

# PROJECT CHARTER

Act Like a Fraudster

December 3, 2024

## Revision History

### Charter Revision Register:

| Change Description | Approved by | Date of Revision |
|--------------------|-------------|------------------|
| Initial Charter    |             | Sep. 19, 2024    |
| 1st Revision       |             | Nov. 14, 2024    |
| 2nd Revision       |             | Dec. 03, 2024    |

Approval: \_\_\_\_\_

Accountable Executive/Project Sponsor

## Executive Summary

**Project Name:** Act Like a Fraudster

**High-level Objective Statement:** Study common methods of real estate title fraud, identify the techniques and resources used by criminals, and create a tool that utilizes the processes to report on possible fraud in an informational manner. Work with Alliant National to ensure that the tool is relevant to their needs.

**Background Information:** Title fraud can cause devastating financial damage, especially among vulnerable members of society. It can be done with publicly available information and detection often comes too late; after the title has changed hands and recuperating money from fraudsters is unlikely. With the availability of new technologies, such as AI, attackers have gained access to powerful resources enabling more sophisticated attacks.

**Successful Outcome Statement:** Prepare a report detailing means of title fraud and work with Alliant National to develop a software deliverable that contributes to their operations. A successful project is one that clearly communicates possible avenues of attack, advanced tools and information employed to do so.

**Strategic Alignment:** Alliant National insures land titles. It is in their best interest that fraud does not occur as it causes undue harm to their customers and impedes Alliant's operations.

**Key Initiative Alignment:** Security and Compliance

| Primary Project Contacts |                    |                                      |
|--------------------------|--------------------|--------------------------------------|
| Role                     | Name/Title         | Email                                |
| Project Sponsor          | David Sinclair/CEO | dsinclair@alliantnational.com        |
| Claims Manager           | Mauri Hawkins      | mhawkins@alliantnational.com         |
| Enterprise Architect     | Mohan Kottieth     | mkottieth@alliantnational.com        |
| Data Scientist           | Vinod Vinod        | vvinod@alliantnational.com           |
| Title Law Consultant     | Margaret Cook      | mcook@alliantnational.com            |
| Professor                | Alan Paradise      | alan.paradise@colorado.edu           |
| TA                       | David Baines       | david.baines@colorado.edu            |
| Team Member              | Zachary Cook       | zachary.cook-2@colorado.edu          |
| Team Member              | Daniel Evarone     | daniel.evarone@colorado.edu          |
| Team Member              | Isaac Kou          | isaac.kou@colorado.edu               |
| Team Member              | Diego Marrero      | diego.marrerozilenziger@colorado.edu |
| Team Member              | Walker Narog       | walker.narog@colorado.edu            |
| Team Member              | Shuchi Shah        | shuchi.shah@colorado.edu             |
| Team Member              | Joseph Westley     | joseph.westley@colorado.edu          |

## Project Scope & Stakeholders

### **In-Scope Statement:**

The project consists of creating a deliverable designed to demonstrate the capabilities of modern attacks. The deliverable will be in the form of a website that, given an address, will generate a profile of the property and sample messages to be used in communication with a target. The profile will include information related directly to the property such as location, images, etc. Additionally, it will provide peripheral information about related real estate agents and escrow officers along with resources to include fake IDs and emails. The goal is to provide the user with all necessary information to ethically test preventative measures of title fraud and demonstrate how modern tools enhance fraudulent behaviour.

**Out-Of-Scope Statement:** Though our project is meant to address the issue of title fraud, the methods by which fraudsters engage in and accomplish their goals are diverse and, more importantly, not always done through digital means. Thus, we cannot and will not address every possible form of fraud and will only focus our scope on addressing a few specific methods congruent with our planned deliverable. Additionally, we will not be responsible for directly preventing fraud through defensive cybersecurity measures nor address any form of insurance outside of title fraud.

**Methods:** We will collect data on individuals/properties from the following websites.

Individual:

- [SmartBackgroundChecks](#)
- [Cyber Background Checks](#)
- [FastBackgroundCheck](#)

Property:

- [LandSearch](#)
- [LandWatch](#)
- County Record Websites

The data from these sites will be collected and aggregated via web scraping, using the Python libraries Selenium and BeautifulSoup. An SQL database will be used to store collected data and provide a historical reference of previously generated profiles. IDs, documents, emails, and the like will harness artificial intelligence to streamline the process.

## Success Measures

| <b>Measurement Family</b>  | <b>Targeted Improvement</b>   | <b>Target Results Date</b> |
|--|---|----------------------------|
| Identify common avenues of title fraud and possible solutions                | Understand methods of title fraud, determine specific areas for project scope   | By Oct. 2024               |
| Collect information about an individual or property from open source avenues | Create web scraping tools to find and concatenate said information into an easy to read report                        | By Dec. 2024               |
| Compile and organize reports into a webpage for user access                  | Develop a functional webpage displaying said reports and other necessary information so that can be accessed by users | By Feb. 2025               |

## Estimated Schedule

| Project Phase:         | Deliverables/Milestone:  | Estimated Dates: |               |
|------------------------|--|------------------|---------------|
| <b><u>Initiate</u></b> | <ul style="list-style-type: none"> <li>● Meet with the Alliant National team</li> <li>● Review resources provided by sponsor</li> <li>● Brainstorm potential deliverables</li> </ul>   | <b>Start</b>     | <b>Finish</b> |
|                        |  | Aug 2024         | Sep 2024      |
| <b><u>Plan</u></b>     | <ul style="list-style-type: none"> <li>● Set up necessary information to commit fraud.</li> <li>● Identify tools used to enhance attacks or streamline the process</li> <li>● Establish development environment</li> </ul>                                 | <b>Start</b>     | <b>Finish</b> |
|                        |  | Sep 2024         | Nov 2024      |
| <b><u>Execute</u></b>  | <ul style="list-style-type: none"> <li>● Finalize detailed requirements</li> <li>● Begin development process</li> <li>● Finalize Implementation Plan</li> <li>● Complete Testing</li> <li>● Complete Implementation</li> </ul>                             | <b>Start</b>     | <b>Finish</b> |
|                        |  | Nov 2024         | Apr 2025      |
| <b><u>Close</u></b>    | <ul style="list-style-type: none"> <li>● Discuss Measures of Success with Alliant National</li> <li>● Ensure operational controls are in place</li> <li>● Obtain business sign-off on deliverables</li> <li>● Receive approval to close project</li> </ul> | <b>Start</b>     | <b>Finish</b> |
|                        |  | Apr 2025         | May 2025      |

### Team Member Roles & Responsibilities

|                       |  |
|-----------------------|--|
| <b>Zachary Cook</b>   | <ul style="list-style-type: none"><li>● Database Engineer</li></ul>                    |
| <b>Daniel Evarone</b> | <ul style="list-style-type: none"><li>● Test Engineer</li></ul>                        |
| <b>Isaac Kou</b>      | <ul style="list-style-type: none"><li>● Security Engineer/Communication Lead</li></ul> |
| <b>Diego Marrero</b>  | <ul style="list-style-type: none"><li>● Project Manager</li></ul>                      |
| <b>Walker Narog</b>   | <ul style="list-style-type: none"><li>● Security Engineer</li></ul>                    |
| <b>Shuchi Shah</b>    | <ul style="list-style-type: none"><li>● Security Engineer</li></ul>                    |
| <b>Joseph Westley</b> | <ul style="list-style-type: none"><li>● Front-End Developer</li></ul>                  |

### Project Impacts

The final deliverable of this project will serve two purposes. The first will be to quickly generate a profile with sufficient information to commit title fraud. This will serve as a demonstration of the sophisticated tools openly available to and employed by attackers. Secondly, it will enhance Alliant's capabilities of testing system defenses by offloading data gathering to an automated tool.