TrackTV Legacy Search Engine

- This search engine simulator is built as a synchronous REST service. Each call to the server will wait an block for the the result to come back.
- The result will be in JSON format and will retrieve the tv series that were a match for the request's query from Track TV.
- The system does not connect to Track Tv, it just uses a subset of it's database. When the server starts you will see a list of the tv series that are indexed.

Running the server

- You will have a jar file called "syncwebserver.jar". To run the server run the following command:
- *java -jar syncwebserver.jar -p <port_number>*
- The server runs on a specific port. You can choose any port you want, as long as it is valid and it is not already in use. You can also run the command with no port specified and the default port number 8081 will be used.
- e.g. java -jar syncwebserver.jar -p 8081

Using the server

- After the server has started you can make request with specific queries to search for tv series. The server only supports HTTP GET requests and they should be made at the following ddress:
- *GET localhost:<port_number>/tracktv?query=<search_query>*
- e.g. curl -XGET localhost:8081/tracktv?query=Californication
- e.g. access from browser localhost:8081/tracktv?query=Californication
- The <search_query> will contain the keyword(s) that will form your search request.
- Example of keywords: "stargate", "robin hood", "californication".
- If the <search_query> doesn't have at least 2 caracters, the request will not be considered valid.
- If the <search_query> is "**" , the response will contain all the entries from the database.
- The response from the server will be in JSON format containing the number of entries that matched your search and the actual entries from our virtual database.
- HTTP status codes that you can encounter:
  - 200 – OK
  - 404 – NOT_FOUND -> you didn't access the right url
  - 400 – BAD_REQUEST->you must use the format specified above for the queries
  - 500 – INTERNAL_SERVER_ERROR->you caught some error that we've missed. Sorry:D
  - 501 – NOT_IMPLEMENTED->we only support HTTP GET method
  - 503 – SERVICE_UNAVAILABLE->looks like the server is down. Is it your fault?
- JSON response structure:{"noEntries":2,"content":[{<track_tv_entry_1>},{<track_tv_entry_2>}]}

Problems with the server

The server supports a limited number of simultaneous requests, just 2 and another request that will wait in a queue. If there are more than 3 simultaneous requests, the extra ones will get ignored. So, think about this and how you can deal with such situations.