North South University

Department of Electrical & Computer Engineering

Junior Project Proposal

Title of the Project:

DocTalk : A Platform to get Doctor's Advice

Group No: **Seven (7)**

Group Members	
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Abstract

The **DocTalk** is an android app to help the users for easy access consultation from a doctor. Especially during the COVID-19 pandemic, it's hard to get a face to face consultation and advice for regular medical urgency.

DocTalk is a platform to connect the user and doctor in a same place. Also, **DocTalk** will help the user to get the prescribed medicine from the best available online store.

Moreover, it will show appropriate online resources according to the doctor's prescription.

Introduction & Background

This is an interactive app to connect general user to certified doctor for medical advice. During pandemic like COVID-19 this app can help to get appropriate advice in a very easy way. Also, this app can show the available way to get prescribed medicine automatically.

But the uses of this app are not only limited for pandemic situation. It can be used to get day to day doctor's advice for general daily life.

Objective

- Get consultation from doctor
- Save medical history and information
- Get prescription
- Get the prescribed medicine from online sources
- Get instruction and appropriate videos of prescribed exercise
- Get push notification about appointment

Scope

This is an app for medical and health services. It can be used very efficiently during any pandemic situation as well as for general life uses.

There are a lot of potential for this field in Bangladesh.

Methodology & Approach

- Android Studio: Since project is an Android app
- Firebase: For online database of the project
- Vision API: To get text from the prescription
- Drug Search via Google map: See available online source
- YouTube API: To get appropriate videos to suggest
- Firebase Notification: To apply push notification

Constraints & Limitations

- Several learning constraints
- Short time limit, only 3 months
- Implementing APIs and database connect
- Collecting available drug information from appropriate online sources
- Availability issues of free APIs

Challenges

- Learning several topics in a short period of time
- Implementing everything and complete the project within the time limit
- Organizing the group work over the internet for current pandemic situation

Software Used

- Will use **Android Studio** to implement the project
- **Firebase** will be used for database
- **PicsArt** and **Adobe illustrator** for logo design
- **Android Emulator**
- **Microsoft Word**
- **Microsoft PowerPoint**

Budget

Initially **NO** budget for the project. It remains a course project.

As long as our project doesn't require more space for database, there no money needed for the project.

We will use the free version of all APIs (Google Map, Cloud vision, Push Notification etc.)

Time Plan

Task 1	Learning Phase (Git, Android Studio, Firebase)
Task 2	User registration (Manual, via Gmail), Connecting Firebase
Task 3	Connecting Database, Upload image service
Task 4	Implementing Vision API, Camera App
Task 5	Text Recognition, Putting Drug store information
Task 6	Implementing Google Map
Task 7	Search by the recognized text (OCR)
Task 8	Connect YouTube API
Task 9	Finalizing User Interface
Task 10	Unit Testing and Bug fixing

Table 1: List of all Tasks

	07-12	07-19	07-26	08-02	08-09	08-16	08-23	08-30	09-06	09-13	09-20	09-27
	W 1	W 2	W 3	W 4	W 5	W 6	W 7	W 8	W 9	W 10	W 11	W 12
T 1												
T 2												
T 3												
T 4												
T 5												
T 6												
T 7												
T 8												
T 9												
T 10												

Table 2: Gantt Chart

Expected Outcomes:

The project is entirely to help general people to get medical advice on their smartphone.

The program is expected to lighten up the burden of workload to get general information from a doctor. Also, it is expected the project will help people to get appropriate medicine from the best way possible.

Finally, during this pandemic it is expected the project will help out on our general way of life.

For future implantations there is a scope for Bangla OCR working environment. —Bangla character recognition is very important field of research because Bangla is most popular language in the Indian subcontinent. (Md. Mahbub Alam)

References

Md. Mahbub Alam, D. M. (n.d.). *A Complete Bangla OCR System for Printed Chracters.* Retrieved from http://www.uap-bd.edu/jcit_papers/vol-1_no-1/JCIT-100707.pdf