Petar Kandic . Jarvis Consulting

I am a software engineer who is eager to show what I know. My experience in developing applications has given me a significant understanding of languages such as Java and C, as well as commonly used technologies such as Linux and Git. While back-end development is my greatest strength, I also have experience designing front-end applications, using HTML/CSS, JavaScript, and Python. I have worked alone and as part of a team, using the Agile methodology to communicate with my coworkers and find solutions. I have seeked to add to my knowledge over time, and I am always open to learn new technologies and skills. Whenever new challenges arise, I am prepared to overcome them, using what I know and my ability to learn.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, C

Competent: HTML/CSS, JavaScript, Bootstrap, Python, Rust

Familiar: Docker, AWS, Elixir, C#, C++

Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis_data_eng_PetarKandic

Cluster Monitor [GitHub]: Developed a package of Bash scripts to monitor the status of a Linux system. These shell scripts allow users to monitor the status of all nodes in a Linux cluster. After a PostgreSQL instance is created in a Docker container, tables are created in the instance to store the node data. The hardware data and software usage data are then stored in the database. The software usage data is added persistently to the database, using the cron tool. The agent was tested manually, checking the databases the ensure the data was transferred.

SQL Tables and Queries [GitHub]: Designed an SQL database comprising three tables, and created several dozen queries on those tables. These queries demonstrate several key SQL operations, ranging from simple INSERT statements, to advanced JOINS. A user may study these queries to understand how these operations work. These operations were tested on a PostgreSQL instance, managed by a Docker container.

Java Grep Implementation [GitHub]: Created an implementation of grep, a Linux file-searching tool.By implementing grep in Java, we can achieve platform independence, as Java can run on all major operating systems. The application searches through a (user-provided) directory, and locates lines in files which match a given regex. These lines are written to a text file. Core Java was used to write the program, while Maven was used to manage the dependencies. jUnit was used to test the program.

Java Stock Quote App [GitHub]: Developed a simple stock portfolio app. The application may be either expanded upon to create a more advanced simulation, or be used as is. Data on a stock of the user's choice is pulled from a website (Alpha Vantage). The user may 'buy' or sell a specific quantity of stock which they own. JDBC (Java DataBase Connectivity) is used to store data in a PostgreSQL database. The application was written in Core Java (using JDBC) and was tested with both jUnit and Mockito.

JavaScript Demonstration [GitHub]: Designed and implemented a portfolio of JavaScript applications. These applications range from an implementation of doubly linked lists, to an application which converts Roman numbers to decinal numbers. These were created to demonstrate the syntax and capabilities of JavaScript. By creating several different applications with different purposes, users can observe the different capabilities of the language. All of these applications were extensively tested.

Highlighted Projects

Tutoring Web Application [GitHub]: Designed and developed a tutoring application. Users explore a mock-up of a commercial web-application, navigating its pages and using the log-in system. HTML/CSS is used for the static elements, JavaScript is used for active elements (including windows which fade in), and SQL to store and retrieve log-in data. I used Mocha to test the log-in functionality, and manual testing for the rest of the application.

Java Car Dealership Simulator [GitHub]: Designed and programmed a car dealership simulator in Java. Users interact with the simulator to purchase cars, return them, and filter them based on factors such as their make and price. This project uses Core Java, and no other languages or frameworks were employed. I used unit testing, extensively testing every possible command.

Professional Experiences

Software Developer, Jarvis (2023-present): Programming applications in a Linux environment. These applications are primarily developed in Java or Bash, and are mainly used to create and populate SQL databases with different types of data. Our team uses the Agile methodology. We hold daily scrum meetings, in which we discuss what projects we are working on, and what we plan to do next. These scrums allow us to understand how close we are to completing our objectives, and enable us to reach out to others if we need assistance.

Data Engineer, Fiix Software (2021): Developed a web scraping application with Python to gather the web usage data of our clients. The requests library was used to retrieve data, while pandas was used to transform data before storage. This application was then deployed over AWS, and executed at regular intervals using cron. Before the deployment, I also used AWS to test the application on sample databases. The scraper executed 35% faster than its predecessor. This enabled the company to process a larger amount of data than before, at a faster rate.

Education

Toronto Metropolitan University (2018-2022), Bachelor of Sciences, Computer Science - Dean's List (2020, 2021)

Miscellaneous

- Organized a competitive soccer league; I continue to play in leagues
- Captained several competitive basketball teams; players competed in a regular season and playoffs