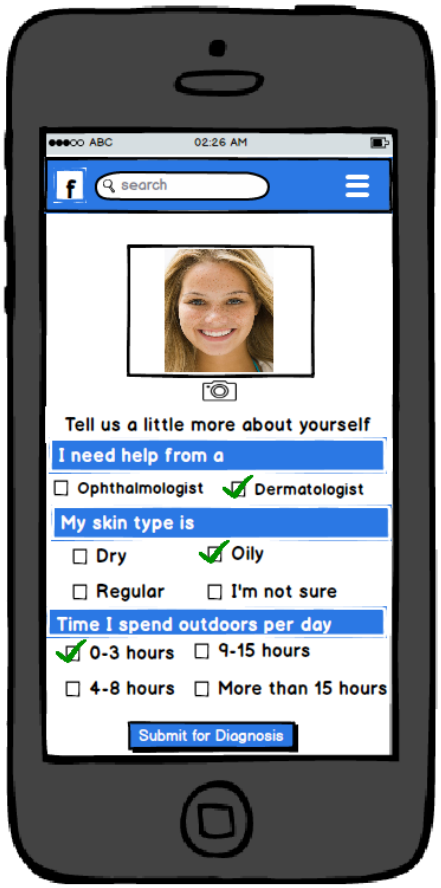
Facebook as a platform for Telemedicine

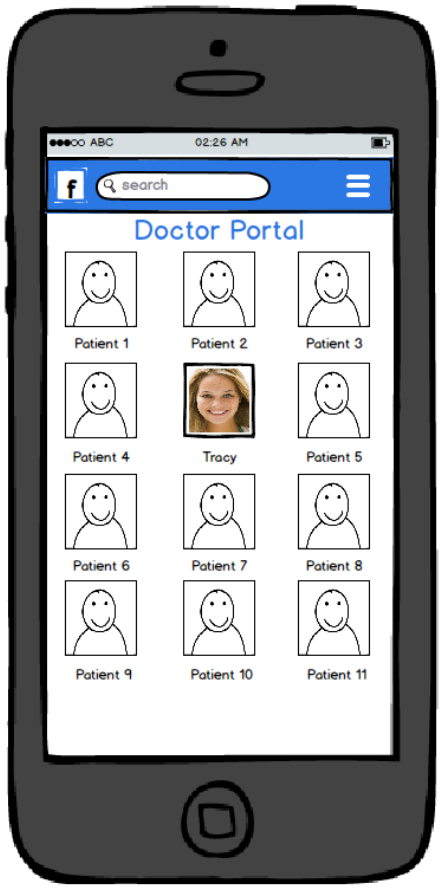
Target Users	Patients with skin issues, orthopedic issues or other branches of medicine that are heavily "visual" in nature
Issues with current approaches	1. Wait times for dermatologist visits are 4-6 weeks (in the US) 2. Diagnostically challenging due to varied presentations of skin conditions
Potential solutions	• Use the Facebook platform to "connect" patients with doctors • Gather preliminary information from the patient • Apply machine learning on images to assist the doctor with the diagnosis to reduce challenges and subjectivity in diagnosis • Enable the doctor to suggest a treatment plan with a high level of confidence

Facebook as a platform for Telemedicine



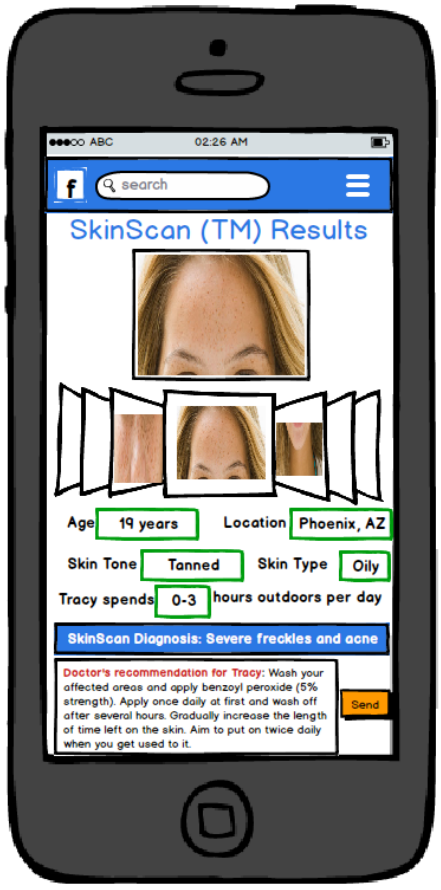
Screen 1

User takes a pitcure of his/ her skin and answers a few basic questions



Screen 2

In the doctor's portal, we filter the list of patients based on the information we have collected and present a list of patients relavant to this doctor's expertise.



Screen 3

To help the doctor with the diagnosis, we use machine learning to match the image against a database of images and predict the skin problem.

The doctor can then suggest personalized skin care treatment for the user's skin problem.

Facebook Messenger/ WhatsApp - Solving the texting-and-driving problem

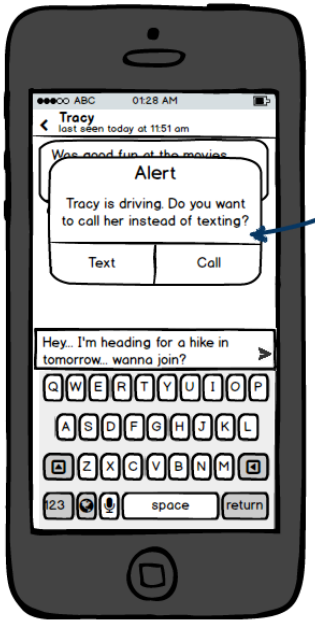
Target Users	Drivers who text while driving
Issues with current approaches	1. Drivers feel compelled to text when driving 2. Receiving a text message while driving creates an urge to read and respond to the message 3. Most (if not all) existing approaches try to deter the driver from texting (e.g., penalties, fines)
Potential solutions	• Use location tracking and vehicle motion/ speed information to predict when a person is driving • Persuade the "sender" to call instead of texting • Do not deliver messages to the driver's phone until he/ she has reached the destination

Facebook Messenger/ WhatsApp - Solving the texting-and-driving problem

For the purposes of this use case, the person sending the message is Steve and the person receiving the message is Tracy

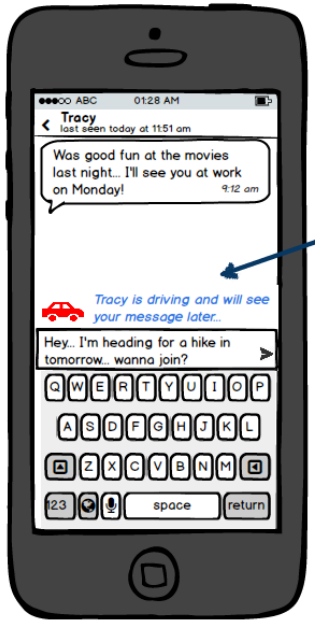
My Idea No. 1

Show Steve that Tracy is currently drving. This could **deter Steve from sending the message**



My Idea No. 2

When Steve attempts to send a message to Tracy when she is driving, show a **pop-up alert which asks Steve if he wants to call her instead of texting**



My Idea No. 3

Show Steve that Tracy is currently drving and his message will be delivered to her when she reaches her destination.

Using **location and vehicle motion tracking, we show the message to Tracy only after she has reached her destination** For e.g., if she is stopped at a traffic light or is in motion, then we can get that from her location/ speed of the vehicle

This feature will also **ensure that Steve can text Tracy whenever he chooses** (i.e., he is not prevented from messaging Tracy)

Facebook Messenger/ WhatsApp – Improving the group chat experience

Target Users	Facebook Messenger and WhatsApp users who use the group chat feature
Issues with current approaches	1. Messages appear chronologically in a group conversation 2. Loss of context when a user replies to a message which has been buried under several other messages 3. Conversations end abruptly potentially leading to reduced user engagement 4. The “reply” feature in WhatsApp only allows tagging one message
Potential solutions	• Use machine learning techniques to automatically suggest hashtags. Use these hashtags to group messages into conversations • Leverage a user’s interests (e.g., from past messages) to deliver messages that would be relevant/ interesting for him • Suggest people with whom to make “eye-contact” when sending a message. This would be similar to how a real-life conversation takes place

Facebook Messenger and WhatsApp - Improving the group chat experience

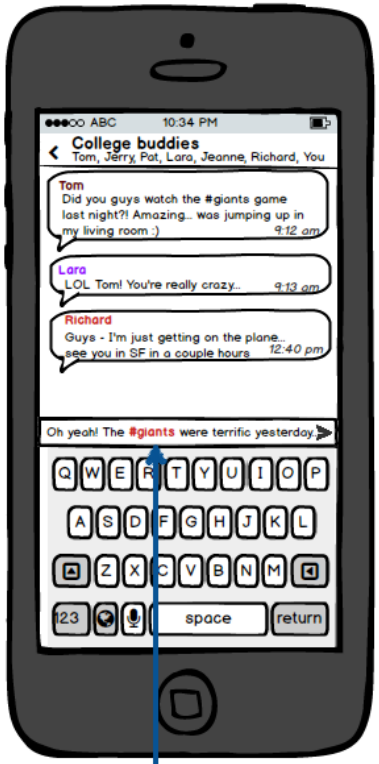
Predict hashtags and use them for grouping into conversations

Current interface for WhatsApp group conversations

Message clutter results in:

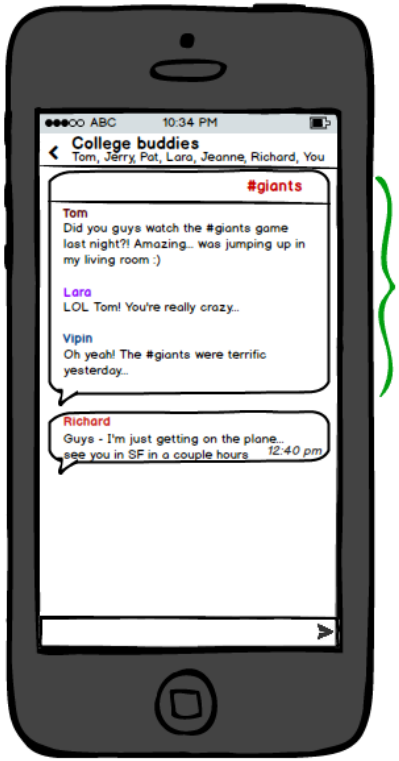
1. Loss of context
2. Conversations ending abruptly

A new interface that improves user experience automatically groups of messages based on the context



Predict relevant hashtags when a user types a message.

In this example, suggest #giants



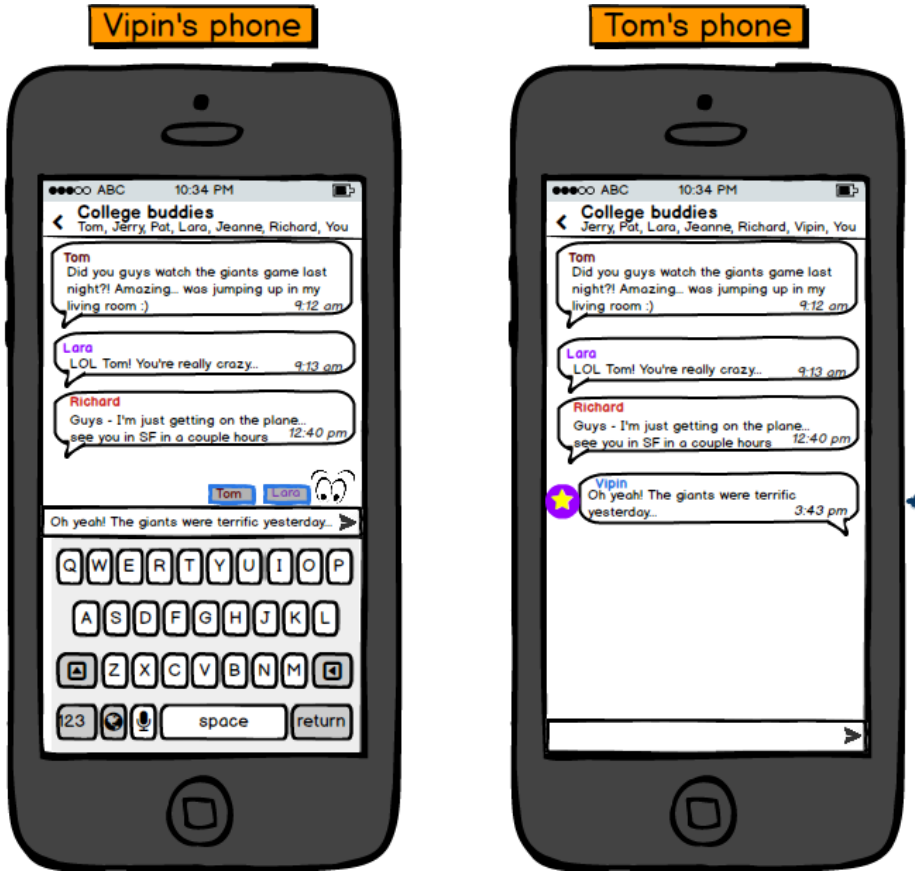
Improve user experience by grouping messages into conversations based on:

1. Hashtags
2. References to names of relevant people

Facebook Messenger and WhatsApp - Improving the group chat experience

<u>Eye-contact feature to make the group conversation experience life-like</u>

In in-person group interactions, people make eye contact to respond to a person. Along those lines, automatically suggest people with whom a user would want to make "eye contact" when typing a message on WhatsApp



When Vipin makes "eye contact" with Tom and Lara, his reply is highlighted on Tom's phone and Lara's phone but is shown as a normal reply in Richard's phone.

This is akin to a regular group conversation where only a subset of the people are actively conversing with each other.