Timothy Bak
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https://timbak94.github.io/Portfolio/

Projects

Oto no Kumo (Rails, JavaScript, React, Redux, HTML5, CSS)
Single-page web app inspired by SoundCloud designed to allow users to upload and listen to music
- Capitalizes the Redux store to produce continuous play of music from HTML5 audio elements on multiple components, allowing for seamless transitions
- Utilizes AWS S3 to host user-uploaded files and incorporates them into the PostgreSQL database, reducing server load
- Operates with Rails RESTful web services for song and user CRUD to provide interoperability between OS and the internet

Active-Replay (Ruby, RSpec, Rails)
Object-relational mapping application programmed to ease SQL query manipulation
- Applies metaprogramming to provide users with methods for manipulation based on table name
- Provides "belongs to", "has many" relations, along with their "through" variations

MUSIKA (JavaScript)
JavaScript browser game inspired by rhythm games like DanceDanceRevolution
- Provides responsive controls that rely on object collision to determine the accuracy of player inputs
- Establishes accurate beat mapping through a song's BPM, displaying reliable distribution of notes

Education

App Academy (November 2017 - February 2018)
- Rigorous 1000-hour software development course with <3% acceptance rate
- Topics include: TDD, scalability, algorithms, OOP, coding style, REST, security, single-page apps, and web development best practices

Boston College (August 2012 - June 2016)
- BA English, General Education Minor

Professional Experience

Brown Academy (August 2016 - November 2017)
Head of English Department
- Administered day-to-day operations at Brown Academy, managing upwards of 50 students/teachers on weekdays and 100 students/teachers on weekends
- Taught classes for Common Core ELA and SAT reading comprehension and writing
- Established NYS-recognized ESL program