





Team Members

- Nishi Doshi
 - First-year Graduate Student in field of Computer Science
- Garima Dave
 - First-year Graduate Student in field of Computer Science

Presentation Outline

- Problem Statement
- Designed solution
- Features
- Models
- Benefits
- Rewards System
- Comparison with Existing Solutions
- Future Scope
- References

Problem Statement

- To reduce the number of visits to doctor which nowadays people find very difficult to commute.
- Saving on resources such as transportation, time and money.
- Many a times, people do suffer from acute diseases like fever, muscle pain for which they feel the need to get themselves diagnosed.
- During times of emergency, it sometimes get too late for the help to reach

Designed Solution

We build an application named "Dr. OnTap" which addresses the issues mentioned before.

It is an user-friendly application and available in all the languages.

Easy to use and responsive interface.

Includes all the necessary features related to health diagnosis.

Features

- Connect with family members to notify them about health of their family members.
- Keep track of personal health records: diagnoses, allergies, vital signs, immunizations, lab tests, medications etc.
- Keep a history of medical records of the user. This would help in predicting the type of treatment to be given to the user.
 - For example: If user has knee pain and a history of knee operation in last 6 months, then our app will recommend user to visit the doctor. On the other hand, if user has had no history of such operation, then the app would recommend applying a spray and check after a few days - if the pain is persistent then visit the doctor (after a few days a notification comes up)

Features

- List treatments including recommended medicines or visit to doctor / specialist
- Integration with lyft or uber to help user to visit the nearby doctor/medical store.
- Keep a list of pharmacies so that according to user location, they can find the nearest store to pick up from.
- Reminder to follow up with doctor.

Features

- In case of emergency:
 - User can get on call with the available doctor to smooth the process of diagnosis.
 - User can opt to send a notification to their assigned emergency contacts for picking up the required medicines/resources and getting them delivered.
 - Integration with Siri/Google Assistant/Microsoft Cortana/Amazon Alexa to help in case of very crucial emergency to send a message to all the emergency contacts by implementing a code word (by user) for such emergencies.
 - Quick call to ambulance
 - If ambulance is not available, nearby lyft/uber drivers get the emergency alert

Models

- Results will be used from the existing dataset and user will be made to sign an agreement mentioning the need to get the medications reviewed from the doctor (for the initial period)
- For the initial 3-4 months, data will be gathered and model will be trained according to:
 - Recommended medication
 - User Survey

	1	2	3	4	5	
	0	0	0	0	0	
Time taken	for the who	le diagnosis	* .			
lme .						
: AM						
esponsive	ness of the	doctor*				
	1	2	3	4	5	
	0	0	0	0	0	
Responsive	ness of the	Uber/Lyft (if	used)			
	1	2	3	4	5	
	0	0	0	0	0	
Any Sugges	tions					

Benefits

- Health technology doesn't only benefit medical staff it improves communication between individuals and their family members or emergency contacts
- Increased patient engagement
- Reduce commute time for patients when the issue is not of much emergency
- Provides general medical assistance and will be especially useful in cases of emergencies

Benefits

- Explores various ways to promote healthy in a virtual world environment by integrating several existing technologies
- Improved health outcomes
- Trusted relationship between doctors and patients

Rewards System

- Ratings and good reviews for doctors who help in recommending medicine and diagnosis process
- Ratings for doctor according to the user feedback according to the visit
- Different ratings to lyft/uber drivers according to their service during emergency and non-emergency situation
- After a month of free trial, user will be provided with multiple plans to choose from which will include family plan, friends plan etc.

Comparison with Existing Solutions







Users will be shared recommended list of doctors whom they can contact for treatment.

Whereas our app will analyze whether the symptoms are severe or not and share the treatments. Our app recommends patients for appointment only when the condition is severe (this saves commute and reduces visits to doctor in case of mild symptoms).

Users are being provided with details for a video call

In some of the parts of the world, internet is not readily available at all times because of power cut or unavailability, our app prescribes medications without internet use.

Users health is getting monitored everyday and being notified to doctors

Our app takes the records of users medication and lesser the chance of false positives.

Future Scope

- Currently symptoms are being manually entered by users and according to the symptoms entered, our app recommends the medications
- In future, our app can be designed in a way where instead of asking all of the symptoms, it asks the user the new symptom and then based on the new symptom and also the previous symptom, it will narrow down to a disease
- Our app provides the medication delivered to their house
- Doctors can add their profile in the application to help people

References

- https://www.scnsoft.com/healthcare/telemedicine-apps/demo
- https://ieeexplore.ieee.org/abstract/document/9526460
- https://play.google.com/store/apps/details?id=org.kp.tpmg.preventivecare&hl =en US&gl=US&pli=1
- https://www.jmir.org/2021/12/e31737/
- https://link.springer.com/article/10.1007/s13218-015-0357-0
- https://www.aaai.org/ocs/index.php/FSS/FSS09/paper/viewPaper/972

THANK YOU