Submission Instructions
1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"

GitHub Username: brycesluman

IMTranslate

Description

IMTranslate is an instant messaging app which will translate somebody speaking in a foreign language to the users' native language on the fly.

Intended User

The intended user is someone who wants to talk to people from different cultures and different parts of the world.
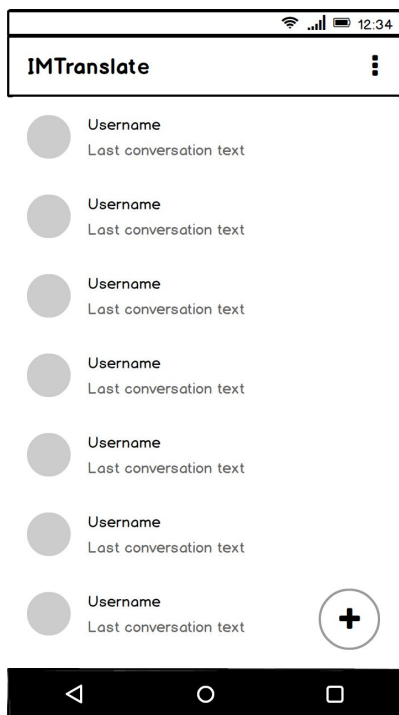
Features

- Chat in real time
- Translates on the fly
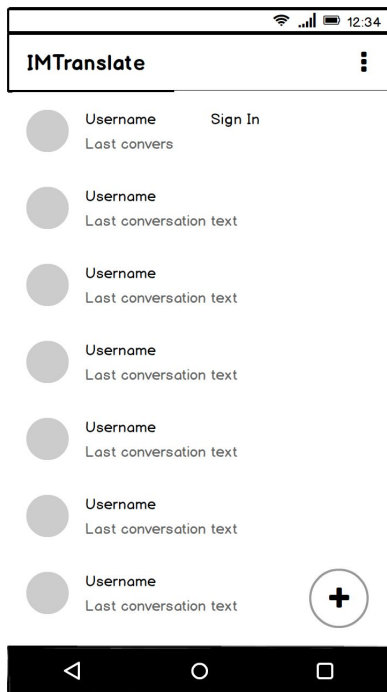- Determines language of incoming message

User Interface Mocks

These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

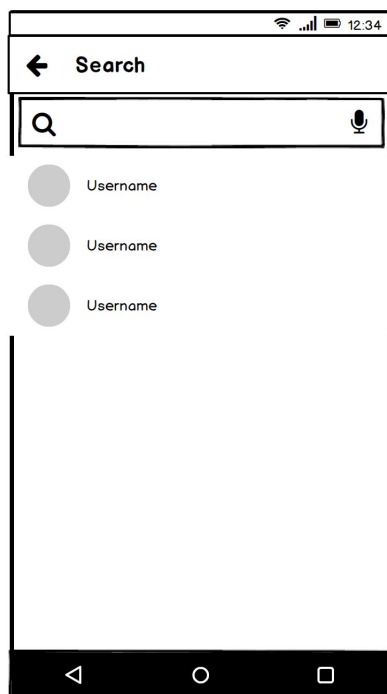## Conversation list

List of current conversations

Options Menu
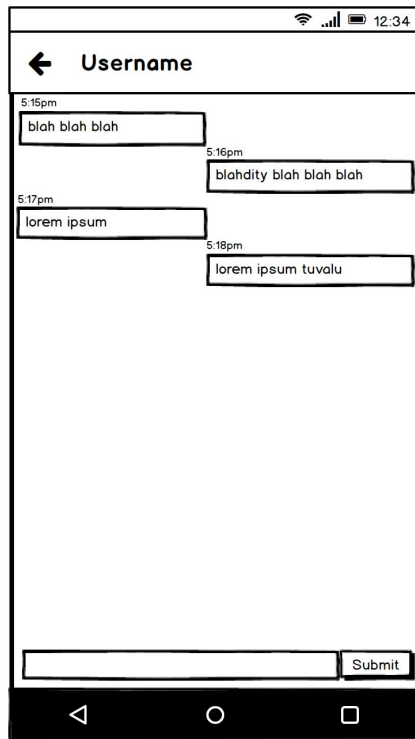

Options menu only has one option: Sign In/Up

Search

Search for users by Username

Conversation detail
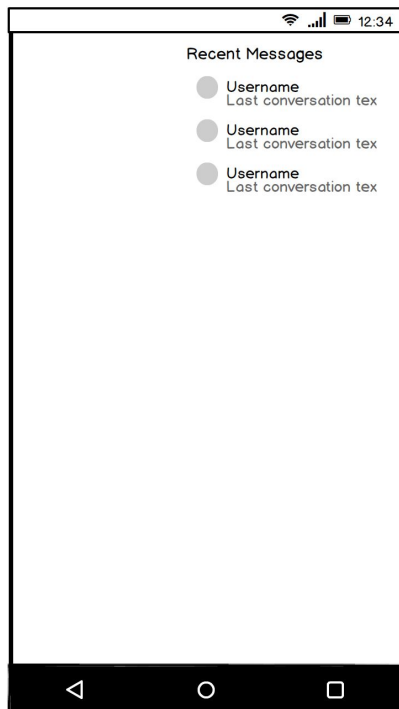

Currently selected conversation.

User Registration
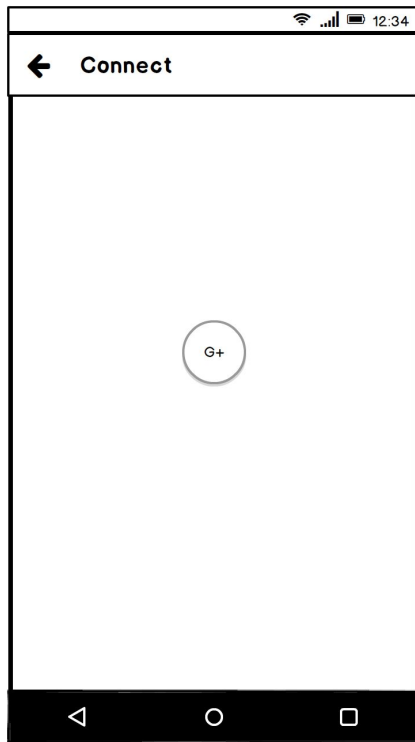
Signin/up/out. Google+ only

Widget

Widget showing last 3 messages on the homepage

Add as many screens as you need to portray your app's UI flow.

Key Considerations

How will your app handle data persistence?

I will build a content provider to store user data and conversation data

Describe any corner cases in the UX.

If you hit the back button before a message sends (like in a slow connection situation) the message should still be sent in the background. I would accomplish this by using a service to send/receive messages.

Describe any libraries you'll be using and share your reasoning for including them.

Glide for caching and loading images.

Describe how you will implement Google Play Services.

Describe which Google Play Services you will use and how.
Google Translate API
Google+ authentication
Firebase for real time updates

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

Write out the steps you will take to setup and/or configure this project. See previous implementation guides for an example.

You may want to list the subtasks. For example:
- Create a new Android Studio project
- Include required libraries
- Determine and include permissions requirements
- etc...

If it helps, imagine you are describing these tasks to a friend who wants to follow along and build this app with you.

Task 2: Implement UI for Each Activity and Fragment

List the subtasks.
- Build UI for ConversationListActivity
- Build UI for ConversationDetailActivity
- Build UI for ConversationDetailFragment
- Build UI for SettingsActivity
- Build UI for AuthenticationActivity

Task 3: Data

- Determine data structure
- Create a SyncAdapter to handle real-time updates of conversations
- Create service to manage data
- Implement and configure Firebase
- Add ContentProvider to persist data from firebase for offline.
- Add Loaders to push data to the UI

Task 4: Translate

Use Google Translate API to translate the incoming message and display to the user in their native language
- Determine remote language and cache if not already
- Use an IntentService to make api call to translate input
- Store response
- Push data

Task 5: Header layout

Create the main layout for the header and menu items
- Create header variants
- Create menu
- Add translations

Task 6: Conversation List Layout

- Create main conversation RecyclerView layout
- Create conversation item layout
- Add translations

Task 7: Conversation Detail Layout

- Create conversation layout
- Create text bubbles layout
- Create Input layout
- Implement soft keyboard
- Add translations

Task 8: Authentication

- Create authentication layout
- Implement login with G+ button
- Implement logout button
- Add translations

Add as many tasks as you need to complete your app.

Submission Instructions
1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"

3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"