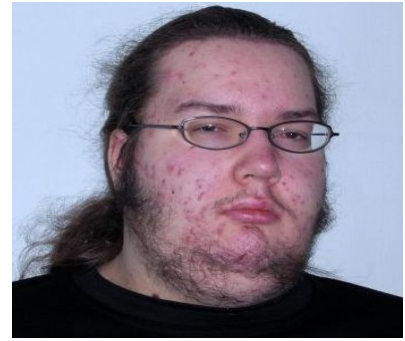# Encryptly

Secure messaging for the masses

Overview

Encryptly aims to bring browser-based encrypted messaging to the mainstream. Users will be able to communicate instantly using a browser based application with their messages encrypted with AES-256, using RSA-4096 for key exchange. Encryption and decryption of messages will occur on the user's browser, offering enhanced peace of mind.

Users will be able to use media and emojis to communicate as well as text - with full unicode and image support. They will also be able create and personalize their profiles.

User personas

Bob is **concerned about his online security** and wants to communicate securely with his friend, however they are not able to meet up in order to exchange a symmetric encryption key in order to message each other securely online.

Encryptly solves this problem by making use of transparent, easy-to-understand encryption technologies from within the browser, with the information necessary to decrypt communication never leaving the browser of each user.
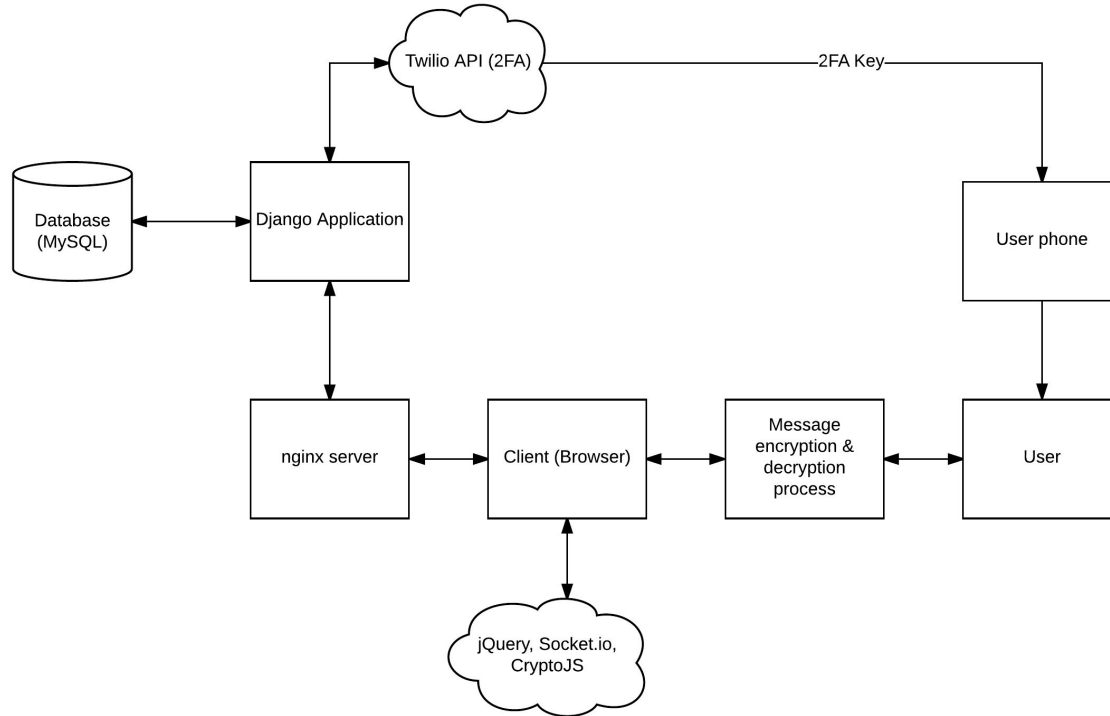
User personas

Microhard is a **technology company** which is concerned about its internal communications' security. There are already some options out there, however, they want an easy-to-understand and easy-to-use application for their already frustrated employees. This is where Encryptly comes into play since all the secure encrypted messaging is done through a web browser, which everyone should know how to operate by now (hopefully).
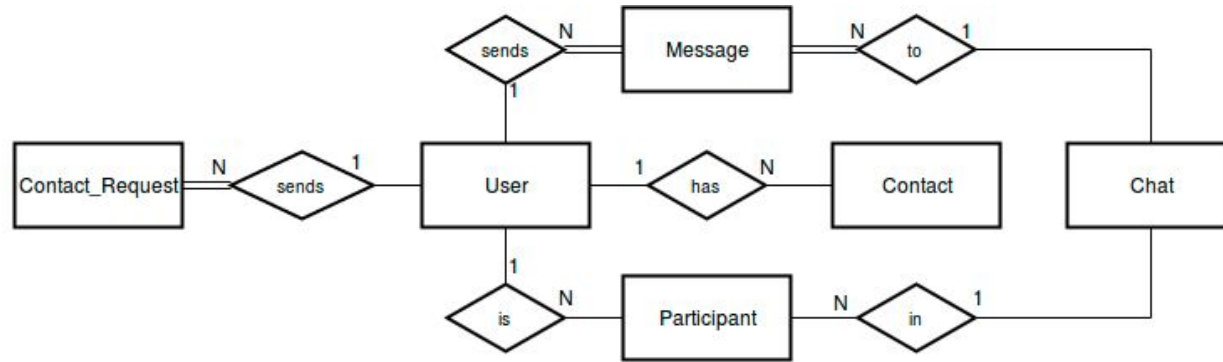
Specification & Requirements

Users should be able to…

- Sign up to the website or sign in to an existing account
- Log in/out of an existing account with optional two-factor authentication
- Send and receive messages instantly with full unicode support
- Send and receive messages in a group of 2+ people
- Send & receive uncompressed media files
- Search for other users by username
- Add a profile picture
- Edit/delete their profile while logged in
- Only communicate with their own contacts
- Have an optional online status, and sent & delivered receipts
- Customizable themes

System architecture diagram

ER diagram
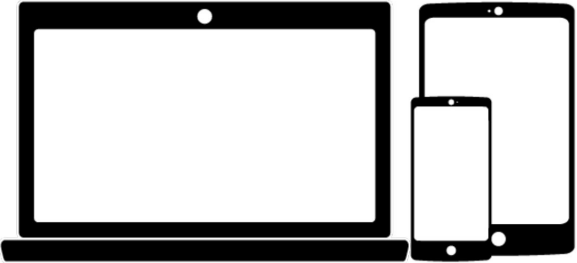
Wireframes - Homepage

Encryptly - Home

https://www.encryptly.io

| Encryptly | About | FAQ | Contact | | Create Account |

Encryptly

Secure messaging for the masses

Decryption Key

Username

Password

Log in

☑ Stay logged in

Wireframes - Sign up

Wireframes - Messaging interface
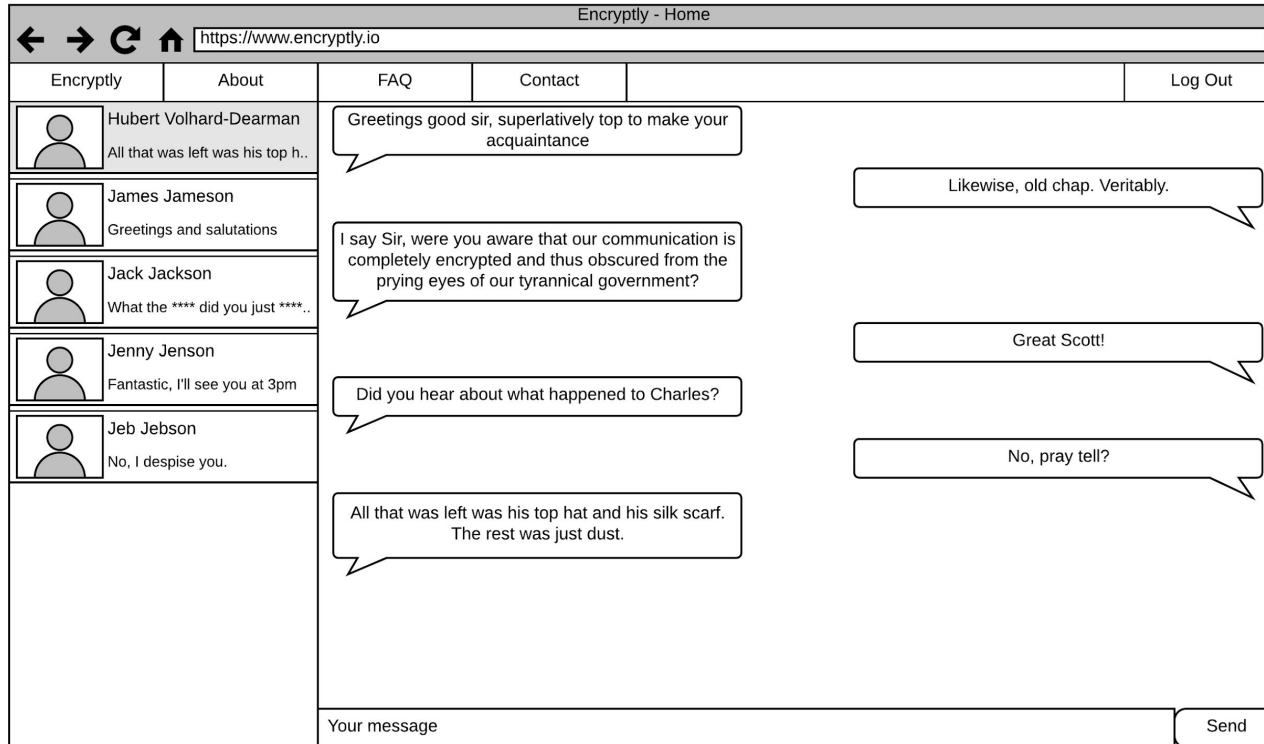
Walkthrough of main features
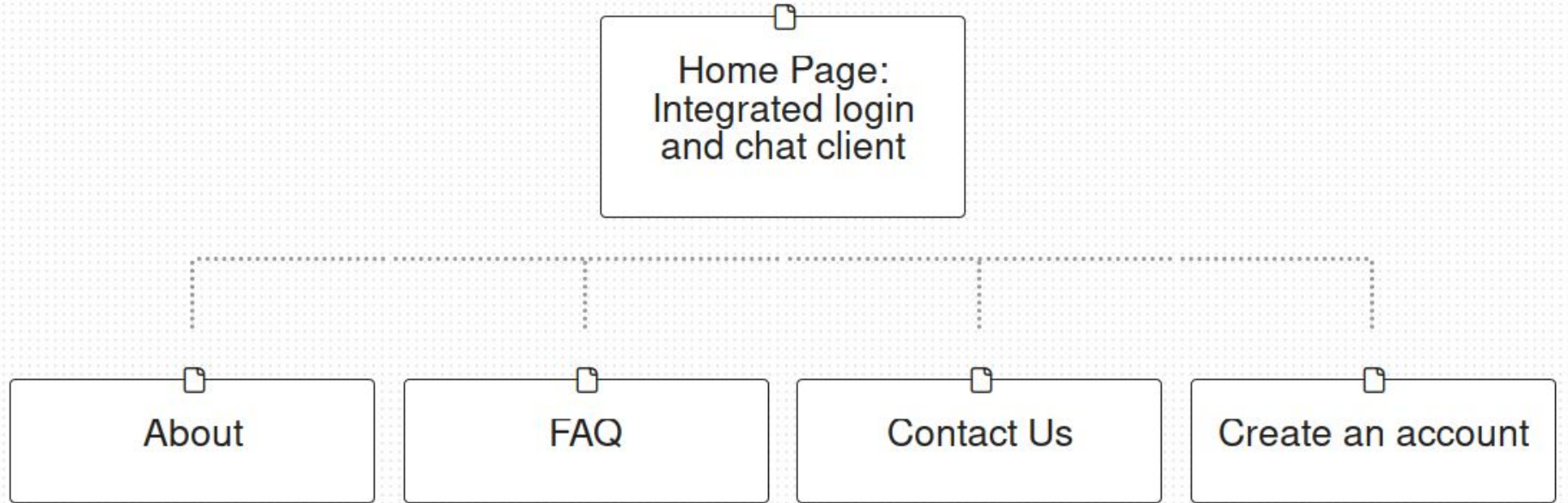
Walkthrough of main features

In the name of security a user will reach the index of the site and be prompted to login or register there with the login not changing the URI so as to not give away the nature of the users visit to the site.

The user once logged in has access to the chat app allowing them to start group chats or conversations with other users as they wish.

The user can also visit the other pages in the site to learn more about how the site works, who the creators of the site are and get help with using the chat application as well as register if they do not already have an account