

## 1. Building a simple dashboard with basic web scraped data

### a. Analyse different registries for the data formats

#### i. Many different registries into the priority list

1. List out the registries, the most important 16 are to be chosen, properly verified for their functioning and data authenticity
2. Dividing these registers based on the complexity of the data formats and Sorting them into different categories

### b. Design and Data formats of the registries for adapters

#### Stories

#### i. Analysing the formats

1. Understanding the various data formats using tools
2. Checking out the website and its code thoroughly to verify the data formats
3. Learning about the data formats

### c. Finalise design formats of adapters

#### i. Understanding how adapters work

#### ii. building the adapters requirements

### d. Build web scrapers to extract data

#### i. web scraping tools

1. Knowing the various tools and languages needed for web scraping. Understanding the ethics and legality behind web scraping. Knowing how to effectively extract necessary information from websites
2. Apply the web scraping tools on the 16 registries
3. Check out old open source websites with similar functioning and analyse their code. Use the functional part of that code to be applied on the registries needed here

### e. Mirror the necessary website information

#### i. Use web scraping to mirror the website information

1. Web scraping tools should mirror all the site information and should be checked for any code errors.
2. Capture the necessary data and properly save it into a database
3. Separating out useful and non-useful data and saving the useful ones into a database for retrieval
4. Doing data verification and validation by checking all the files that are extracted through various methods by running codes using very specific tools

### f. Transform the data into a single format and into a dashboard

#### i. Pre Data transformation

1. After data verification and validation, the files are needed to be separated into different formats

2. These different formats should be analysed to check if they are in the standard formats, if not should be converted into the standard formats
- ii. Data transformation into JSON
  1. Transform the files into JSON format using appropriate tools and codebase.
  2. store these files in a proper database for retrieval
- iii. Post Data Transformation
  1. Check if the files are converted to a standard JSON format
  2. If the files are not in standard JSON format, Use the aforementioned tools to convert them and overwrite the old files in the database

## 2. Implementing an operational dashboard

- a. Search feature
  - i. Search with multiple tabs
  - ii. Result in trial info
- b. Compare feature
- c. Sort and filter feature

Colour code:

Epics: red

Features: blue

Stories: Green

Tasks: maroon