# **Advanced Software Engineering**

Project Increment-1



## **Smart Health**

## Team\_7\_The\_Mavericks

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#### 1. Introduction

#### **Smart Health**

In frequent change of climatic conditions, it is usual to fall sick. In our day to day lives, we don't have enough time to go to the hospital and it is hard to know the disease despite knowing the symptoms and sometimes we don't know the basic health remedies. Thus, we here try to afford an immediate assistance and medication to the user based on his symptoms for feeling ill.

## 2. Project Goal and Objectives

#### **Overall Goal:**

In the present scenario. People are very busy with their day to day tasks. They don't have enough time to consult doctor. Our application makes their tasks simple and easier.

### **Significance:**

Today we can see a bundle of applications for medical assistance, but our application stands out among all. In this application user enters symptoms that he senses and will acquire the diseases which are connected with the symptoms he entered. And also user is assisted with the nearest pharmacy location and the Doctor available nearby.

#### **Objectives:**

The main objective of developing this project is to make user's work simple and easy. The tasks to be performed in this application are the user can get the details of the disease based on the symptoms entered. He can get see the category of the disease and he can find specialist for that disease. He can choose an option to find the nearest medical stored based on the current location.

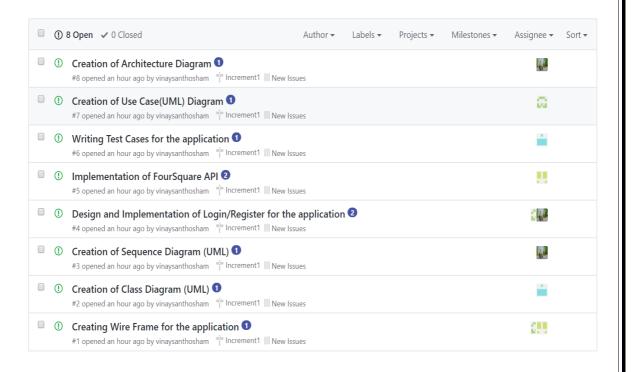
#### **System Features:**

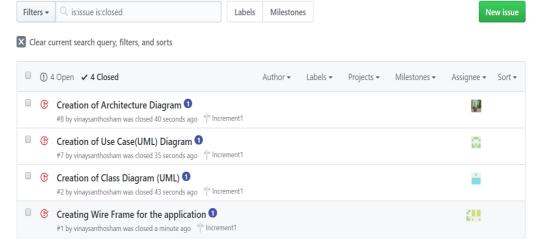
- Login Page for User.
- Register page for User where he can create a account to get access for the application.
- In case of emergency it will detect the location of the pharmacy store nearby.

## 3. Project Plan

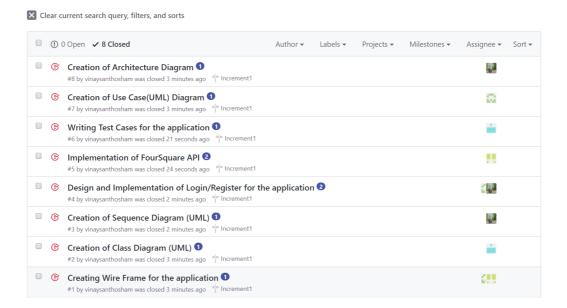
#### **ZenHub Screenshot:**

For Increment 1 we worked on issues regarding login and register pages. And also worked on implementing **FourSquare API**. In the next increment we are planning to implement login through google signin and also on Drug API which detect the disease based on the symptoms entered by the user. It will categorise the disease and it will suggest the specialist doctor available in that particular location





OProTip! Ears burning? Get @sirisha1206 mentions with mentions:sirisha1206.



#### **Burndown Chart:**

Based on issues created in milestones in github we are able to draw below burndown chart.



# 4. First Increment Report

#### **Existing Services/REST API**

## Google API:

Apart from manual Sign In, we also included google sign with Google API using OAuth 2.0 so that users can login with their respective existing accounts.

#### FourSquare API:

This API is used to get nearest pharmacy stores when location is given as input for the application.

#### **Ionic Framework:**

This framework is used mainly because to run the application in all types of devices i.e in Web, Android and IOS.

#### API's To Be Used:

- Google Maps
- apiMedic

# **Detail Design of Features (using tools)**

**WireFrames:** 

1. Login Page:



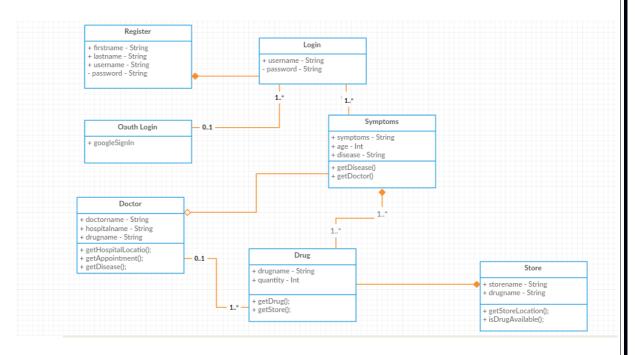
2. Register Page:

| ● ● ● Smart Health - User Registration Page |                                       |  |  |
|---|---------------------------------------|--|--|
|   |                                       |  |  |
| User Name:                                  |                                       |  |  |
| First Name:                                 |                                       |  |  |
| Last Name:                                  |                                       |  |  |
| Email:                                      |                                       |  |  |
| Password:                                   |                                       |  |  |
| Confirm Password:                           |                                       |  |  |
|   | Register                              |  |  |
|   | creately                              |  |  |
|   | www.creately.com • Online Diagramming |  |  |

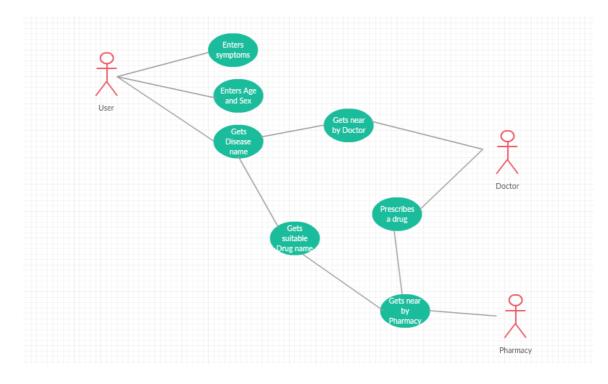
# з. **Home Page:**

| ● ● ● Smart Health _ Home Page |                 |                  |                  |          |
|--------------------------------|-----------------|------------------|------------------|----------|
| Home Page                      | Find<br>Disease | Find<br>Pharmacy | Find<br>Doctor   | Log Out  |
|                                |                 |                  |                  |          |
|                                |                 |                  |                  |          |
|                                |                 |                  | www.creately.com | creately |

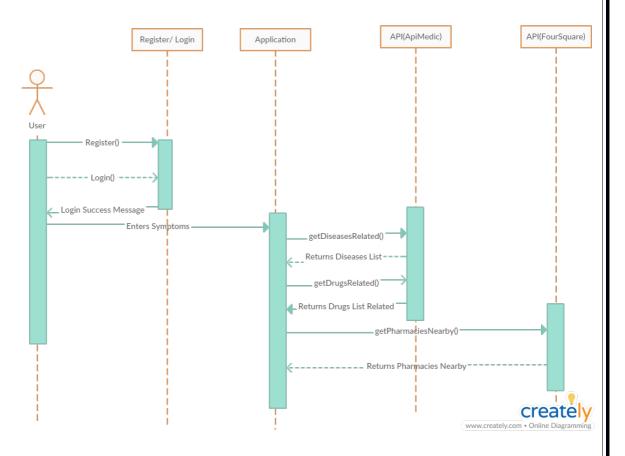
## 4. Class Diagram:



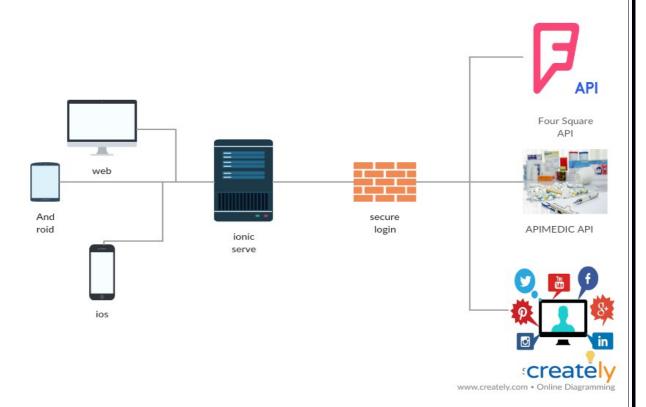
## 5. Use Case Diagram:



## 6. Sequence Diagram:



## 7. Architecture Diagram:



### **User Stories:**

| As   | Conditional                             | I want                          | So  |
|------|---|---------------------------------|---|
| User | Who is authorized to enter symptoms.    | To enter the symptoms he has    | He can get disease for the symptom.                             |
| User | Who gets disease symptoms               | To get the disease symptoms     | He will go to nearby doctor for prescription.                   |
| User | Who goes to a doctor                    | To get the drug for the disease | The doctor will give prescribed medicine based on the symptoms. |
| User | Who goes to<br>nearby pharmacy<br>store | To get the prescribed drug.     | His disease gets cured.   |

# **Unit Testing:**

| Case     | Test Case   | Expected<br>Outcome   | Actual<br>Outcome   | Result |
|----------|---|---|---|--------|
| Login    | Enter Invalid<br>Credentials                        | Should popup<br>an error<br>message<br>showing that<br>"Enter a valid<br>username or<br>password" | An error message is popped up showing "Enter a valid username or password | Pass   |
| Login    | Enter Invalid<br>Username and<br>valid password     | Should popup<br>an error<br>message<br>showing that<br>"Enter valid<br>username or<br>password"   | An error message is popped up showing "Enter valid username or password   | Pass   |
| Login    | Enter valid Username and Incorrect password         | Should popup<br>an error<br>message<br>showing that<br>"Enter valid<br>username or<br>password"   | An error message is popped up showing "Enter valid username or password"  | Pass   |
| Login    | Enter valid<br>Credentials                          | Should redirect<br>to Home page   | Redirects to<br>Home page   | Pass   |
| Register | Enter Invalid mail<br>Id                            | Should throw an error stating that "Email format is Invalid"                                      | Throws an error stating that "Email format is invalid"                    | Pass   |
| Register | Enter different<br>Password and<br>Confirm password | Should throw an error stating that "Passwords   | Throws an error stating that  | Pass   |

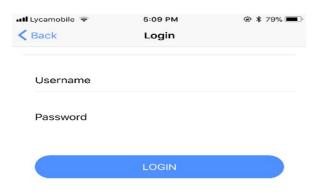
|          |   | must match"                      | "Passwords<br>must match"  |      |
|----------|---|----------------------------------|----------------------------|------|
| Register | Enter all the valid values into the field | Should redirect<br>to Login Page | Redirects to<br>Login page | Pass |

# 5. Implementation and Deployment

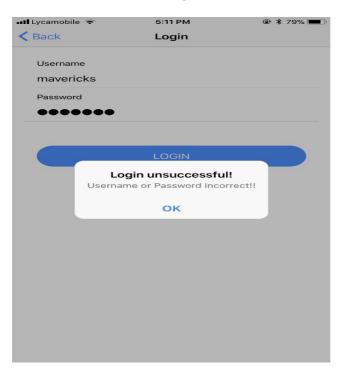
We developed our application using ApiMedic and FourSquare API's. Process flow of our application is mentioned as steps in the below screen shots.

#### **Login Page:**

**1.Login page** design and user input fields are mentioned here for the application.



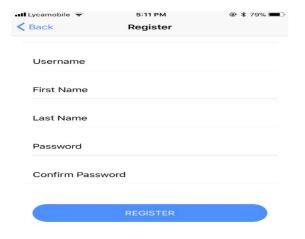
#### 2. On successful login:



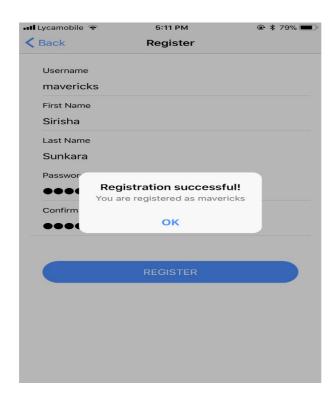
#### **Registration:**

Before logging in, any user he should register to get account access. Register page contains different fields to enter such as Username, Firstname, Lastname, Password and Confirm Password with validations for password.

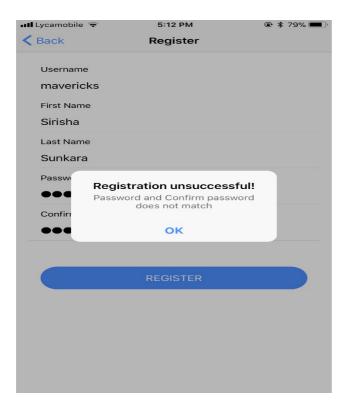
1.Below we can see screenshots for **Register page**.



## 2. On successful register:

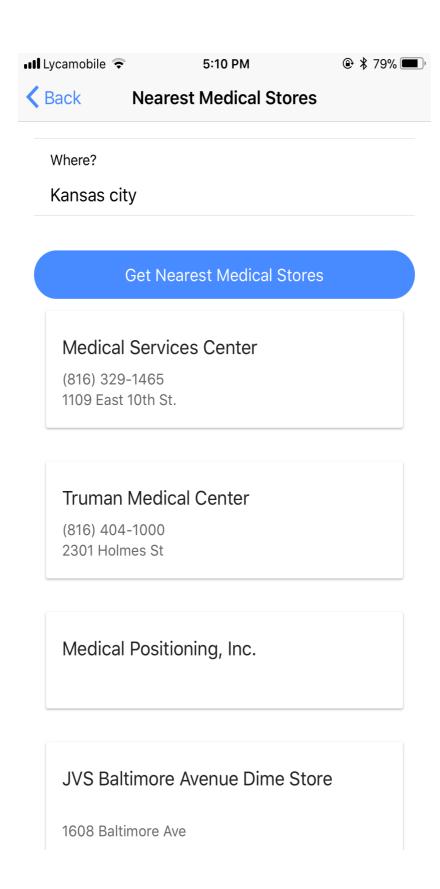


## **3. On Entering Invalid Credentials**:



## **Nearby Pharmacy Location:**

Using Foursquare API we collected all the nearby pharmacy stores. Below are the screen shots for nearby stores.



6. **Project Management**Implementation Status Report

We have developed our application by collaborating various technologies. Some of them are.

- HTML5
- CSS
- JAVASCRIPT
- ANGULARJS
- IONIC

#### 1. Completed Tasks

The following tasks are completed in increment-1,

- Completed designing Login and Register Pages
- Validating the user based on credentials
- Displaying the nearby pharmacy stores in particular location using FourSquare API

#### 2. Work to be Completed

Tasks to be completed are,

- Adding Layouts for other pages
- Completing other pages by using ApiMedic API
- Changes to the User Interface
- Adding Menus

#### 3. Contributors

Vineeth Reddy, Kottam − **25%** 

Venkata Bhavesh Reddy, Polareddy – 25%

Naga Sirisha, Sunkara - **25%** Vinay Santhosham - **25%** 

# 7. **Bibliography**

- 1. <a href="https://foursquare.com/">https://foursquare.com/</a>
- 2. <a href="http://apimedic.com/">http://apimedic.com/</a>
- 3. <a href="https://creately.com/app/">https://creately.com/app/</a>