This project is developed using three tier architecture wherein software is organized into three logical computing tiers; the presentation tier wherein user interface was developed in HTML, CSS and JavaScript; the application tier wherein logic is developed using Python Flask framework and the data tier wherein the data associated with the application is stored in SQL Lite Database.

This web development solution required quick, scalable and lightweight framework therefore team decided to use Python Flask framework that is independent of external libraries for middle tier. Application login and mail functionality was secured using flask libraries named Flask-Bcrypt, bcrypt, Werkzeug, itsdangerous, email-validator, idna, dnspython, Markup Safe, Flask-Login, Flask-Mail. Apart from that, data tier integration with middle tier was implemented using python libraries named Flask-SQL Alchemy, Flask-Migrate, SQL Alchemy, Mako, greenlet, alembic. This application utilized Jinja framework as well for templating engine making it quick and easy to write code similar to python syntax. Data tier was supported using multiple schemas for storing user profile credentials, preferences and were used by middle tier for querying dynamically.

Despite tight timelines, library such as Pillow (PIL Fork) was used making sure user profile image as well for basic image processing functionality.