

# TwinThread Code Challenge

All TwinThread customers have a variety of physical assets at their businesses. Searching for and displaying assets is a common task we face. We have provided a sample of JSON test asset data below.

Using language of your choice please write a program that does the following:

- Downloads/consumes this sample data upon starting the application ([https://drive.google.com/file/d/1\\_sJdC5-\\_lluKbxmtOU3o4w6-fKUfL-5/view?usp=sharing](https://drive.google.com/file/d/1_sJdC5-_lluKbxmtOU3o4w6-fKUfL-5/view?usp=sharing))
- Allows for a simple search of asset data by name, description, or other specified top level field
- List all assets that have a critical status
- Gives a count of unique class names, then, for every class name, lists the names of those assets that have those class names

Bonus Points:

- Build a UI for your search that nicely displays the results.
- Build a visual hierarchy for a given asset id (see a tree of assets beneath that asset)
- Support complex queries such as the following:
  - **wildcard search:**
    - name: Extru\*
  - **multiple property search:**
    - name: Extru\* && status: critical
    - name: Extru\* || status: critical
  - **range search:**
    - value:[0.1-9.5]

Your program should compile and run. It can be a console app or provide a simple UI.

Take at most 4 to 5 hours and report back with how much time you spent (if you're busy and can only do 2, you won't be dinged for that.). This is meant to be more work than you can complete in the time allotted, and is meant to show us your pace and quality of work.

When you've completed the project, please provide a README.md with specific instructions to run and use your app and put the code on Github. Finally, email us a link and we'll reach out with next steps.

Thanks, and good luck!