

Architectural Design

Overview

The system has three main components. The UI and Client Messaging Component are both implemented on the client as part of the Android application, the Server Messaging System is implemented on Amazon EC2 cloud instances and exposed as a HTTP REST API.

The UI Component handles the presentation of the application to the user, when a message needs to be sent the application uses services exposed by the Client Messaging Component, which handles the propagation of the messages to the server.

Definitions

- **Client:** The software running on mobile devices.
- **Client Messaging Component:** The software component implemented on the client that handles message creation and submission to the server messaging system.
- **Server:** The software running on internet-facing machines hosted on Amazon EC2.
- **Server Messaging System:** The component of the server that allows clients to register messages to be sent to other users.
- **UI Component:** The software component implemented on the client that handles the interaction with the user through implementation of a GUI.

Structure

