TANJODH HAYER

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TECHNICAL SKILLS

Languages	Java, Python, JavaScript, SQL
Frameworks	React, JUnit, Express.js, Node.js, Spring Boot
Tools	Git, Heroku, Redis,

PROJECTS

LightNovel Recommender Java, Javascript, HTML, Python, Spring Boot, MSSQL

- I leveraged Redis, an in-memory data store, to improve performance and speed up data retrieval by caching frequently accessed data. This resulted in reduced database queries and improved application responsiveness.
- Configured master-slave architecture using log shipping. Ensuring data redundancy and high availability by automatically shipping transaction logs from the master database to the slave database, enabling quick failover and data recovery.
- Incorporated pagination functionality to efficiently display large datasets allowing users to navigate through the list of light novels in smaller, manageable chunks, enhancing user experience and improving performance.
- Developed a Python web scraper to extract light novel data from external sources enabling the display of up-to-date and comprehensive light novel information on the application.

BGC Engineering Inventory System Javascript, React, Express.js, PostgresSQL, Node.js, Heroku

- I collaborated with BGC Engineering personnel to develop and deploy a custom inventory management system that utilized Google Maps API and Bar-code scanning API to streamline inventory tracking, resulting in improved operational efficiency.
- Selected Express.js and Node.js as backend technologies for their scalability, robustness, and proficiency in handling asynchronous operations. Leveraged these frameworks to streamline API request handling, routing, and business logic implementation.
- Integrated the system with PostgreSQL, leveraging its reliability, data integrity, and robust query support. Seamlessly stored, retrieved, and managed data, enabling accurate inventory tracking and analysis.
- The security measures implemented, such as BCrypt and Passport.js, ensured the protection of sensitive information by securely hashing passwords and providing authentication and authorization functionalities for authorized users within the company

Consumable Item List Java, Swing, Spring Boot

- Created a Consumable Item List application which allowed users to manage their inventory of consumable items, track usage, and generate reports.
- Developed and implemented a REST API using Spring Boot to optimize application efficiency and enable seamless server-client communication. This stateless, lightweight, and scalable architecture utilized HTTP requests, resulting in a modular and maintainable design. The REST API enhanced interoperability and provided opportunities for future system integration with other platforms or systems.
- Implemented Factory pattern and interfaces for modular, reusable codebase. Improved code quality and adhered to Object-Oriented Programming principles. Enabled easy management and customization of diverse consumable items, promoting separation of concerns and encapsulation. Facilitated future expansion without disrupting existing code. Interfaces supported abstraction and integration of new functionalities, ensuring code consistency.

EDUCATION

Simon Fraser University Burnaby, BC

Bachelor of Science in Computer Science Sept. 2020 - Present