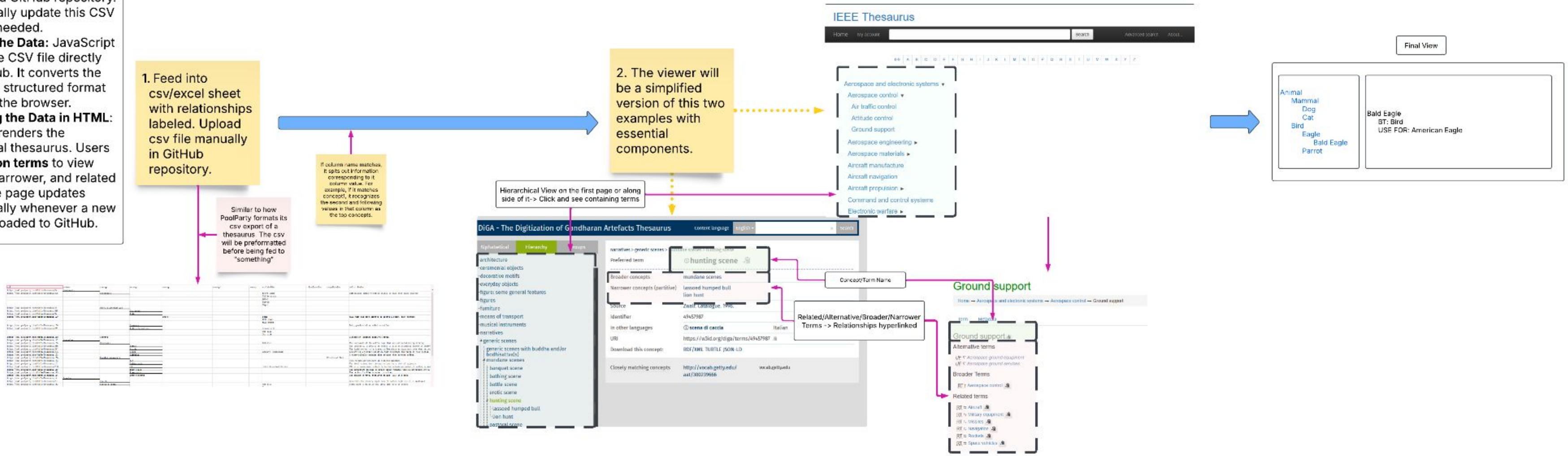
LIS598 Project 2: ThesaurusViewer

Doreen Chen

Design Doc

Specified Frontend Only to ChatGPT and Edited Process:

1. **CSV File Storage**: The thesaurus is stored in a **CSV file** inside a GitHub repository. You manually update this CSV file when needed.
2. **Fetching the Data**: JavaScript fetches the CSV file directly from GitHub. It converts the CSV into a structured format (JSON) in the browser.
3. **Displaying the Data in HTML**: The page renders the hierarchical thesaurus. Users can **click on terms** to view broader, narrower, and related terms. The page updates automatically whenever a new CSV is uploaded to GitHub.



1. Feed into csv/excel sheet with relationships labeled. Upload csv file manually in GitHub repository.

Similar to how PoolParty formats its csv export of a thesaurus. The csv will be preformatted before being fed to "something"

If column name matches, it spits out information corresponding to it column value. For example, if it matches concept1, it recognizes the second and following values in that column as the top concepts.

2. The viewer will be a simplified version of this two examples with essential components.

Hierarchical View on the first page or along side of it-> Click and see containing terms

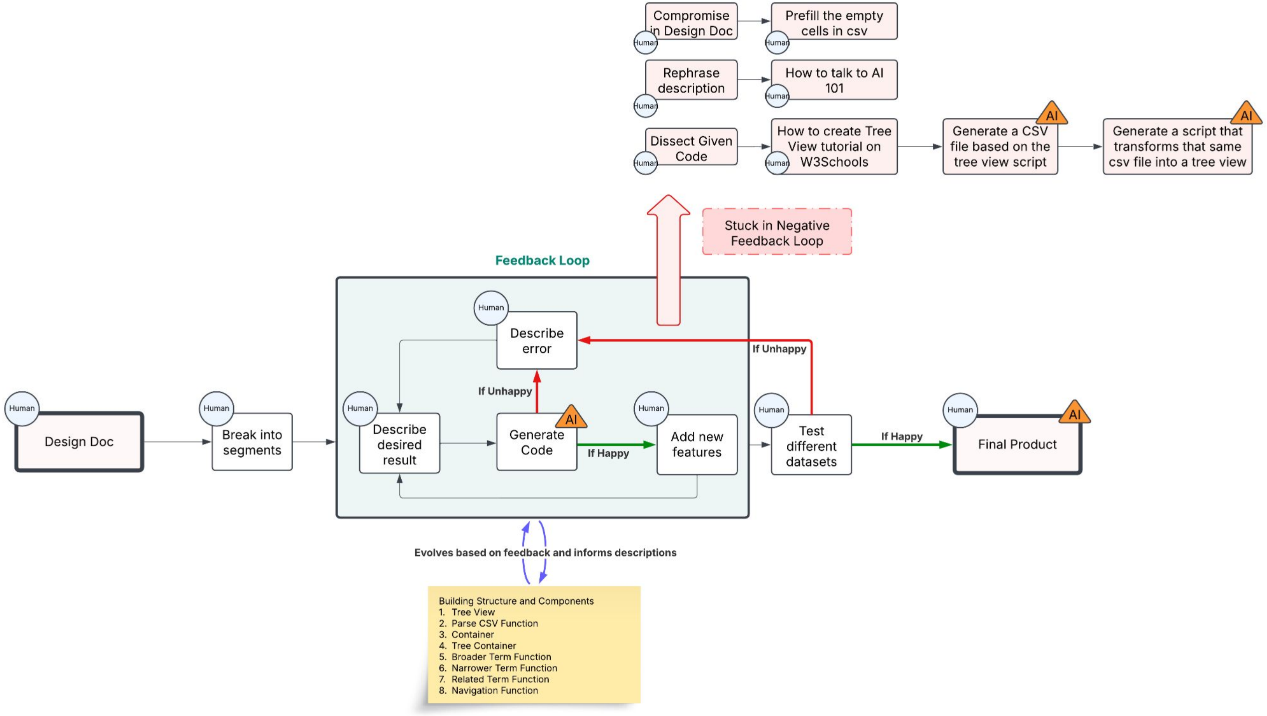
Concept/Term Name

Related/Alternative/Broader/Narrower Terms -> Relationships hyperlinked

Final View

IEEE Thesaurus
Home
My account
Search
Advanced search
About...
Aerospace and electronic systems ▾
Aerospace control ▾
Air traffic control
Attitude control
Ground support
Aerospace engineering ▸
Aerospace materials ▸
Aircraft manufacture
Aircraft navigation
Aircraft propulsion ▸
Command and control systems
Electronic warfare ▸
DiGA - The Digitization of Gandharan Artefacts Thesaurus
content language
English
search
Alphabetical
Hierarchy
Groups
architecture
ceremonial objects
decorative motifs
everyday objects
figure: some general features
figures
furniture
means of transport
musical instruments
narratives
generic scenes
generic scenes with buddha and/or bodhisattva(s)
mundane scenes
banquet scene
bathing scene
battle scene
erotic scene
hunting scene
lassoed humped bull
lion hunt
pastoral scene
Preferred term
hunting scene
Broader concepts
mundane scenes
Narrower concepts (partitive)
lassoed humped bull
lion hunt
Source
Zwalf, Catalogue, 1996.
Identifier
49457987
In other languages
scena di caccia
Italian
URI
https://w3id.org/diga/terms/49457987
Download this concept:
RDF/XML TURTLE JSON-LD
Closely matching concepts
http://vocab.getty.edu/aat/300239666
vocab.getty.edu
Ground support
Home → Aerospace and electronic systems → Aerospace control → Ground support
Term
Metadata
Ground support
Alternative terms
Broader Terms
BT ↑ Aerospace control
Related terms
Animal
Mammal
Dog
Cat
Bird
Eagle
Bald Eagle
Parrot
Bald Eagle
BT: Bird
USE FOR: American Eagle

AI-Integration Workflow



Compromise in Design Doc (Human) → Prefill the empty cells in csv (Human)

Rephrase description (Human) → How to talk to AI 101 (Human)

Dissect Given Code (Human) → How to create Tree View tutorial on W3Schools (Human) → Generate a CSV file based on the tree view script (AI) → Generate a script that transforms that same csv file into a tree view (AI)

Stuck in Negative Feedback Loop

Design Doc (Human) → Break into segments (Human) → Feedback Loop

Feedback Loop

Describe desired result (Human) → Generate Code (AI)

If Unhappy → Describe error (Human) → Describe desired result

If Happy → Add new features (Human) → Describe desired result

→ Test different datasets (Human)

If Unhappy → Describe error

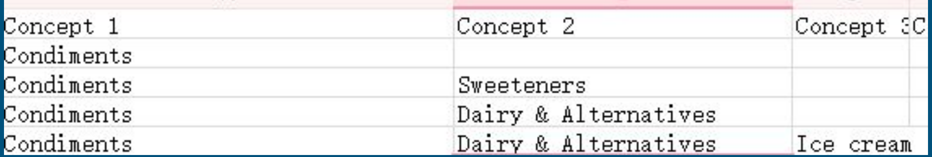
If Happy → Final Product (Human, AI)

Evolves based on feedback and informs descriptions

Building Structure and Components

1. Tree View
2. Parse CSV Function
3. Container
4. Tree Container
5. Broader Term Function
6. Narrower Term Function
7. Related Term Function
8. Navigation Function

How to Talk to AI



Concept 1	Concept 2	Concept 3
Condiments		
Condiments	Sweeteners	
Condiments	Dairy & Alternatives	
Condiments	Dairy & Alternatives	Ice cream

Sweeteners is the narrower term for Condiments.

Initial Approach:

"...Create a frontend only code that can parse this csv file and display a hierarchical list in html. Here are the rules: The first row indicates the relationship between the terms. Concept 1 is the top level term. Concept 2 is the broader term for concept 3 and narrower term for concept 1…"

Gave me a script that displayed something but didn't work.

End Approach:

"Create a function that uses the logic: if end node A is the second to last value before end node B, then in the detail of end node A , indicates end node B is the narrower term of end node A"

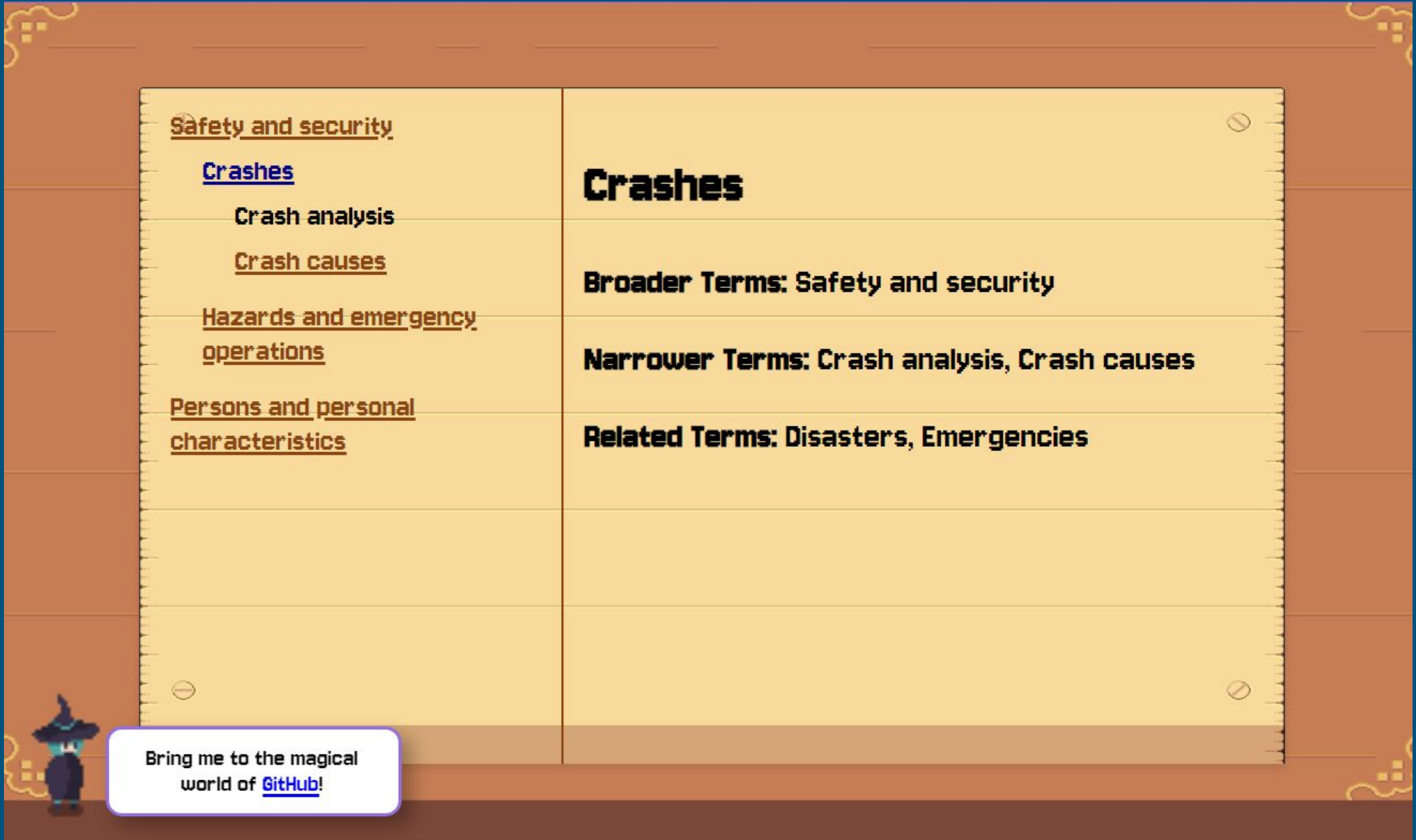
Still required some tweaking around but worked better.

Final Product

https://dchen077.github.io/LIS598ThesaurusViewer/

Uses my group project Coffee Thesaurus from LIS537

Transportation.csv



Safety and security
- Crashes
  - Crash analysis
  - Crash causes
- Hazards and emergency operations

Persons and personal characteristics

Crashes

Broader Terms: Safety and security

Narrower Terms: Crash analysis, Crash causes

Related Terms: Disasters, Emergencies

Bring me to the magical world of GitHub!

Future Goals

1. User uploads csv.files instead of uploading it in GitHub and changing the script.
2. Script that populates empty cells and auto fill until next values. (Being experimented)
3. Make it more user friendly and add a css styling option that is more professional.
4. Less strict structure. (Currently Related Term and Definition must be the last two columns).
5. Add additional details (USE FOR, Scope Notes)