

Test 17

The problems are divided into three levels - A, B, and C - with increasing level of challenge. Higher consideration will be given to those who can solve all three problems. Make any assumptions required to fill in potential gaps in completion of the problem statement requirements. However, clearly explain your assumptions and comment your code well.

Attached is a link of a JSON file (<https://api.opensource.org/licenses/popular>) showing some popularly-used licenses with associated information. Save this json as a file in your local system. This will be your **license.json**

Use this license.json to solve the problem set below.

Level A

Write a server in Golang to get a filename from UI, read that file on disk and process the data, then store it in a YAML file. Additionally, the UI should display a subset of this data to the user.

Specifications:

Create the following APIs for the server:

- i. /GET readFile: reads the content of a file(in same directory as program) into a Golang struct, then returns the value. Take **filename** as an input parameter.
- ii. /POST saveFile: reads the content of its payload and creates a YAML file to save it. Pass the **file data** as payload.

Create a UI (basic html is fine) to display this data in a tabular format. The table should have three columns - id, name and keywords. keywords should combine the listed items into a single string.

E.g:

ID	Name	Keywords
Apache-2.0	Apache License, Version 2.0	osi-approved', 'popular', 'permissive'
.....
.....

UI should have two capabilities

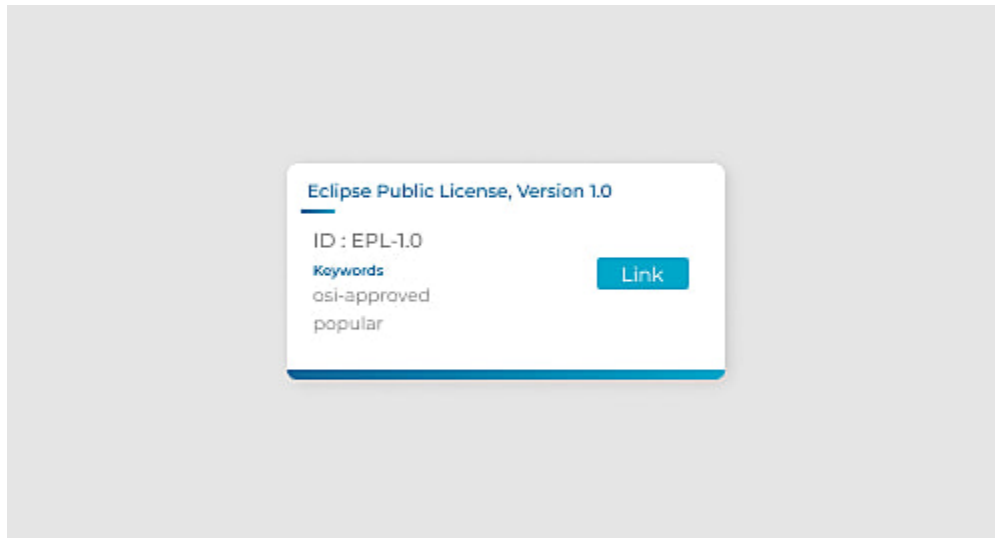
- User can provide filename as input and click a "Load" button. This populates the table.
- User can save this data into a YAML file by clicking a button. Note that YAML file should contain all the JSON data (even if not displayed in table)

Level B

Use Bootstrap (CSS) to create a UI that can display each license and its information (same data as in previous table) in a card instead of a table. You can play around with font sizes, shapes, card sizes, and other design ideas. Deciding factors will be:

- Legibility of data
- Simplicity of presentation

See example below:



Note: This is just an example. Use your own ideas to create UI.

Level C

- i. Set up and install Apache Cassandra 3.11.X on your system. (https://cassandra.apache.org/_/download.html)
- ii. Create a table named **license_data** to hold license information with the columns (id, identifiers, links, name, other_names, superseded_by, keywords, text).
- iii. Create a program in Golang that can read data.json and insert this data into the table.

Note - Complete data should be inserted into the table. Table columns can contain JSON substructures.