

PROJECT CHARTER

Act Like a Fraudster

November 14, 2024

Revision History

Charter Revision Register:

Change Description	Approved by	Date of Revision
Initial Charter		Sep. 19, 2024
1st Revision		Nov. 14, 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
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Team Member	Joseph Westley	joseph.westley@colorado.edu

Project Scope & Stakeholders

In-Scope Statement: Our project consists of one main deliverable which will 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, its owner, and which is a website that takes in the name of an individual and an address associated with them, and returns a detailed report on the other information about the individual/property that can be retrieved from the web as well as the methods of title fraud that can be committed with said information. This tool allows users to see how quickly their personal data can be aggregated, therefore demonstrating both the vulnerability of public data and the potential power of fraudsters. Thus, it acts as both an educational tool for buyers and a source of information and awareness for Alliant National, the title insurance company, which can help prevent future fraud by drawing attention to what buyers, sellers, and insurers should make note of when engaging in any property transactions.

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. 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.

Success Measures

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

Team Member Roles & Responsibilities

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

Project Impacts

The ultimate goal of this project is to demonstrate to Alliant National the potential Open Source tools that can assist fraudsters, as well as how they could be used in an attack. The idea is when a user loads our website, they witness step by step the process of how a fraudster could 1) find a potential target, 2) gather more information on a buyer, seller, agent, and/or property involved in a transaction, and 3) use that information in a potential case of fraud.

Alliant will benefit from this project by seeing in detail what tools tech-savvy fraudsters have access to, and how they could use those tools maliciously. Alliant can utilize our website to either bolster their security on the legal/tech side of their company by responding directly to threats we expose, or they could use our website as a tool for education and awareness both internally and with the agents they work with.