Telemedicine – Remote Medical Consultation

Overview:

The goal of the application is to provide 24*7 health service access to patients. It allows patients to speak to providers, who are remotely available, and avail care. This application also works in saving time and effort required otherwise to physically visit physicians in times of need or at odd hours. The communication is established between physicians using the web application and patients the mobile version of the same. Using this service, time and location stop acting as constraints for healthcare access.

Client details:

Name: Confidential | **Type:** Healthcare IT | **Location:** USA

Technologies:

iOS 9.1 SDK, Cocoa Touch, Xcode 7.1, Android SDK (Min. API 14), Android Target Version 22, MapKit Framework, Google Maps, GPS Location, HealthKit and Twitter Framework, Push-Notifications/GCM

Project Description:

This application is HIPAA compliant and acts as a great source of convenience in healthcare delivery. The average waiting time for users of this app is approx. 20 minutes. People with busy lives and having to deal with minor health ailments can find this app very handy. Without getting bogged down at the prospect of travelling and delaying matters till they get worse, all they need to do is use the app. The network of providers for the app comprises of U.S. board certified doctors from almost every state in the US. They are always available virtually for consultation - 24 hours a day, 7 days a week and even on holidays. Their specialties include primary care, pediatrics, emergency medicine and family medicine. When a patient makes an appointment, it gets mapped only to the ones belonging to his/her state of residence.

Workflow:

When in need, a patient logs into the system using his/her credentials and then chooses the specialty of the physician to contact. The patient has the prerogative to decide on the medium of communication i.e. phone or video chat. The app displays the list of physicians available in the area/state of residence of the patient and with the specialty as indicated. There are 3 possible scenarios which may arise:

a) The physician is online – In the event of the patient wanting to choose a particular provider to consult, the patient gets access to the provider's information details. Subsequently the patient is led to screens where the reason for the appointment, time of appointment and the choice of the medium of communication i.e. video or phone is required to be shared. In case of a need, the patient can update his/her medical history, share symptoms, upload test results, x-ray images etc. Once the physician is available the patient gets notified by a text message and an email.

b) The physician is not online – The patient can request an appointment at a certain time and can specify whether the consultation could be via phone or video. The provider subsequently establishes contact based on availability at the suggested time or communicates accordingly.

c) Doctor on call – This option is used either when a patient has no preference of a provider or in situations of emergency. The patient is required to share medical history and the reason for appointment before availing this facility. The first available physician, specific to region, generally responds to the call.

Other sections:

Patient Health Details: This section has medical details about patients – medical history, allergy, pre-existing conditions, procedures, primary care provider information etc. Both, physicians and patients, can update details in this section. The data shared by the physicians cannot be edited whereas patients can edit what they share. The details of preferred pharmacies are mentioned here.

Patient Assistance: This section is used to access customer support required to aid patients for e.g. to cancel an appointment with a physician.

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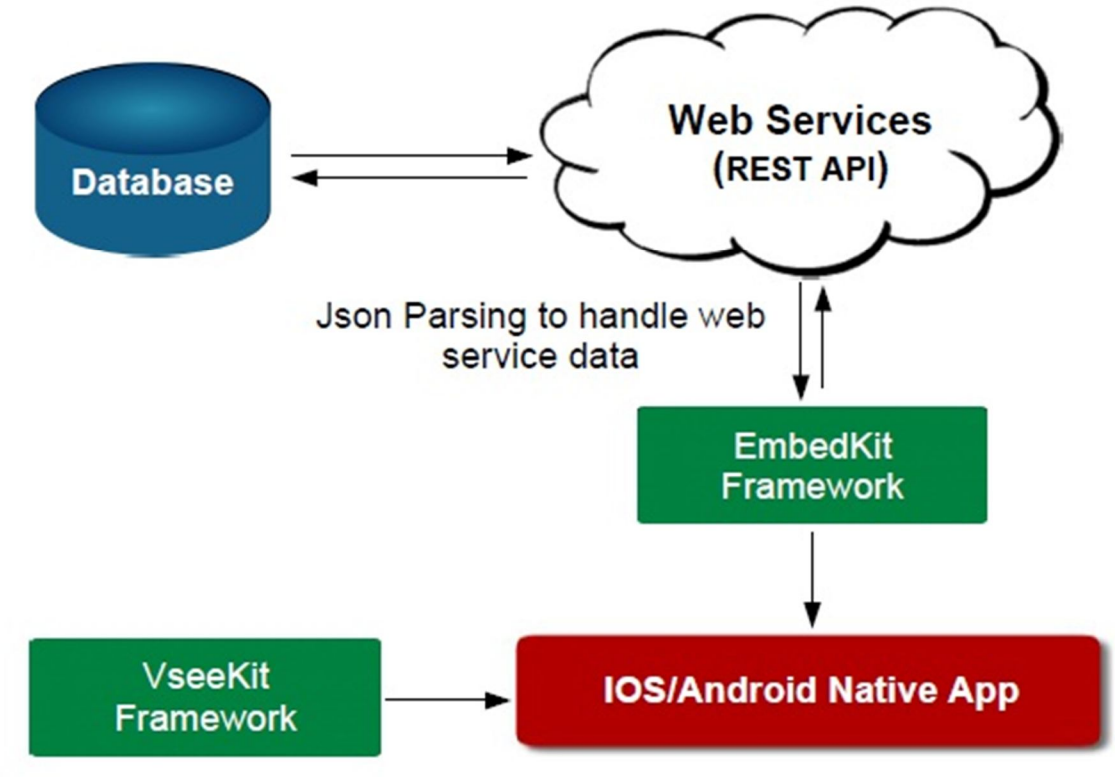
Message Center: This section facilitates email communication between physicians and patients

Patient Symptom Checker: It allows patients to get information about their health and medical needs. On choosing a body part, information pertaining to various symptoms is made available to the patients to identify and select and later share with the physician during the course of the consultation. Physicians can then diagnose the symptoms, prescribe medication, and send the prescription directly to the pharmacy of choice of the patients.

Patient Account: This section has the user profile information and details to facilitate billing transactions. A member is also allowed to add dependents. All related data is also made available in this section.

Architecture:



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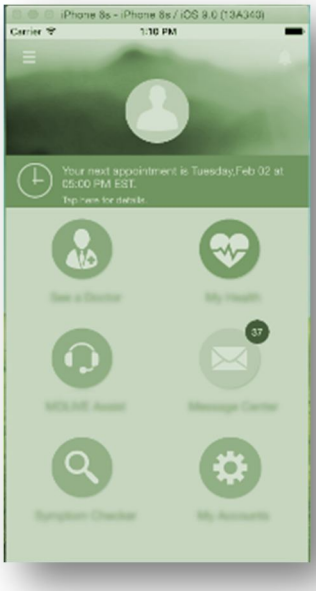
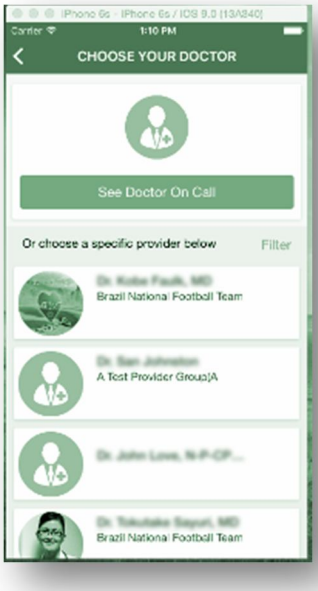
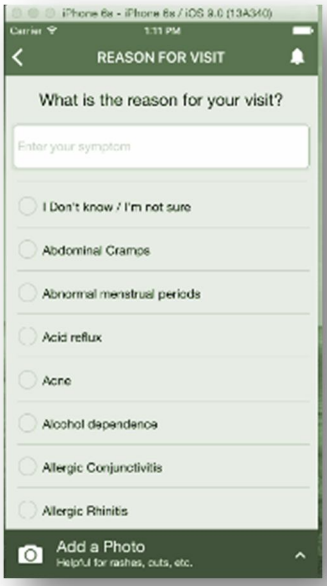
Screenshots:



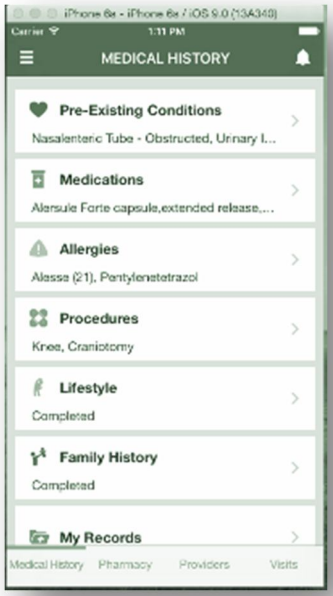
Screen 1



Screen 2



Screen 3



Screen 4

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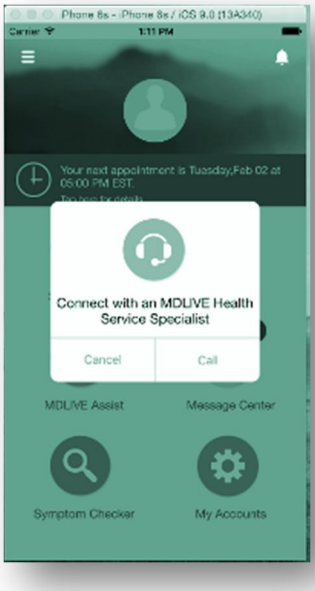
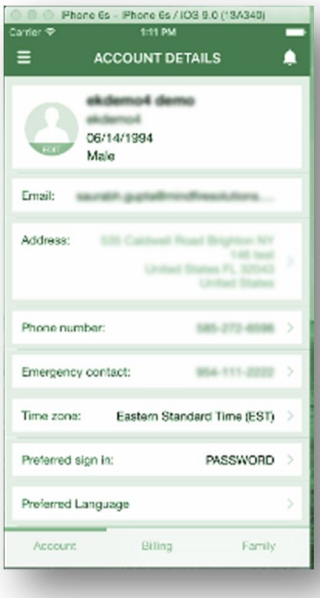
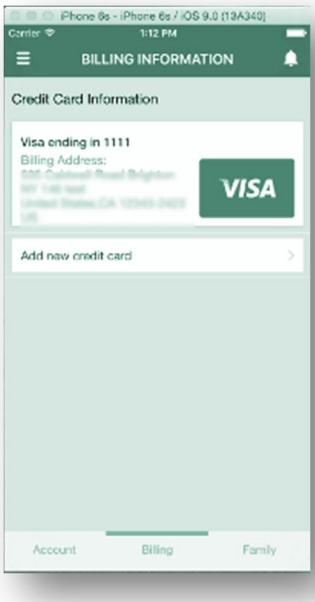
Screen 5



Screen 6



Screen 7



Screen 8

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