

# Vendor Check Automation

Xuan Wang

School of Information, The University of Texas at Austin

Organization: Texas Department of Information Resources

Field Supervisor: Sharon Blue

## Abstract

This capstone project is an automated process to complete 7 vendor checks and store the results as openable PDF documents for the DIR contract managers. It is a python-based program that involves web scraping, database query, and auto-creation of documents. Vendor account information is fetched from Salesforce by using the Salesforce REST API client.

This program is primarily for contract managers to perform pipelined checks on a specific vendor. The contract manager only needs to provide the vendor's name or id, and the program will automatically execute all the checks in sequence. These checks include:

- Franchise Tax Status check;
- HUB Status check;
- Vendor Performance check;
- US Government System for Award Management check;
- US Government Office of Foreign Assets Control check;
- Texas Comptroller of Public Accounts Debarred Vendor List Search;
- Texas Comptroller of Public Accounts Divestment Statue Lists Search

## Output format

-  VPTS Search
-  Search For Vendors - Search For Vendors
-  SAM\_Search
-  OFAC Search
-  Franchise\_Tax\_Status
-  Divestment Statute
-  Debarred Vendor

## Methodology

I used different python methods to query and download files for different page source structures. There are three main ways:

1. requests
  - Use this method to retrieve data from a specific source (website)
2. Selenium
  - Implemented website interface testing with the support of Chrome WebDriver
3. Salesforce (Database)
  - Provided Salesforce credentials with API access
  - Queried Salesforce Data Using SOQL

## Conclusions and Future Work

- To make this program more user-friendly to non-technical personnel, I applied the headless web scraping method to avoid opening new browsers for each webpage.
- For future work, it would be more convenient for the DIR contract managers to use this program directly inside the Salesforce platform.

