

# TLV300- Home Assignment for Full Stack Developer

## Overview

The Whois API is a service that provides comprehensive information about domain names including details about domain registration ownership and contact information. This API allows users to retrieve essential details about a given domain.

For information about WHOIS REST API: <https://whois.whoisxmlapi.com/documentation/making-requests>

## Assignment

Implement a full-stack application that includes both backend and frontend components.

### Backend

Create an endpoint that receives a domain name and the type of requested data (domain information/contact information) and returns the corresponding data from the Whois API.

#### Domain Information

Domain Name	Registrar	Registration Date	Expiration Date	Estimated Domain Age	Hostnames
<domain name>	<registrar name>	<registration date>	<expiration date>	<estimated domain age>	<hostname1>, <hostname2>, ... (truncate if longer than 25 chars)

#### Contact Information

Registrant Name	Technical Contact Name	Administrative Contact Name	Contact Email
<registrant name>	<technicalContact name>	<administrativeContact name>	<contact email>

### Frontend

Create a simple frontend interface to interact with the backend service.

The frontend should be a single-page application (SPA) which allows users to input a domain name and displays the returned domain information in a user-friendly format.

It should include the following features:

- An input field for the user to enter a domain name.
- A button to submit the domain name for lookup.
- An option for the user to select the type of information they want to see (domain information/ contact information).
- A table or tables to display the returned domain and contact information, formatted as specified below, based on the user's selection.
- Handle and display errors gracefully if the domain lookup fails.

### Implementation Details:

- Use any language for the backend. For the frontend, use any modern JavaScript framework/library such as React, Vue, or Angular..
- Work with the Whois endpoint: <https://www.whoisxmlapi.com/whoisserver/WhoisService>
- Use the "outputFormat" input parameter in the request to receive the response in JSON format.
- Fields marked in <> in the above template should be populated with data received from the Whois API.
- Do not use any specific package for Whois. Specifically, do not import Whois or any other similar package. You may only use core packages and the 'requests' package.
- Include one main endpoint that receives a domain name and the requested data and returns the requested data from the Whois API for that domain. However, you may include as many helper functions as you like.
- The field 'hostnames' should be comma-separated and truncated with ... if longer than 25 characters.
- Test your code before submitting and handle errors gracefully.
- Obtain your free Whois API key from the settings under your user after logging in.
- You can use the domain "amazon.com" to test your code.
- Ensure the frontend communicates with the backend using HTTP requests.
- Style the application to make it visually appealing using CSS or a CSS framework like Bootstrap or Tailwind.
- The application should be capable of being deployed and run locally (localhost port 5000).
- Be creative!

### Submission

**Please submit the following:**

1. A link to a public GitHub repository containing your project files, including:
  - The backend source code.
  - The frontend source code.
  - A README file with clear instructions on how to set up, run, and deploy the application.
  - Any additional documentation or notes.
2. Ensure your repository is well-organized and the code is clean and well-commented.
3. Provide any necessary credentials or API keys required to run the application in a separate configuration file or environment variables, but do not commit sensitive information directly to the repository.

### Additional Resources

- cURL converter: <https://curlconverter.com/>
- React documentation: <https://reactjs.org/>
- Vue documentation: <https://vuejs.org/>
- Angular documentation: <https://angular.io/>

***Good Luck!***

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