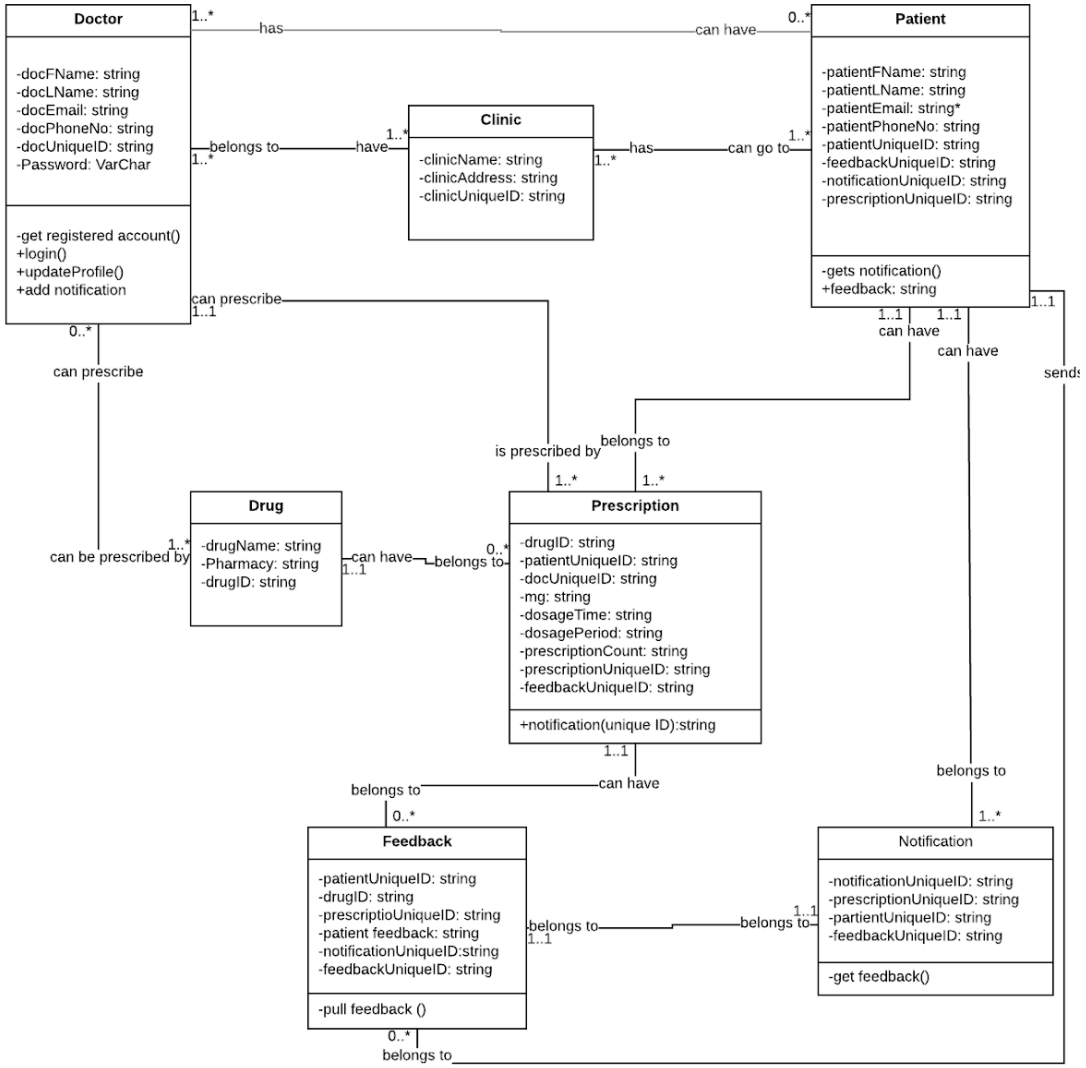




Appendix: User Stories examples

- As a user I want to remember to take my medication on time so that I remain healthy
- As a user I want to keep track of the medication I took so that I don’t skip on them or take the same medication twice
- As a doctor I want my patients to take the medication as prescribed so that they become healthy
- As a doctor I want to see how and when my patients are taking their medication so that I can work with them to improve their health
- As an emergency contact of the patient I want to know if the user is not responding to the messages so that I can check up on them

Appendix: Class Diagram



Thank you

Comments, questions, thoughts?

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