



Full Stack Developer

Coding Interview Questions

Thank you for your interest in applying for the position of **Full Stack Developer** with Queen Solutions, Inc - QTechnologies. We'd love to have you on-board. This short coding interview questionnaire aims to give us an overview of your abilities in terms of front-end development, back-end development, and database management. We hope you have fun answering this series of problems. Good luck!

Back-end:

Language : JavaScript

Framework : ExpressJS

Runtime Environment : NodeJS

Company A wanted you to make an API for serving statistical information regarding site visits. The base statistics for site visits is stored in the database (in this case, you can use the JSON file, *data.json*, provided in this document). Create an implementation plan, as well as the actual implementation, that will satisfy the following requirements:

1. Provide average site visits for a given date
2. Provide average site visits given a date range (from and to).
3. Provide an array of key-value pairs, with key being the date and value being an array of sites that have site visits for that date

Include in your implementation plan the following:

1. Endpoints to be implemented
2. Conditions
3. List of possible errors to throw
4. Other necessary information

Front-end:

Framework : AngularJS / ReactJS

Create an interface for a form for accepting a file upload. The uploaded file will be read and its contents will be displayed in a table. The interface must only accept a json file following the same schema as *data.json*. If the schema does not match data.json, provide an error message. You can use any CSS library if you need to.

Database Management:

Create a schema for a simple agent management service. The requirements for agent management are as follows:

1. The agent can be assigned to multiple outlets
2. The agent can be given several permissions to access certain pages (route control, delivery processing, restaurant management)
3. An agent's employment can either be contractual or full-time



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4. If an agent's employment type is contractual, the agent must have an End-of-Contract date
5. The agent must have credentials for accessing their intended system

Include any information that you deem necessary.

After you finish, email your answers to cio@queensolutions.net.

Happy Coding!