Olivia Joy Cacdac

Profile

As a computer science student, I am interested in full-stack development for web and desktop applications. I am proficient in several programming languages including Java, C++, C, and I have project experience working with SQL and noSQL databases.

Projects

DevMate

Contributed to various phases of the software development cycle in a team of 3 to develop a Java desktop application which assists developers in documenting bugs and enhancements for their own projects.

- Collaborated in a team of three with clear and effective communication, resulting in successful project outcomes.
- Developed back-end logic for the saving and editing features in the application, ensuring persisted information in an SQLite database.
- Implemented the singleton design pattern for database connection.
- Designed an interactive and user-friendly graphical interface using JavaFX and SceneBuilder for front-end development.

Designing a Database

Designed and implemented a MySQL database to improve data organization, for use in a full-stack web application.

- Collaborated in a team of three using strong communication to participate in all aspects of the database life cycle, while quickly adapting to meet new deadlines.
- Performed normalization on tables and SQL queries to join tables into views for the web application.
- Composed a formal and detailed report on the project.

Work Experience

Software Developer

Contracted by Digital Media Artists Jonathon Keats and Steve Durie June 2024 - Present Full-stack development for The Future Democracies Laboratory, which is a prototyping software for different governmental systems, using JavaScript, Node.js, Chart.js, p5.js and MongoDB. Key contributions:

- Refactored code to implement a model-view-controller (MVC) design pattern.
- Implemented a MongoDB database using Node.js running over SSL to save persisted user data.
- Implemented new features and a new user interface for the application according to design mockups.
- Integrated hardware controls into the software.
- Data analysis and visualization into 4 different histograms which are automatically updated as new data is added.

Instructional Student Assistant (Grader)

San Jose State University

Jan 2023 - May 2023

- Job summary:
 - Graded 9 Data Structures & Algorithms (CS 146) homework assignments in a timely manner for 30+ undergraduate students over the course of a semester.
 - Analyzed and tested Java programs written by students.
 - Provided positive and constructive feedback on student work to encourage learning and to support their understanding of the material.

Education

San Jose State University - San Jose

B.S. Computer Science, 2025

Minor in Digital Media Art

Relevant Coursework: Java Programming, Object-Oriented Design, Data Structures & Algorithms, Server-side Web Programming, Introduction to Database Management Systems