

University of Dhaka

Department of Computer Science and Engineering

Project Report:

Application Development Lab Fall – 2017

Project Name: **LIVE LONG**

Date of submission: 8 th November 2017



Submitted To:

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Team Members:

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Introduction:

Live Long is a personal health assistant app.

It stores important health information about the user. Especially, Blood pressure, Temperature, BMI, etc. to keep track of the user's health.

It notifies the user if their health condition becomes worse day by day.

It has a Medicine reminder to remind all the medicine by time. It stores all previous medicine data that the user took.

In an emergency, this app lets users call one or many emergency contacts to get instant help.

The nearby hospital gets the current location of the user and shows nearby hospitals.

The final task of this App Development Lab course is to put the use of what we learned throughout the course and create a project utilizing all the topics we learned. The project challenges us to put us off our creativity, organizing ability, knowledge, and experience altogether to implement algorithms and create an Android project.

Objectives:

The main objective of this app is to keep the user fit and strong.

If we monitor the records of the patient, we may prevent some sudden heart attack or asthma, etc

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Doctors usually ask patients to keep some information about body temperature, blood pressure, weight etc. This App stores all the information

and displays it in graphs. So, doctors can easily read the values and monitor their patients.

Motivation:

The world is getting busier day by day. Data is becoming the most important thing on the planet. So, we may need a "digital nurse" to keep track of our health.

Users can find/store all of his/her information within this app in an oriented way.

Doctors usually ask patients to keep some information about body temperature, blood pressure, weight etc. This App stores all the information and displays it in graphs. So, doctors can easily read the values and monitor their patients.

Project Features:

- Medicine Reminder:
 - stores all the current medicine a patient is taking now.
 - stores medicine info with doses and duration.
 - Notify users by sending a notification at a given time until the duration of the course ends.
- Temperature Update:
 - Takes body temperature in Fahrenheit with time
 - Displays the temperature in a month in the graph
 - Notify users by sending a notification if three contiguous input is larger than 102F.
- Pressure Update:
 - Takes systolic and diastolic blood pressure with time
 - Notify if blood pressure is high or low.
 - Displays the blood pressure in a month in the graph
 - Notify users by sending a notification if three contiguous input shows high or low blood pressure.
- Nearby Hospital:
 - Takes the current location of the user
 - Shows the nearby hospitals in map
- Emergency:
 - Allows user to call emergency contacts that user saved
- History:
 - Stores all the information together.
- Daily care:
 - Calculate BMI, stores data in a graph to motivate the user to maintain healthy BMI

- Counts footsteps, while the user is jogging.
- Check-Up:
 - Stores all the pictures of prescriptions
 - Stores all the important pictures selected by the user.
- Chat Bot:
 - Typical Chat Bot

Platform, Library & Tools:

- Android Studio
- Java JDK
- Google Maps Android API Utility Library
- Volley Library
- FireBase

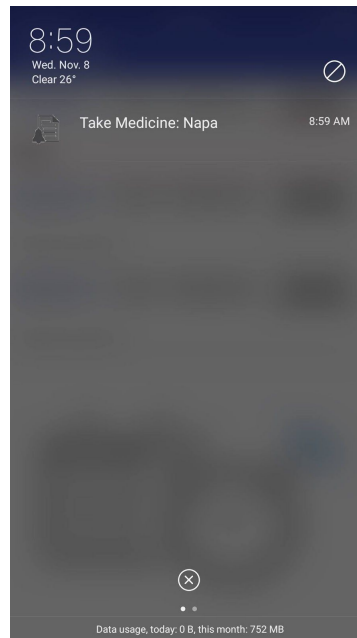
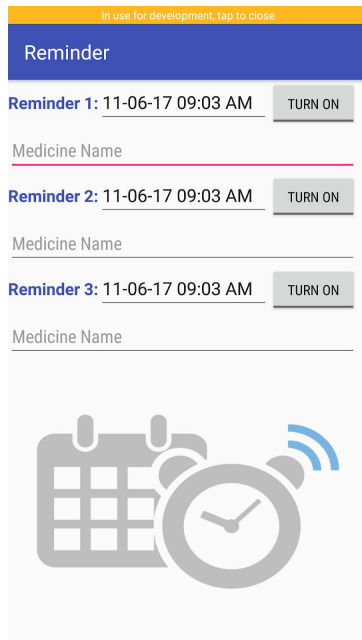
Limitations:

- Our goal was to make the app as user-friendly as possible, sometimes we failed at that
- Our goal was to allow the user to call the nearby hospital in an emergency, by using google map, but we couldn't access like that, we took manual user input to call on emergency.

UX & UI:

Screenshots:

Medicine Reminder:



Blood Pressure monitoring:

Blood Pressure

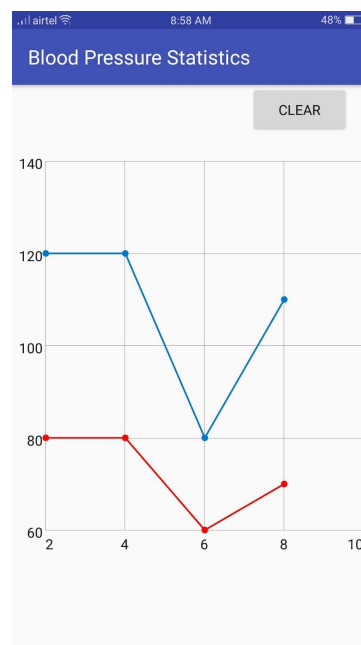
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Blood Pressure Systolic Diastolic

SAVE

STATISTICS



Temperature monitoring:

Temperature

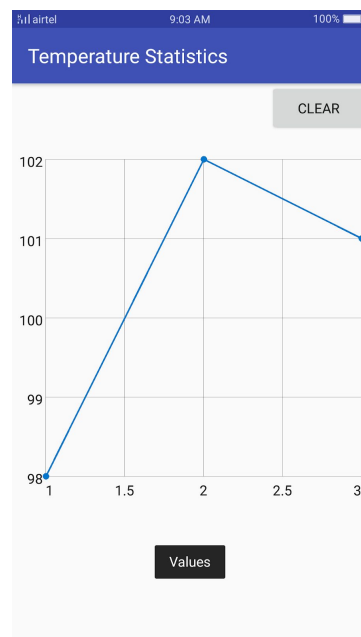
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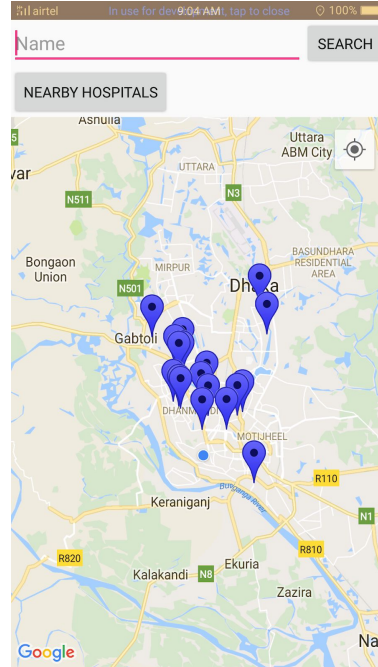
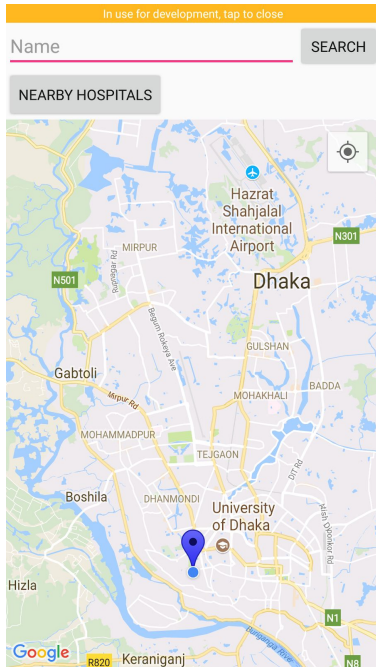
Temperature: In fahrenheit

SAVE

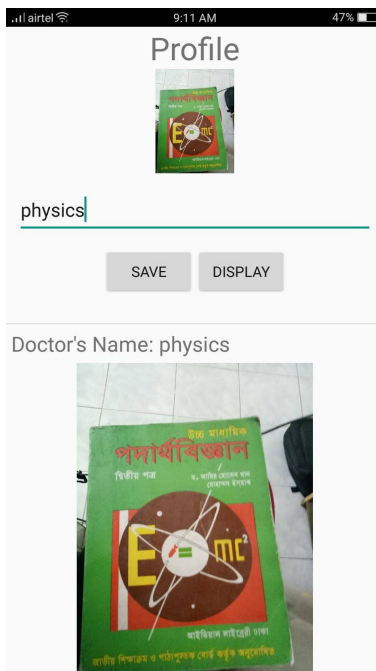
STATISTICS



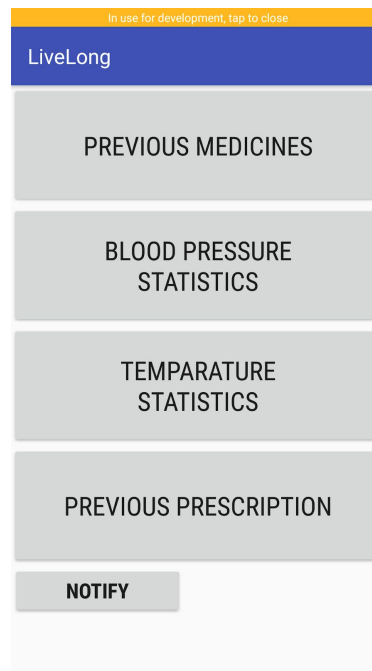
Nearby Hospital:



Check up:



History:



Conclusions:

As it was our first time, working on android studio, we think, we have still some fields to improve.

Our goal was to make a complete app to keep track of a person's health and fitness. Though this app has some limitations, we think, we can help people through this app. Even, in emergency, this app may become lifesaver.

Future Plan:

"LiveLong" is my dream. We were planning from our first year to make this app.

In the future, we will make it as flawless as possible.

And, we'll add some more features on user demand. We want to spread awareness among people through this.

Special Credit:

- MD. Mofizul Islam
- Mubin Haque
- Sarker Tanvir Ahmed Rume
- Pritom Saha(CSEDU 20+ CSEDU 22)
- Sakib Hasan (CSEDU 22)

References:

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- Pritom Da
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