



# ImHere

Geolocation based instant messaging

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# Motive

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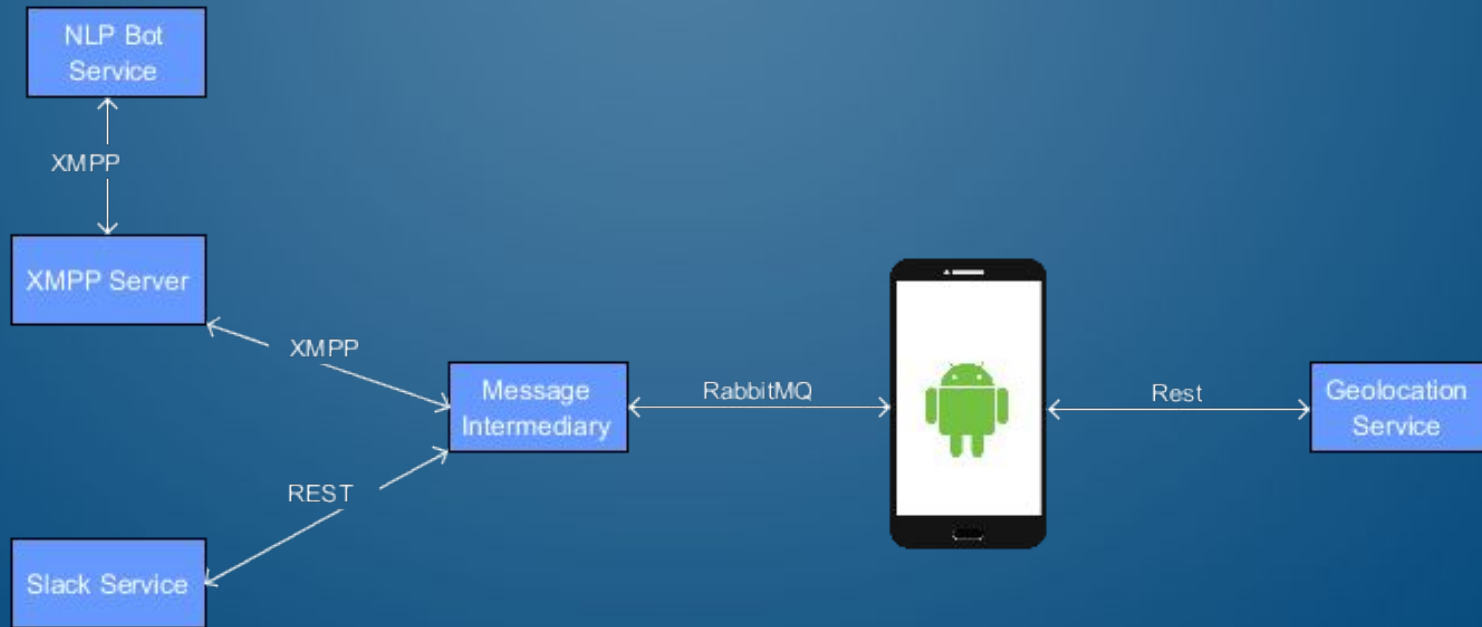
- Current instant messaging relies on the exchange of contact information or connecting to a thematic chatroom available over the internet;
- No way to contact someone physically near you without exchanging contact info beforehand;
- Need to contact someone in the same geographic context or event (Music festival, building, classroom) but we don't want to exchange personal info;
- Only dating apps seem to offer this kind of service (e.g. Tinder)

# Concept

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- Create a chatroom with a name/theme and limited lifespan which access is given to people within a certain range;
- Embedded chatbot enables the use of various services without leaving the chat interface (e.g. see the news)

# Architecture

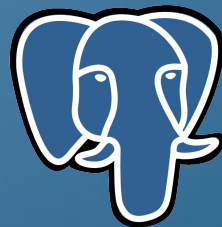




# Geolocation Service



# Geolocation Service Technologies:

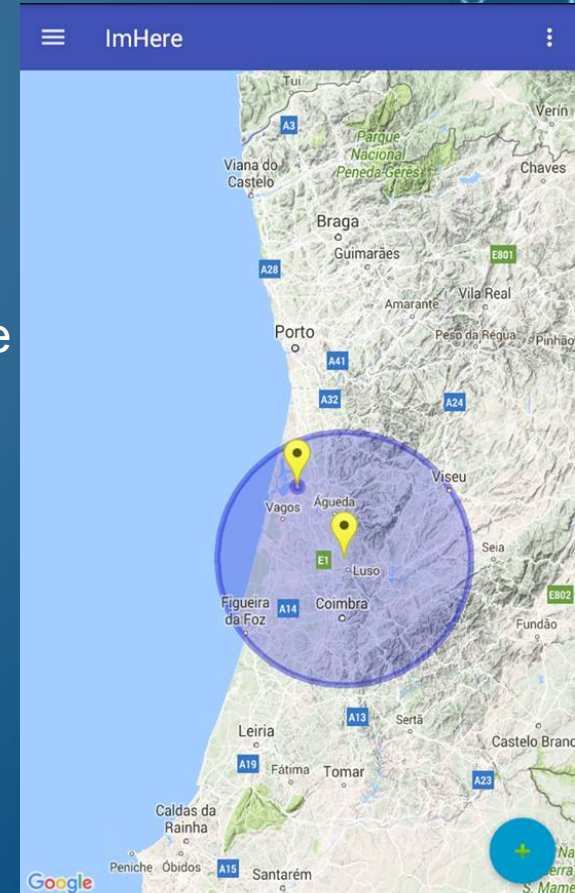


PostgreSQL



# Geolocation Service

- Stores locations and radius of the chats
- Chat location and range is shown as a coloured circle
- Get location coordinates and radius
- Serves information related to user location
  - Check if user is inside a location
  - Retrieve the closest locations
  - Distance between user and location
- Edit and remove chat parameters





# NLPBot Service





# NLPBot Service Technologies:

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# NLPbot

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- Natural Language Processor chatbot that calls different services.
- Uses a trained model to identify which service to call (e.g. “tell me the news” and “what are the headlines today?” both return the current news).
- Acts as a regular client that connects itself to every chatroom
- It's easy to develop third party services to extend its features

# Message Intermediary Service Technologies:

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# Message Intermediary Service


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- Intermediary to exchange messages between different applications
- Stores users and chats information
- Chats (slack and openfire) related operations
  - Create chat
  - Join Chat
  - Chat message history
  - Chat information
  - Update received message
  - Send notification to firebase
- Users related operations
  - Create user
  - Login with slack
  - Login with google account

# Android App



With the app, a user may:

- Authenticate himself using a google or slack account
  - View a map containing all the nearby chats and its range
  - Create chats customizing its name, range, theme and lifespan
  - Join a available chat through the map or a menu
  - Instant message with all users connected to the chosen chatroom
  - Request services (news,jokes,reminders,definitions) from the chatbot available on all chatrooms
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# Demo

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