Ideate a use case

- info story, requirements, wireframes:

- who is the user of the information and why is it important to them (their goal or problem being solved with the information)

- The purpose and motivation of the information used is clear and understandable. （to provide a more ethical rating agency data and decrease the commercial bias in the ratings）

**Other:**

- No extra or unnecessary information is used that is not described by the information story.

Requiremnets:

- The requirements of the informations structure are sufficient to define what’s in scope and identify what is not in scope.

- All features of the structure and portability are captured in the requirements.

**Information Story:**

* Who is the user: Recruiters looking for ideal employees in tech
* Why is it important to them:
* recruiter如果只有一个candidates的简历，很难evaluate这个candidate的programming skills
* 如果recuiter直接查看一个candidate的github profile，很难快速地得出analysis insight, 并快速地理解这个programmer的skill level
* 如果这个recruiter正在寻找在某些programming area，比如擅长rust的programmer，将很难通过浏览这个prorgammer的repo总结出来
* 因此，我希望design一个information product where recruiters可以enter the candiates’ github account name and 直接获得the account’s analysis, 帮助the recuiter 作出对于candidate的recruit决定
* 从program的operation jounry上说，the recruiter can enter the github user’s name in the frontend page powered by react and typescript. The product will make an API call to the GitHub endpoits to retrieve the user’s account and repository information.

一方面，这些information会被displayed on the frontend in the original json format. 并且有一个download button for the recuiter to download the json file.

除此之外，after the json data is retrieved from the api, the product会对信息进行筛选，并进行合理的manipulation, 包括:

* + The time of the user on github, the user value based on programming skills, and the active level of the user on github.

最终将这些information传递到frontend，为recuiter提供only和recruitment相关的user programming skill information, 帮助recruiters evaluate the skills of the candidate and make the recruitment decision.

How the existing information is structured

The three axes of data portability.

Based on these three axes, evaluate the portability of the existing information

how portable it is for developers to analyze, which is the original use case,

but how hard it is for our target users, the recruiters, to understand and quickly derive insights from

how is the information accessed (API calls to github endpoint)

analyze the overall portability, quality, and performance of the existing information for the information story, what is good and bad

analyze how the current deficiencies can be improved

**Define the existing information structure**

**Assess** existing information structure using **the FAIR (principles) needed for information story**

1. The existing information that is used in the project is thoroughly analyzed for how it is structured and its portability with respect to the original use case.

2. The way the information is accessed is understood, and the existing information is analyzed, in full or in part, to understand quality and performance.

3. analyze how the current deficiencies can be improved..

2. Given the information story, the transformations needed to the existing information are clear and well defined, including enough requirements to cover all transformations and any new features required.

*Current good and bad, and how generally they can be improved*

当前的*information structure有哪些deficiencies that不能够帮助recruiters find the right candidate by providing useful information on programming skills*

通过make api calls to two GitHub endpoints for user inforamtion (https://api.github.com/users/EveWangUW) and user repo information (https://api.github.com/users/EveWangUW/repos), using the github account ‘EveWangUW’ as example, the existing information structure can be retrieved: (See the folder ‘exisiting information structure’ for the original user and user repo json files)

The fair principles involves xxx

To improve xx,

1) Three big axis of data portability:

-    Clear Meaning -- what is the (semantics) meaning? What is the value there? What is in the data? How to interpret the data?  
    -   Transparency  
    -   Interoperable  
    -   Usable   
-    Accessible -- what is way that we access it?  
-    Structure -- what is the format of data? Is it a JSON or XML structure?

\*Data can be portable but not findable

These three axis of data portability will help with the final projects, in which we want to improve the portability of a digital dataset.

Data and information portability can be assessed against three axes: clean meaning, accessibility, and structure.

**Analyze deficiencies and design improvements for your portable structure:** How you decided to improve the structure -- analyze the current stage against the ideal one

Portable information structure from transformed existing information

The new information structure is different from the existing information in a substantial way, including at least 2 of the following:

information itself, the structure, the format, and the access methodology.

The new information structure clearly meets the requirements identified in the information story, and no additional changes are made that are not part of the requirements.

Improve the existing information structure to enable your information story:

What your new structure is -- writing the code, making the changes, doing some api access, figure out how to access it, get license…

-    Control for quality, performance and security of information system: How would quality be identified and addressed -- how to make sure the change lasts, what are the statistics of the data, how to make it durable and robust…

Document performance and quality of new portable information

The desired quality captured in the requirements and the final quality of the information is well documented. Any differences in quality are described along with a possible remediation plan.

The desired performance of the information system is clearly captured and the final performance is documented. Any differences in performance are addressed and a possible remediation plan is captured.

* How would quality be identified and addressed

Functional information system to access new portable information

It is possible to access the information as described in the documentation.

The information provided is correct and complete as described in the information story.