Project: Librarian

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# *Initial Research Sprint Phase 1*

## **Create List of Information that you need to understand before starting to develop.**

### List:

* How can I process the string data with AI?
  + What kind of AI is this?
    - The type of AI is NLP Natural Language Processing. This processes human text.
  + Do I need to train it?
    - Yes we would need to train this using data that is labeled.
  + How can I train it?
    - It looks like TensorFlow would be a good tool to use.
  + How can I use it?
    - You can pass in new items to the model once it has been trained and it will give you a number that represents the output.
  + What should I use for the AI component of this system.
    - I think to start this project we should begin by using an API, this will get us started and even thought it will not have the best results it will give us something. Then later we can update this to include our own AI model.
* How can I modify user file data from the backend?
  + What information should I retrieve from the user file data?
    - Name
    - Path
    - Extension
    - Creation Time
    - Last Access Time
    - Last Modified Time
    - Size
    - Permissions
    - Owner
    - Attributes
  + What languages should I use?
    - We are going to try using electron because it has backend support for all 3 major operation systems, and it has the use of chromium which I am familiar with.
  + What should be the procedure to modify there data?
    - All changes must be approved by user
* How will the system look from the point of view to the user?
  + What are the essential components of the user interface?
    - Directory Selection Component
    - Changes Preview and Approval Component
    - Error handing components
  + Will the user select a directory?
    - What if that directory is not allowed access?
      * We need to consider the permissions of files attempting to be organized. Also we need to ensure that the files being organized are not operating system files.
  + Will this be a website or will this be a local application?
    - We are going to make this a local app.

## Use Case:

A picture containing text, indoor

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## Class Diagram:

#### User Model

Diagram

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#### Boundary View Model

Diagram

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#### Directory Model

Diagram

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## Dynamic Model

#### Flowchart Diagram:

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