Nathaniel Tseng

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SKILLS

React.js, JavaScript (Node.js), Python, Redux, SQL, SQLAlchemy, Flask, Git, HTML5, CSS3, C#, Docker

PROJECTS

Remember the Milk Clone (Express / PostgreSQL / React / CSS3)   Live Site | GitHub
Dynamic single-page app that allows users to create, read, update, and delete tasks and lists
- Supported additional text notes on tasks and due date categorization to allow users to better prioritize tasks
- Built dynamic task search using Redux state to allow users to find tasks from any list at any time
- Styled application using non-package CSS3 attributes to maximize browser compatibility

Instructables (Flask / SQLAlchemy / PostgreSQL / React / Redux / Docker / CSS3 / AWS S3)   Live Site | GitHub
Website that allows user to create tutorials for their various interests, and comment on them
- Designed PostgreSQL database to allow tutorials to include any number of steps
- Utilized AWS S3 to improve scalability of image uploads allowing users to add images to project headings and all sections

Prophets of the Labyrinth (Discord.js)   GitHub
Multiplayer rogue-like game about acting on predictions played in Discord
- Utilized object-oriented programming (OOP) patterns including Strategy Pattern, Observer Pattern, and Factory Pattern to improve codebase maintainability and efficiency
- Optimized deployment (DevOps) using GitHub Actions to automate wiki updates and syncing sponsors credits

Evernote Clone (Express / Sequelize / PostgreSQL / React / Redux / CSS3)   Live Site | GitHub
Notes app that allows users to create notes and organize them into notebooks
- Imported rich text editor library Tiptap to allow users to save detailed notes with visual styling
- Designed React components to provide immediate feedback through modals and validation error messages

Extension Hunt (Express / Sequelize / PostgreSQL / Pug / CSS3)   Live Site | GitHub
Website that allows users to create pages for VS Code extensions, comment on, and upvote extensions
- Implemented DOM manipulation authentication to allow login from any page of the application
- Engineered many-to-many db relationship for extension categories allowing extensions to be qualify for multiple categories

DirectoryBot (Discord.js)   GitHub
Community management bot that allowed users to reference friends' game usernames across different games
- Maintained service from release to sunset (2 years of deployment) through major library updates utilizing latest features, resolving vulnerabilities, and fixing bugs
- Protected user privacy by encrypting sensitive data in storage
- Implemented locale-sensitive localization framework to automatically respond in user's set language

EXPERIENCE

Academic Tutor
Personal Employment, September 2016 - September 2021
- Applied UX principles of agency, mnemonics, and pacing in 1:1 math/science tutoring resulting in 10%+ grade improvements
- Emphasized understanding over test taking strategy to promote enjoyment of learning
- Created practical projects to ground understanding in reality, inspiring confidence in students

Board Game Consultant
Coalition Game Studios, September 2017 to February 2019
- Organized playtests for clients including *Fantasy Ranch* and *Pedigree: The Animal Breeding Boardgame*, with 100% on-time case completion record
- Collated rules copy editing, A/B split testing, and survey analysis into actionable feedback reports

EDUCATION

App Academy - Immersive software development course with focus on full stack web development (Winter 2021)
Santa Clara University - *BS - Mechanical Engineering* (Spring 2016)