Yifan He

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GitHub https://github.com/yifan-He/Projects-Demonstration
Personal Web Page: https://yifan-he.github.io

SUMMARY

Having a deep understanding of object-oriented design, programming, and familiarity with data structures, algorithms and code refactoring.

Experienced in working in a productive team and comfortable in feature design and troubleshooting.

A team player who can quickly integrate into new environments and actively participates in group discussions.

EDUCATION

Concordia University

Bachelor of Computer Science

Montreal, QC

June. 2018 - May. 2022

PROFESSIONAL EXPERIENCE

ByteTube.Inc Montreal, QC

Software Engineer Intern Jan. 2023 - Sep. 2023

- Worked as part of a high-performing agile team to develop community web applications using modern development tools to provide consumption services for the community.
- Built RESTful pages using EasyUI+JQuery and provided corresponding interfaces using SpringBoot+MyBatis3+MySQL to assist in developing customer orders, querying customer points, and customer redemption functions to enhance user experience.
- By using **Dynamic SQL** and **Lazy loading** mechanism in Mybatis, SQL statements are dynamically spliced according to different conditions and queried on demand, reducing the complexity of queries and improving query performance.
- Implemented a daily timed task to count daily merchant sales using **Quartz** and provided feedback to merchants using the **ECHATS** visualization tool in the front end, allowing merchants to better understand how their stores are selling.
- Added headline photos and user passwords to **Redis**, speeding up the loading speed of the home page by 10%.

PROJECTS

FishBall Community Application

- Built a partially-finished community shopping platform to help customers make their daily shopping more convenient.
- Independently completed features, using EasyUI+JQuery independently on the front end and SpringBoot+MyBatis3+MySQL on the back end, and providing a unified RESTful interface.
- Used **DES** and **DM5** to encrypt and decrypt platform passwords, **Redis** stores infrequently changing resources such as photos.
- Assisted in generating **QR codes** to log in or register the platform with the **WeChat** third-party interface.

Eight-Emperor card game (C++)

- Lead a team of five people at school to implement a strategy card game in which you draw cards, deploy and command armies to take over the continent and pass the scoring at the end.
- Integrated map, load map, card, player, and biding phase these 5 parts and overall contributed over 50% of the code.
- Added action logging and pattern selection functionality through the use of the **Observer Design Pattern** and the **Strategy Design Pattern**.

Database design of COVID-19 vaccination system

- Participated in a database design with a team of 5 people in school, involving the designs of E-R diagrams, keys, entries, and relationships.
- Implemented the database with **SQL** and Constructed a web page with **HTML/CSS/PHP** for query input. Ex. adding, deleting, and searching vaccination information.

Unity game - The Hive

- Built a puzzle-solving 2D maze pixel game using **Unity** in a school team of 5.
- Implemented basic user interfaces such as backpacks, menus, character blood bars, battery levels and hunger levels independently by using Unity **Bar** and **Grid** components.
- By using C# script to develop some characters and a simple backpack function that allows the player to interact with the backpack. The backpack has functions such as describing, storing, discarding and using items.

SKILLS

Front-end: HTML, CSS, JQuery
Back-end & FrameWorks: Java, C++, Python, Spring, Mybatis, Maven, JUnit

Database: MySQL

Other Tools & Services: ECS, VScode, Visual Studio, GitHub, Git, Unity