

# Alliant #1: Act Like a Fraudster

## Project Plan

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE
<b>1 Initial Planning &amp; Requirements</b>						
1.1	Define project scope	Everyone	9/9/24	12/12/24		100%
1.2	Project Charter	Everyone	9/16/24	12/8/24		100%
1.3	Requirements Document	Everyone	10/2/24	12/8/24		100%
1.4	Project Plan	Everyone	10/2/24	12/8/24		99%
1.5	Set up project management tools & environment	Everyone	10/17/24	11/4/24		100%
<b>2 Research, Design &amp; Setup</b>						
2.1	Research Title Fraud	Everyone	9/16/24	10/14/24		100%
2.2	Research Title Transfer Process	Everyone	9/16/24	10/21/24		100%
2.3	Research Current Industry Tools	Everyone	9/30/24	10/14/24		100%
2.4	Research Project Planning Platforms	Everyone	9/30/24	10/21/24		100%
2.5	Website Information Gathering	Everyone	10/14/24	10/28/24		100%
2.6	Research Listing Websites	Everyone	10/21/24	10/28/24		100%
2.7	Design system architecture & wireframes	Everyone	11/14/24	11/18/24		100%
2.8	Research & select technologies (scraping, AI, web)	Everyone	11/4/24	11/25/24		100%
<b>3 Prototype Development &amp; Web Scraping</b>						
3.1	Develop website prototype and backend	Isaac, Zach	1/13/25	2/7/25		100%
3.2	Implement web scraping for property data	Shuchi, Walker,	1/13/25	2/14/25		100%
3.3	Scrape deed and mortgage information	Shuchi	2/15/25	2/21/25		100%
<b>4 Integration &amp; Backend Development</b>						
4.1	Integrate web scraping data into backend system	Isaac, Zach	2/22/25	3/7/25		100%
4.2	Implement AI email generation & document creation	Daniel, Isaac	3/20/25	4/11/25		100%
4.3	Implement DeepLiveCam	Diego	3/20/25	4/11/25		100%
<b>5 Website Design, Map, &amp; Final Testing</b>						
5.1	Website design & map integration	Isaac	3/10/25	3/14/25		100%
5.2	Final system testing & debugging	Zach, Walker	3/31/25	4/4/25		100%
<b>6 Final Report, Project Review &amp; Closure</b>						
6.1	Compile final documentation & project findings	Walker	4/7/25	4/11/25		70%
6.2	Review and project closure	Everyone	4/14/25	4/18/25		60%

## Gantt chart

### 1. Initial Planning & Requirements

#### 1.1 Define project scope:

- Decide upon a final deliverable for the sponsor.
- Agree upon a limited set of features for the deliverable.

#### 1.2 Project Charter:

- Define project structure to include milestones, timelines, member roles, objectives, and impacts.

#### 1.3 Requirements Document:

- Explicit list of metrics to encapsulate the project.

#### 1.4 Project Plan:

- Map of discrete steps necessary for project completion.

#### 1.5 Setup up project management tools and environment:

- Select from available project management tools.
- Create repositories for project code and bookkeeping.

### 2. Research, Design

#### 2.1 Research Title Fraud:

- Develop a broad understanding of title fraud.

#### 2.2 Research Title Transfer Process:

- Understand parties and documents involved for future application.

#### 2.3 Research Current Industry Tools:

- Decide what tools are applicable to the title transfer process.
- Refine list to those relevant to the project.

#### 2.4 Research Project Planning Platforms:

- Select an environment that facilitates team management.

#### 2.5 Website Information Gathering

- Identify websites from which to gather land title data.

#### 2.6 Research Listing Websites:

- Learn what information is required to create a listing.

#### 2.7 Design system architecture and wireframes

- Outline technical foundation of the deliverable.
- Create tentative website design and navigation.

#### 2.8 Research and select technologies:

- Discuss what tools could be used to accomplish deliverable objectives.
- Research potential candidates.
- Select those that work best for the project.

### 3. Prototype Development & Web Scraping

#### 3.1 Develop website prototype and backend:

- Finalize wireframe model.

- Create a functional prototype.
- Implement backend for modularity and functionality.
- 3.2 Implement web scraping for property & agent data:
  - Create a web scraper tailored to extracting data from relevant listing websites.
- 3.3 Scrape deed and mortgage information
  - Expand data collection to include personal and financial information relative to the property.
  - Expand list of web scraper compatible websites and the data collected.
- 4. Integration & Backend Development
  - 4.1 Integrate web scraping data into backend system:
    - Store results of the web scraper for display
  - 4.2 Implement AI email generation & document creation
    - Generation of communication via GPT-4.
    - Output fraudulent communications based on the return values collected by the web scrapers. Demonstrates the effectiveness of basic data collection methods that are widely available to the public.
  - 4.3 Implement DeepLiveCam
    - Generate face swapped videos to demonstrate how vulnerable a person's identity is in the modern era.
- 5. Website Design, Map, & Final Testing
  - 5.1 Website design & map integration:
    - Finalize website generation of relevant information.
    - Ensure functional integration of Google Maps.
  - 5.2 Final system testing & debugging:
    - Test for unexpected behavior related to:
      - Data returned from the web scraper,
      - Database storage and queries,
      - Rendition of query results on the website,
      - Website navigation and presentation.
- 6. Final Report, Project Review & Closure
  - 6.1 Compile final report:
    - Summary of insight regarding title fraud and development of a related tool.
  - 6.2 Review and project closure:
    - Compare final deliverable against stated expectation.
    - Feedback from the sponsor.