Front End

Index.html - Login page used for logging in with option to go to registration page.

Functionality – Send login request to back-end, end all sessions, start session, get user email for session, redirect page to register page, proceed to datasearch.html

Register.html – Register page with username, password, confirm password, and email fields

Functionality – Confirm password, send register request, redirect to index.html

Datasearch.html – Main job search page with search field for description, location, and full-time option

Functionality – Get user session (username, email, sent (Boolean true or false if daily listing was emailed yet or not)), request today’s listings if sent is false, request to send email with today’s listings, populate datatable with searched listings, add listing id to watchlist

myprofile.html – Lists user’s skills and gives option to add new skills to the list

Functionality - Get user session, request users skills, remove skills, add skills

Recommended.html – Recommended listings for the user based on the user’s skills

Functionality – Get user’s session, get users skills and request listings for those skills, link button with link to the listing on github, interested button which sends listing to the email of the user

Watchlist.html – Lists listings that the user has added to their watchlist

Functionality - Get user session, get watchlist listing IDs, request listings for listings IDs, request to delete listings from the watchlist, remove a listing from the watchlist

Graphs.html – Show bar graph with number of listings for different technologies

Functionality – Get user’s session, request graph data

Back End

sendMail.php – Sends an email to the passed email with the passed data

Sessions.php – Handles user sessions. Calls a function based on the passed request value. Sets user session, returns user session variables, sets sent value to true, or ends session.

handleRequests.php – Handles front end POST requests and routes requests. RabbitMQ client class is passed the request data. Calls writeLogs.php to write logs.

rabbitMQClient.php – Functions for creating rabbitmq client and sending requests

rabbitMQServer.php – RabbitMQ Server which processes requests and routes requests accordingly. New exchange and queue is created for every request.

dbListener.php - RabbitMQ Server which processes requests and routes requests accordingly for the database. New database connection is created for each request and functions are called based on request. Database response is then returned to the rabbitMQServer. Writes logs to DMZlogs.txt.

dbFunctions.php – See database documentation.

dmz.php - RabbitMQ Server which processes requests and routes requests accordingly for the dmz. Calls function based on request. Writes logs to DMZlogs.txt.

dmzFunctions.php – Holds list of functions for making requests to the API.

Functions include: Return all current listings, return today’s listings, return listings for passed IDs, return associative array with stats for listings per technology, return listings based on passed skills.

writeLogs.php – List of functions for writing logs for the DB, DMZ, and main Server.

rabbitMQ.ini/rabbitMQ**\_**DB.ini/rabbitMQ**­­\_**DMZ.ini – configuration files with RabbitMQ server configuration details. DB and DMZ files should have the host IP set to the main server IP. Exchange and Queue should be different for both and configured in the RabbitMQ console. Main server configuration should have the IP set to 127.0.0.1 (localhost).

rabbitMQLib.inc – Holds RabbitMQ classes and functions. See file for function explanations.