



BorrowWorks Ruby Coding Challenge

Using Ruby on Rails 5+ we would like you to create an application that imports the attached text file and CSV file, parses and stores the data in a database and then allow API access to the data. The application should fulfill the requirements below. The source code must be placed in a public repo on GitHub. The application should be deployed on Heroku free tier.

- Bonus points for user registration and authentication
- The file must be uploaded from the deployed application through a publicly accessible web portal
 - Bonus: user file upload tracking
 - Bonus: ability to download historical files
- The file must be parsed and normalized using a background process
 - Column names should be self-documenting
 - Bonus: Email a notification to the user who uploaded the file when the processing is complete
- The CSV file is fairly straight forward and contains state names and abbreviations
- The TXT file is formatted such that:
 - the zip code is in position 2-7 of each line.
 - The county, state abbreviation, and city are in their respective order in the pipe-delimited portion of each line
- After import and parsing is complete, a JSON REST API call using the zip code in the URL through a GET request, should return the following:
 - City
 - County
 - State Abbreviation
 - State Name
 - Bonus for a second endpoint that uses the state abbreviation in the url and returns aggregated counts of the number of counties, cities, and zip codes in the state
- Bonus points for Web UI that allows records to be searched and viewed

We encourage you to use gems and libraries for everything. We are looking for a simple, clean, elegant design, tests and all-round understanding of the full stack e.g. Ruby, Rails, CSS (or SASS), HTML (or HAML), JavaScript (or CoffeeScript).

The primary focus of this challenge is function over form and understanding the concepts that would allow this to be a baseline from which further developments would be built on top of with an eye towards data analytics. We will look at the structure and design of the database that you choose to support these requirements and prefer a developer that demonstrates an understanding for the follow-on work an analyst and data scientist would need to perform.