**BUSINESS CARD OCR WEB APPLICATION**

**PROJECT DESCRIPTION**:

The Business Card OCR Web Application is a tool that allows users to upload images of business cards, extract the text using Optical Character Recognition (OCR), and categorize the extracted information into relevant fields such as email, phone number, address, and website. The application is built using Python for the backend, Flask for the web framework, Easy OCR for text extraction, and regular expressions (regex) for text processing.

**TECHNOLOGIES USED**

* **Backend**:
  + **Python**: Provides the core logic for processing the uploaded images and handling OCR operations.
  + **Flask**: Manages the server-side routing and integrates the backend logic with the frontend.
* **Frontend**:
  + **HTML**: Structures the web pages for image upload and result display.
  + **CSS**: Styles the web pages to ensure a user-friendly interface.
* **OCR**:
  + **Easy OCR**: Extracts text from uploaded business card images.
* **Text Processing**:
  + **Regular Expressions (Regex)**: Parses the extracted text to identify and categorize relevant information such as email, phone number, address, and website.

**PROCESS FLOW**

**Image Upload**:

* Users access the upload page on the web application.
* Users click the "Choose File" button and select an image of a business card.
* Users click the "Upload" button to submit the image to the server.

**OCR Processing**:

* The backend server receives the uploaded image.
* The image is processed using Easy OCR, which extracts all the text from the image.

**Data Parsing**:

* The extracted text is parsed using regular expressions (regex) to identify specific patterns.
* The text is categorized into relevant fields such as name, email, phone number, address, and website based on the patterns and keyword identification.

**Result Display**:

* The categorized information is formatted into a structured layout.
* The formatted information is sent back to the frontend.
* The result page displays the structured information extracted from the business card.

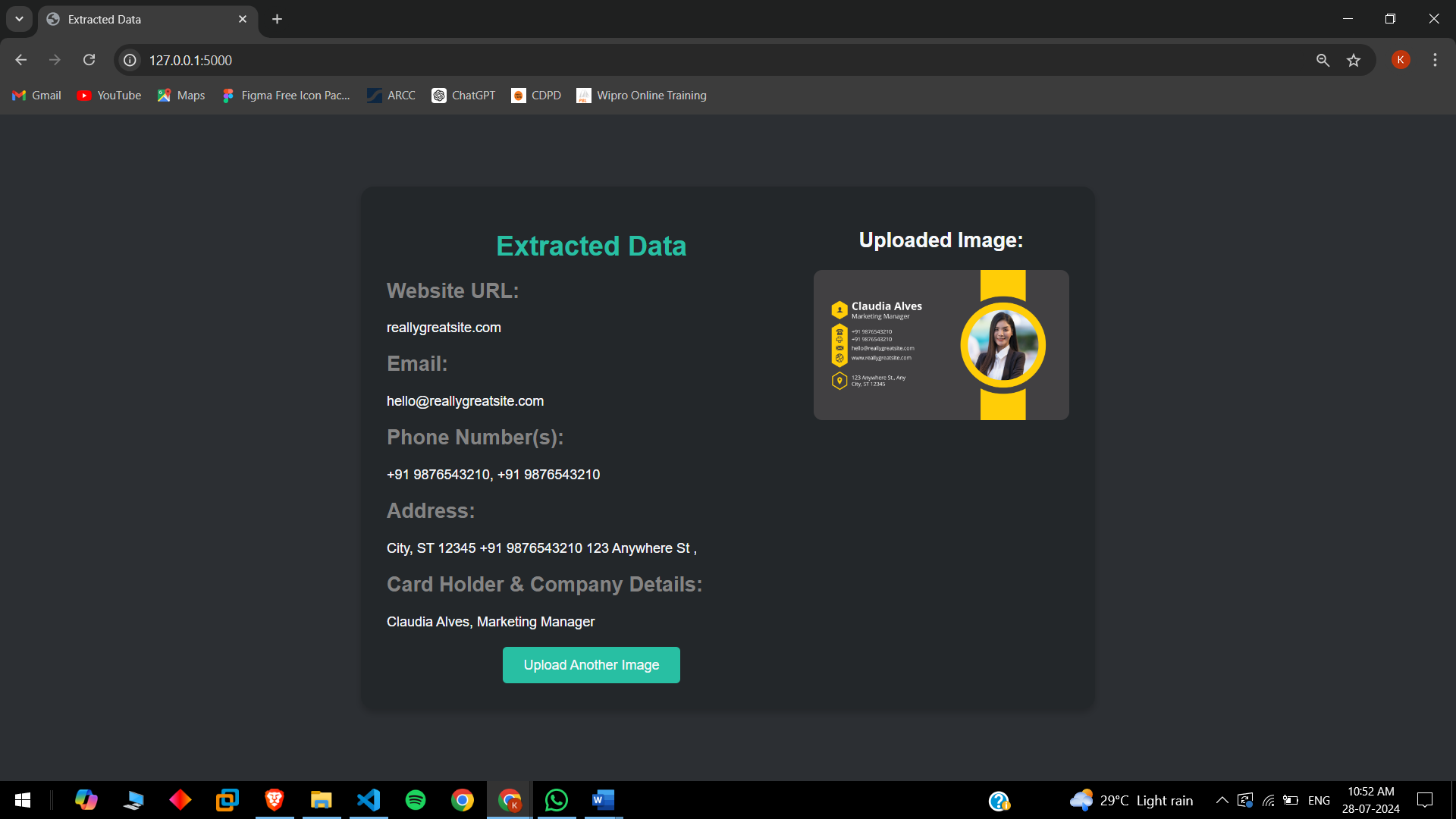
**HANDLED CASES:**

**Empty File Upload**: The application checks if a file is uploaded. If no file is selected, the user is prompted to upload an image.

**Invalid File Type**: The application validates the file type to ensure only image files are accepted (e.g., .jpg, .png). If an invalid file type is uploaded, the user is prompted to upload a valid image file.

**Multiple Phone Numbers**: The application can detect and extract multiple phone numbers, including various formats (e.g., with or without country codes).

**RESULTS:**



A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated