

DataDeck Engineer Technical Challenge

Intro

Here at DataDeck, we have a list of songs in a database that we would like to expose via API. The songs are stored in SQLite database, which can be retrieved from <https://s3.amazonaws.com/bv-challenge/jrdd.db>. There are two tables in the database that have the following structure:

Songs

id	int
artist	varchar(1024)
song	varchar(1024)
genre	int
length	int

Genres

id	int
name	varchar(32)

Mission

To build an API to deliver this data in JSON format.

Details

- The API should make all songs searchable by artist, song, or genre. The genre should be searchable by the name in the genres table.
- It should be implemented in Golang 1.9.x
- The API framework you use is completely up to you (we use Goji at DataDeck).

- The data that is returned should include song, artist, genre name, and length.
- There should be a glide.yml file containing all the dependencies.
- There must be a README.md that explains how to setup and install the application.
- Code must be on Github.

Additional Questions

- Are there any suggestions you could make about the structure of our data?
- What fields would you index in these tables?

Additional Information

When you get started, please provide the URL to the project on GitHub so we can follow along.

If you push frequently and make small commits then we can see how you iterate through the project.

Extra Credit

- Make a function in the API return songs by length, which we would like to search by passing a minimum and maximum length.
- Make a function in the API return a list of the genres, and the number of songs and the total length of all the songs by genre.
- Add unit testing

If you get stuck or have any questions, please do not hesitate to ask! You can reach us at

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