

# Local Business Directory

ITI Project | Computer & AI

SPHINX UNIVERSETY

# Local Business Directory

ITI Project | Computer & AI

Team:  
Yasmeen Mohamed,  
Mai Ahmed,  
Abdelrahman Helmy,  
Abdelrahman Mostafa

Supervised by: ITI

Date: 14/6/2025



01

# Introduction

# What Is a Local Business Directory?

A website that helps users find nearby services and businesses like:

- Restaurants
- Cafes
- Retail
- Health care

Simple, organized, and accessible from any device.

# The Problem

- 1- Users can't easily find local businesses
- 2- Many small businesses have no websites
- 3- Existing directories are outdated or confusing



# Why It Matters

- Helps small businesses reach customers
- One platform for all categories
- Useful in Arabic-speaking regions
- Supports local economy

- Create a front-end web directory
- Make it simple, fast, and responsive
- Support Arabic and English
- Include filters, categories, and maps
- Display top-rated businesses

# Project Objectives

02

# Solution & Technology

# Our Solution

We built a front-end website where users can:

- Search by category or area
- View contact info and maps
- Switch language
- Use it on phones and PCs



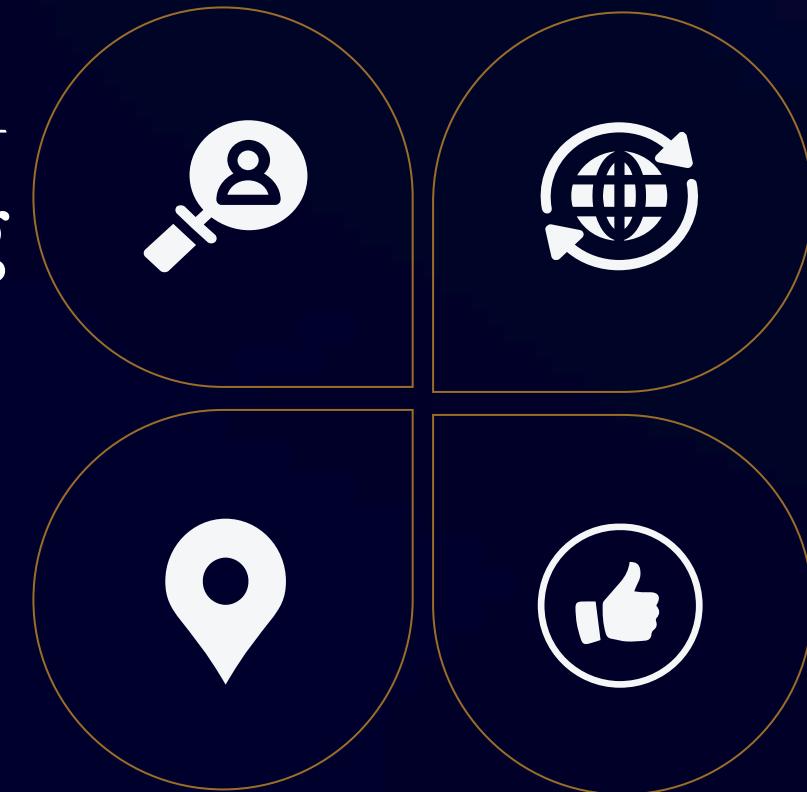
# What Makes It Different?

- English-first interface
- Right-to-left support for Arabic
- Fully responsive design
- Built using only front-end tech
- Light, fast, and user-friendly
- Displays top-rated businesses based on best ratings

# Key Features

Category-based search  
, Location filtering

Google Maps  
integration



Language switch  
(AR/EN)

Top-rated business  
highlights

# Target Users & Use Cases

users:

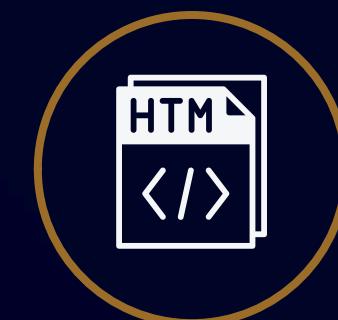
- Locals
- Tourists
- Business owners

Use Cases:

- “Find salons in Giza” .
- “Best cafés nearby”
- “Clinic in Nasr City”

# Technology Stack

**HTML5 :**  
Page structure



**CSS3 :**  
Styling & layout



**JavaScript (ES6):**  
Interactivity



**JSON:**  
Data

**Google Maps Embed API**

**VS Code:**  
Development

# Front-End Architecture

Three main layers:

- Structure (HTML)
- Presentation (CSS)
- Behavior (JS)
- Data is loaded from local JSON files – no backend needed.

# • Directory Structure

/css → styles

/js → logic (search, filter)

/data → businesses.json

/images → assets

/fonts → Arial, sans-serif,Poppins

HTML pages → index, about, details

# JSON as a Mock Database

- Stores business info
- Easy to update
- Supports Arabic & English
- Used in JS for search/filter

Sample entry includes:

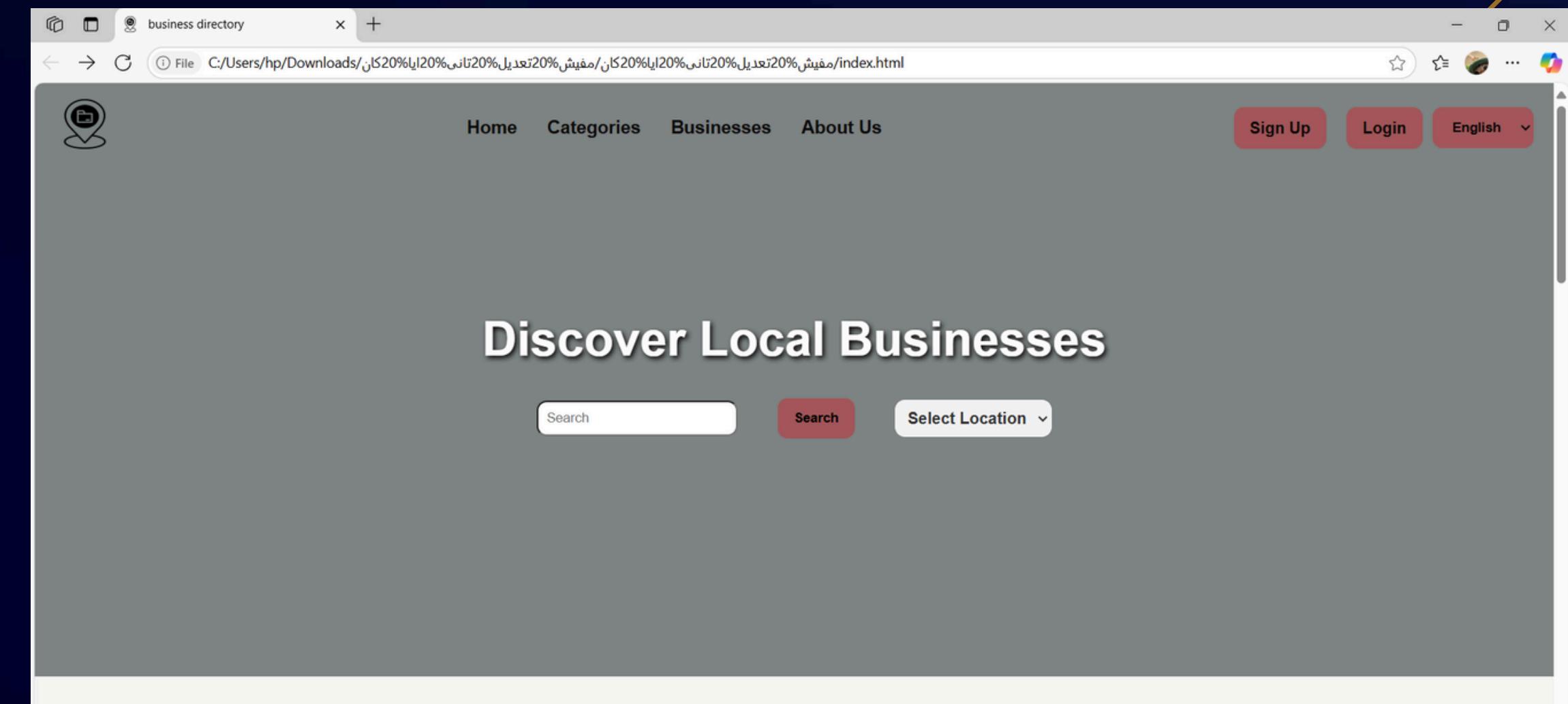
- {name\_en, name\_ar, location, mapLink, rating}

03

# Design & Interaction

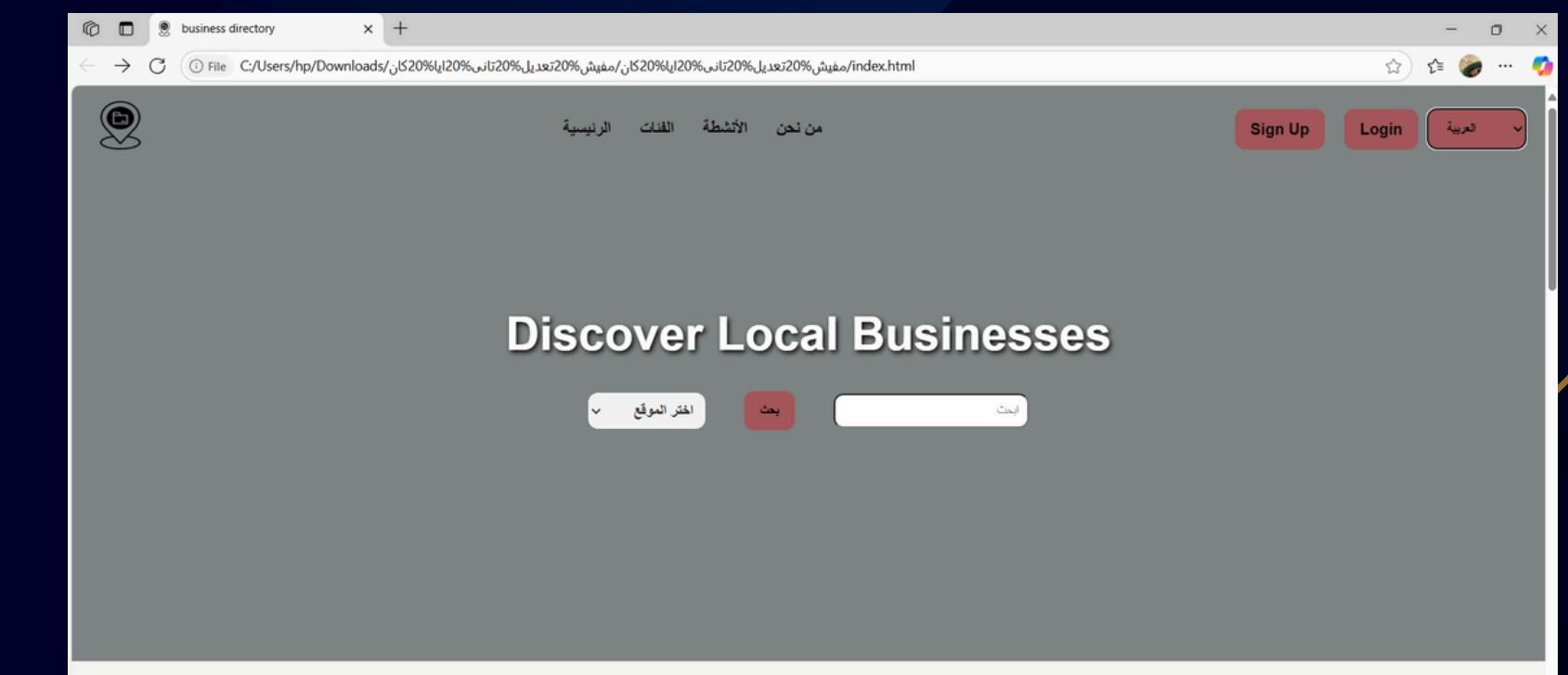
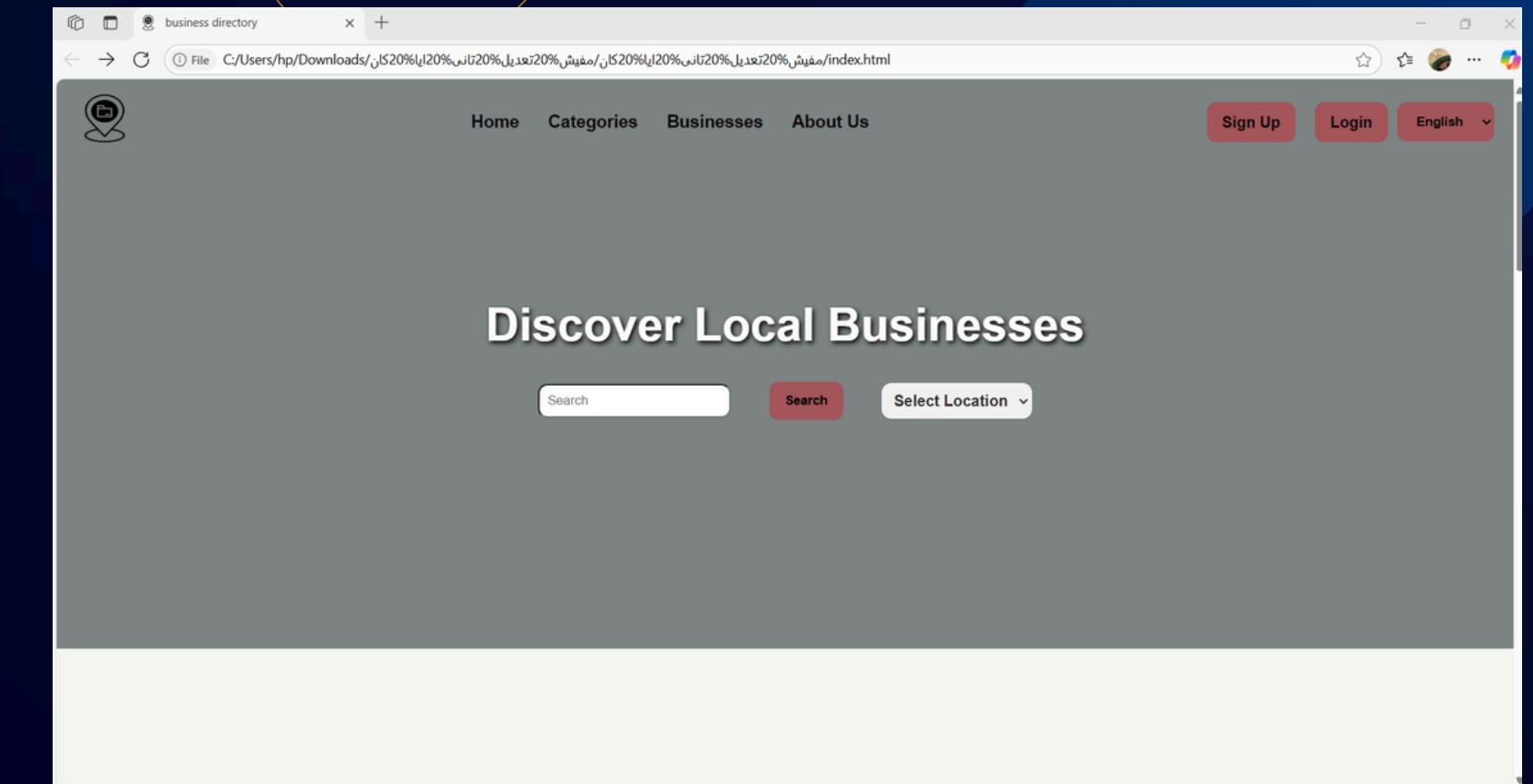
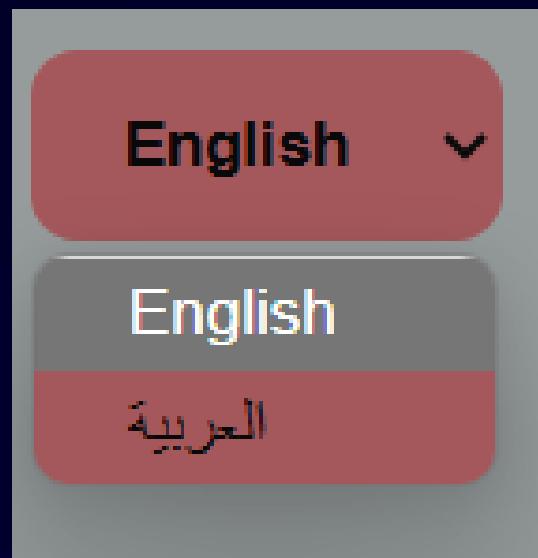
# UI/UX Design

- Clean and modern
- Soft colors
- Mobile-first
- Simple search
- Clear fonts & icons
- Easy navigation



# Arabic Language Support

- Right-to-left layout (RTL)
- Arial font
- Translations via JSON
- Smooth toggle between EN and AR



# Responsive Design

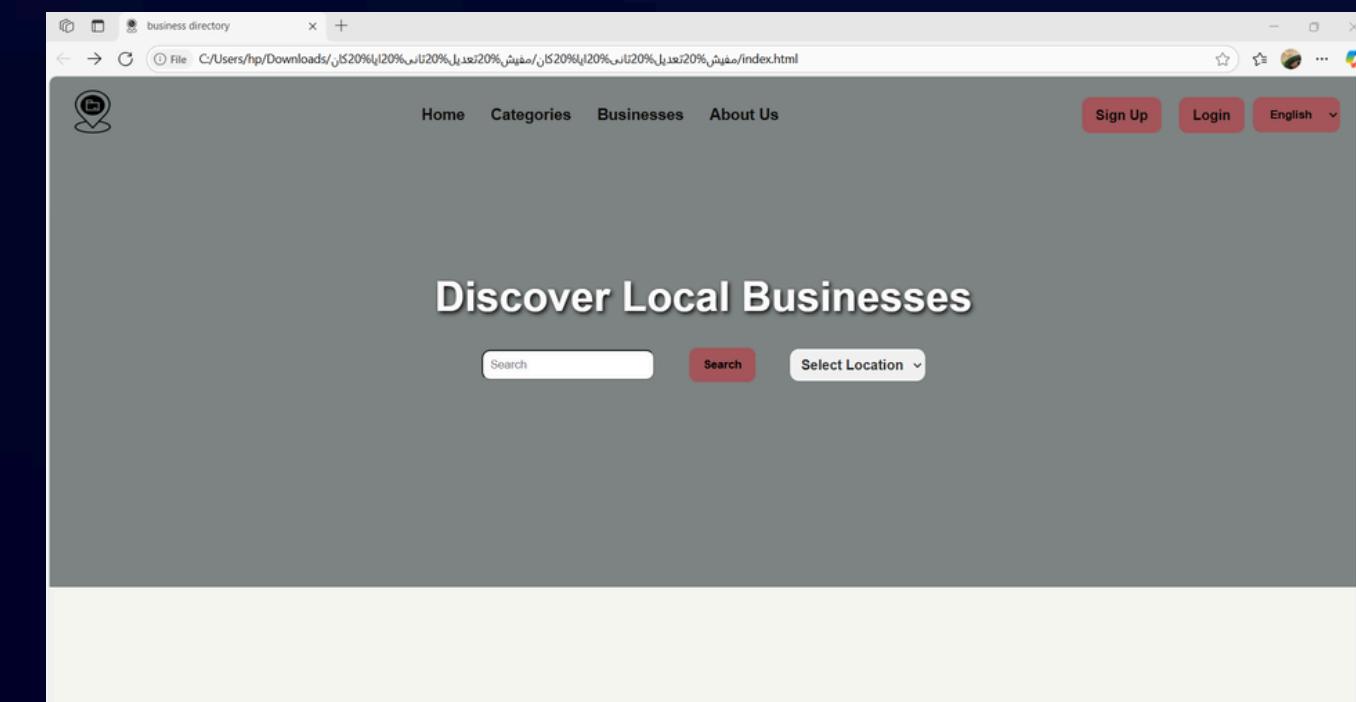
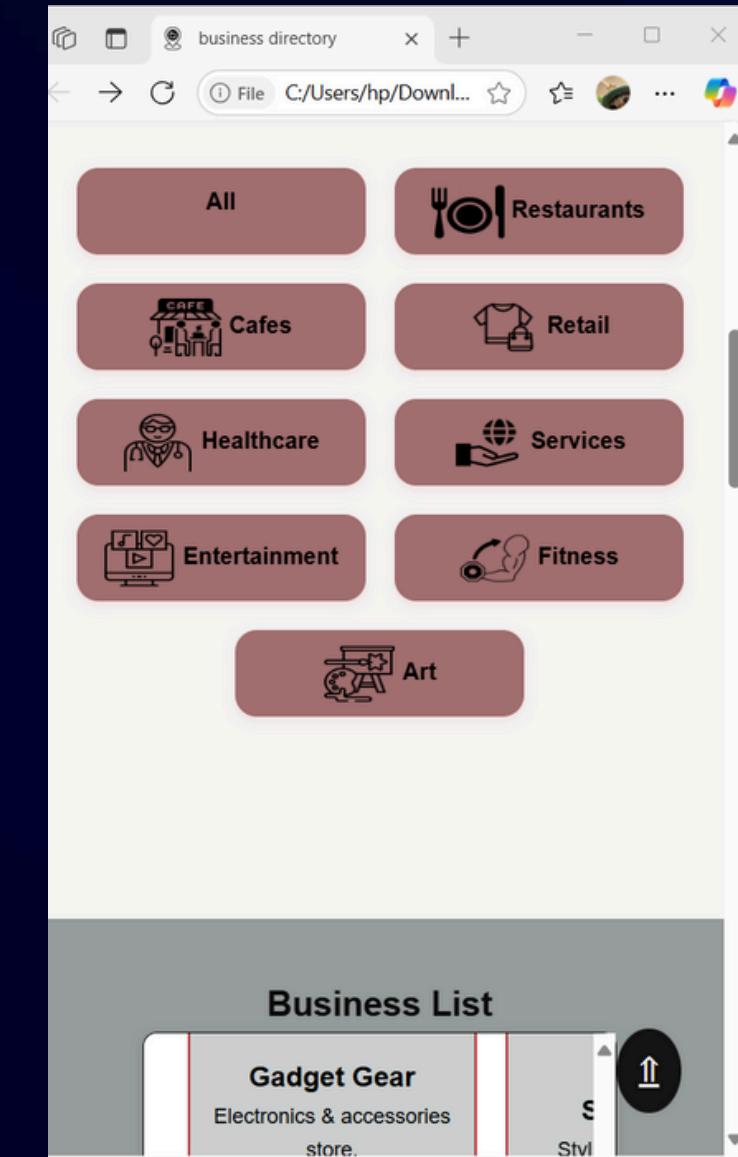
Flexbox & Grid

Navigation menu adapts

Media queries

Tested on phones & tablets

Text/images scale  
properly

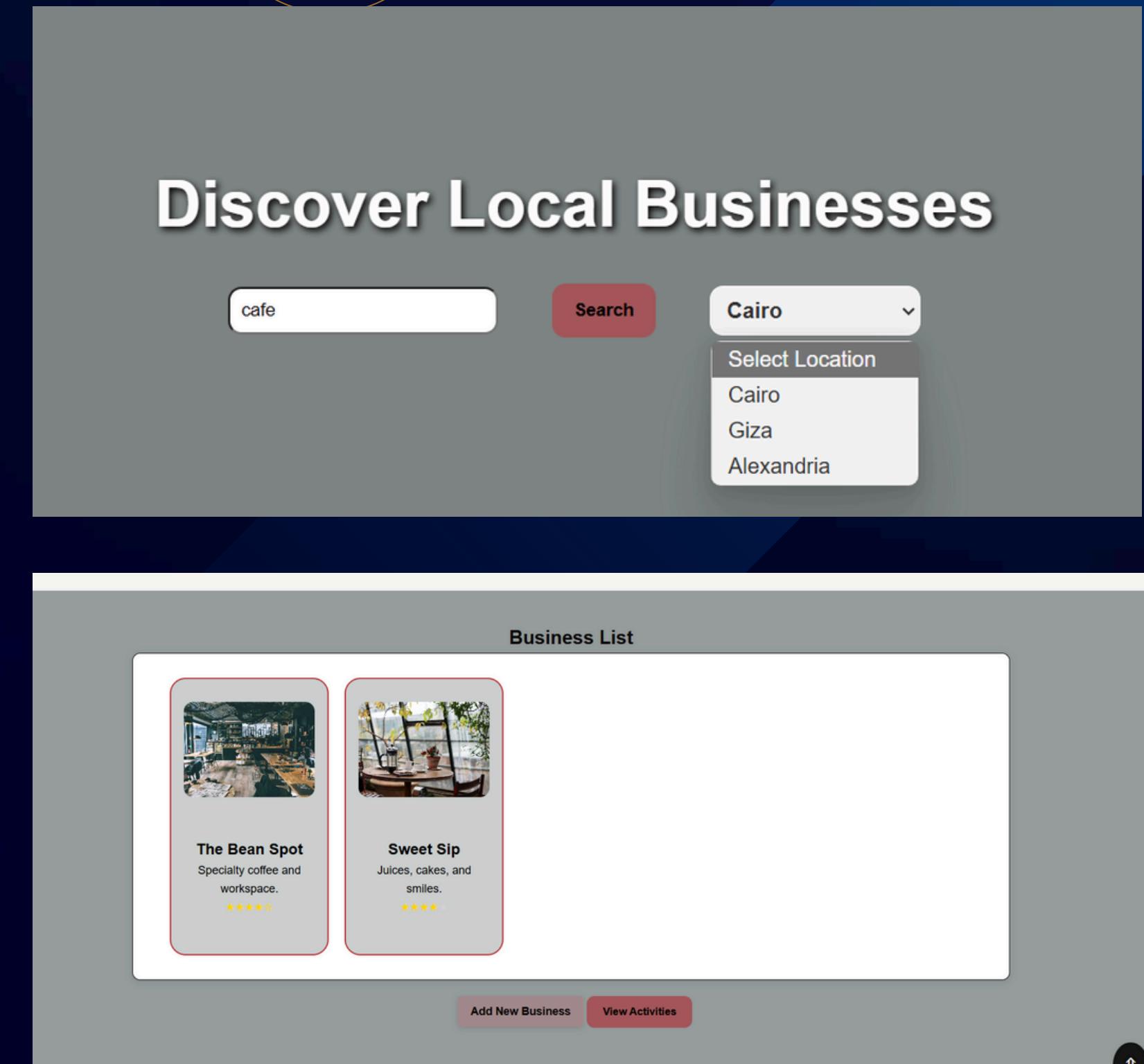


# Accessibility Features

- Keyboard navigation
- Font size  $\geq 16\text{px}$
- ARIA labels
- Color contrast passed WCAG
- Alt text for all images

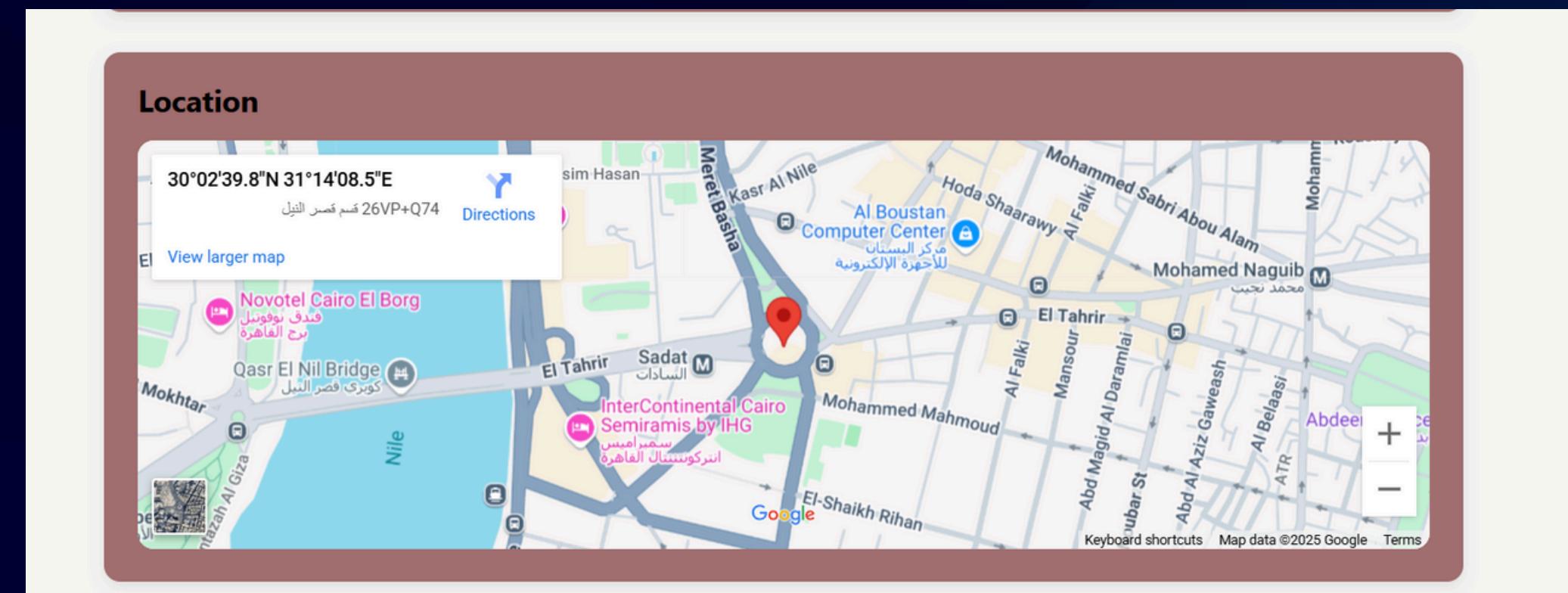
# Search & Filter Logic

- Search box filters businesses live
- Filter by category or area
- Uses JavaScript filter()
- Highlights matching cards instantly



# Google Maps Integration

- Embedded maps per business
- Uses iframe
- No API key required
- Lightweight, loads only on detail page



# Performance Optimization

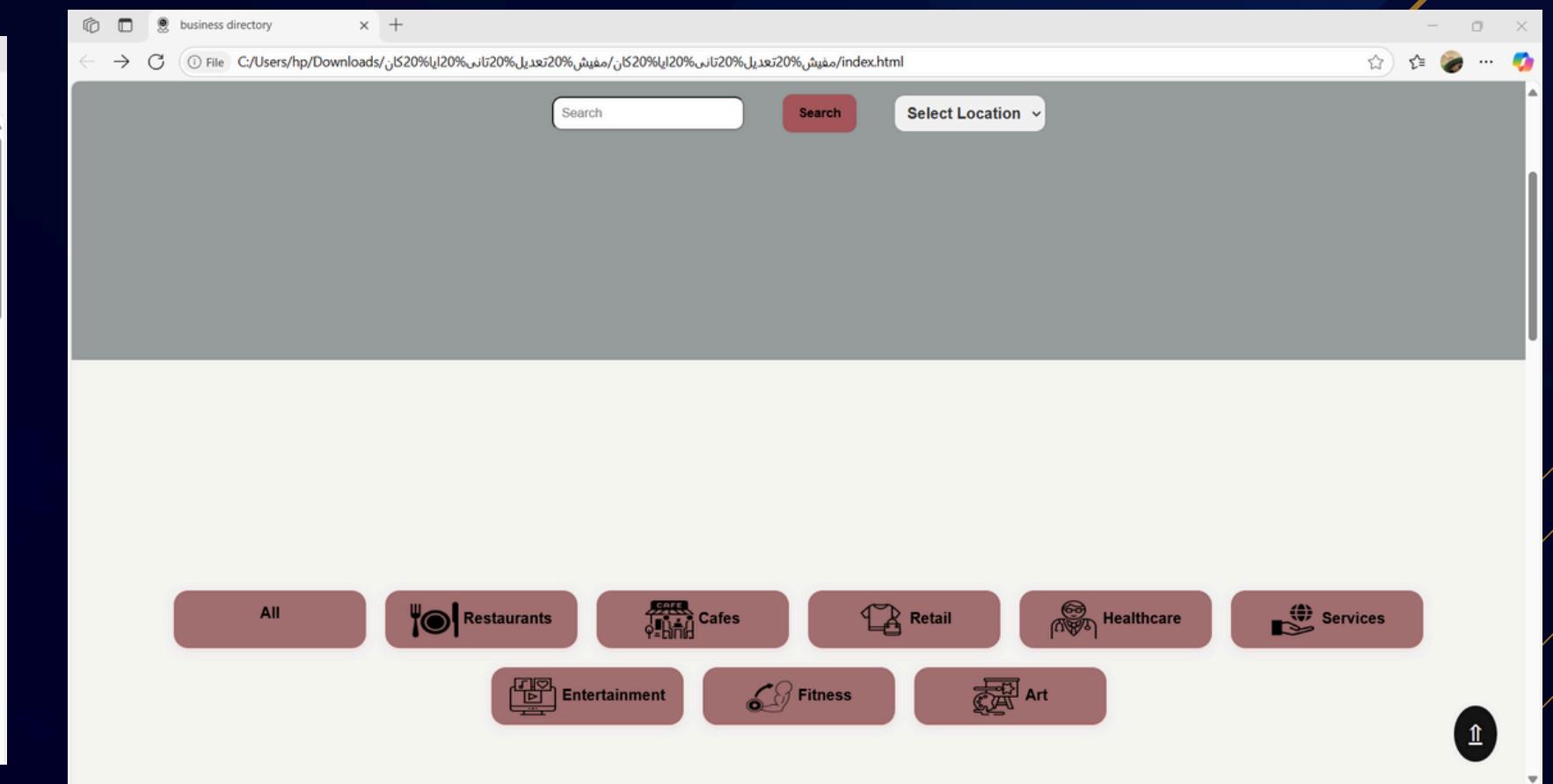
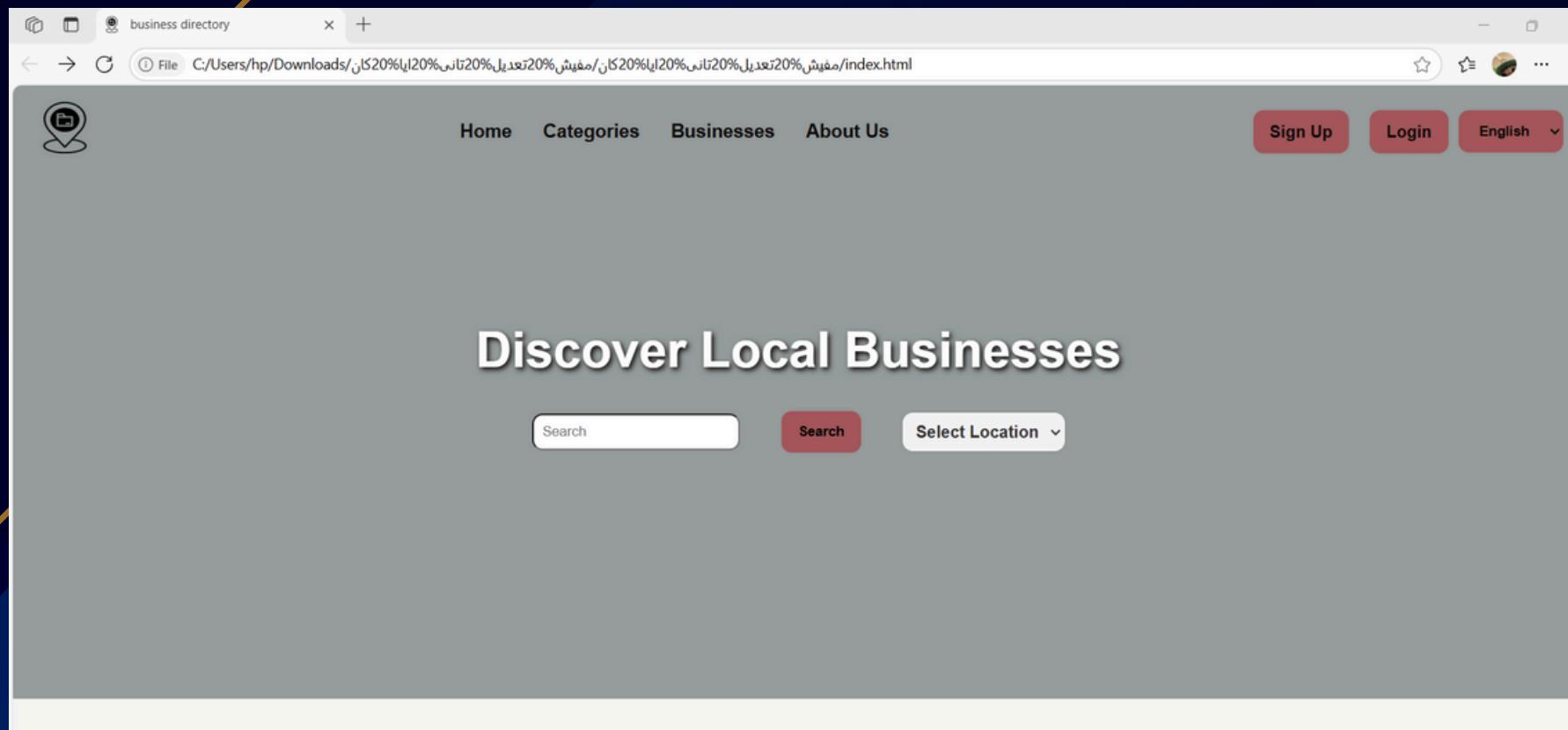
- Minified CSS/JS
- WebP images
- Lazy-loaded maps
- Cached resources
- Merged assets to reduce requests

04

# Implementation & Results

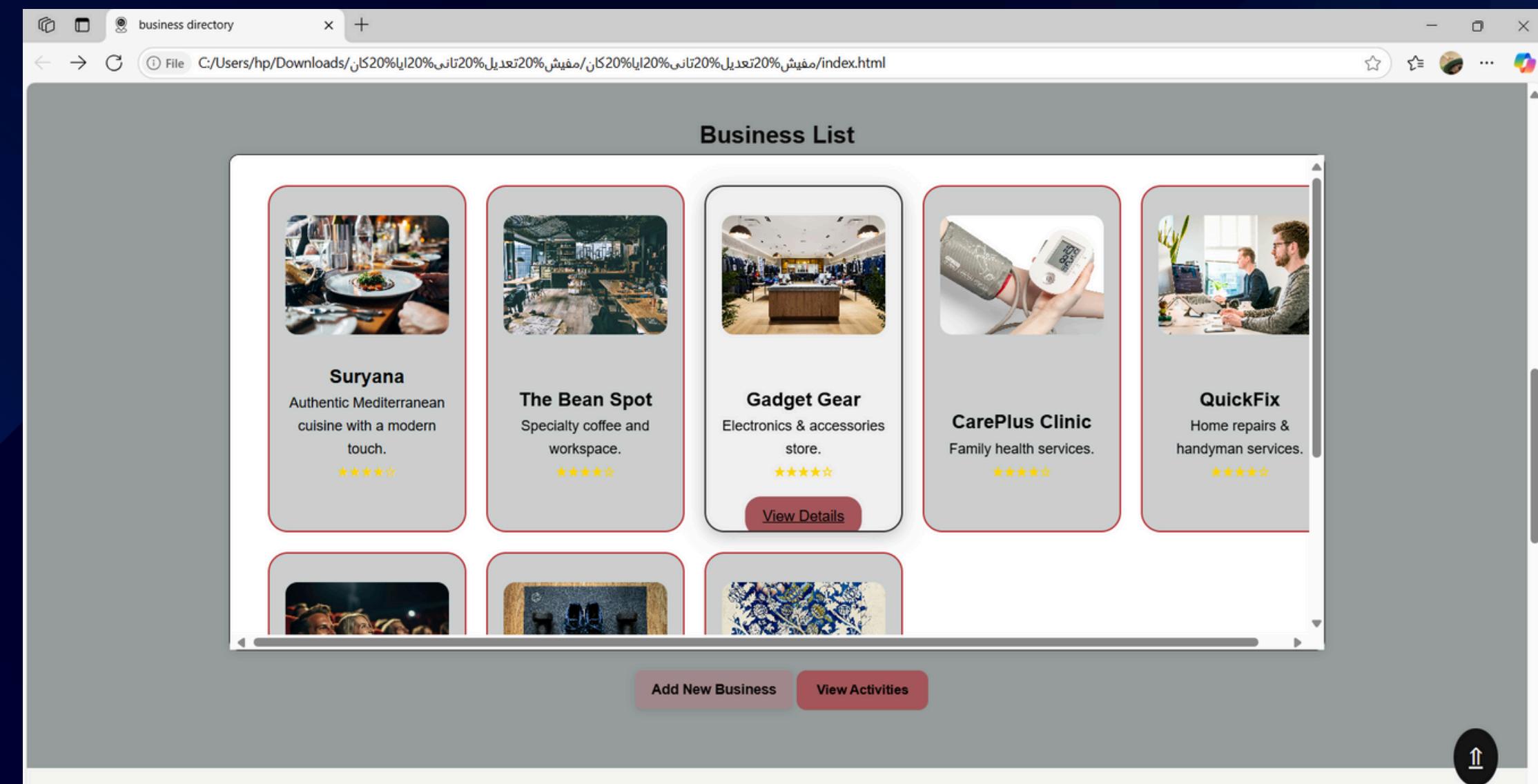
# Implementation

## Homepage – Search bar & categories



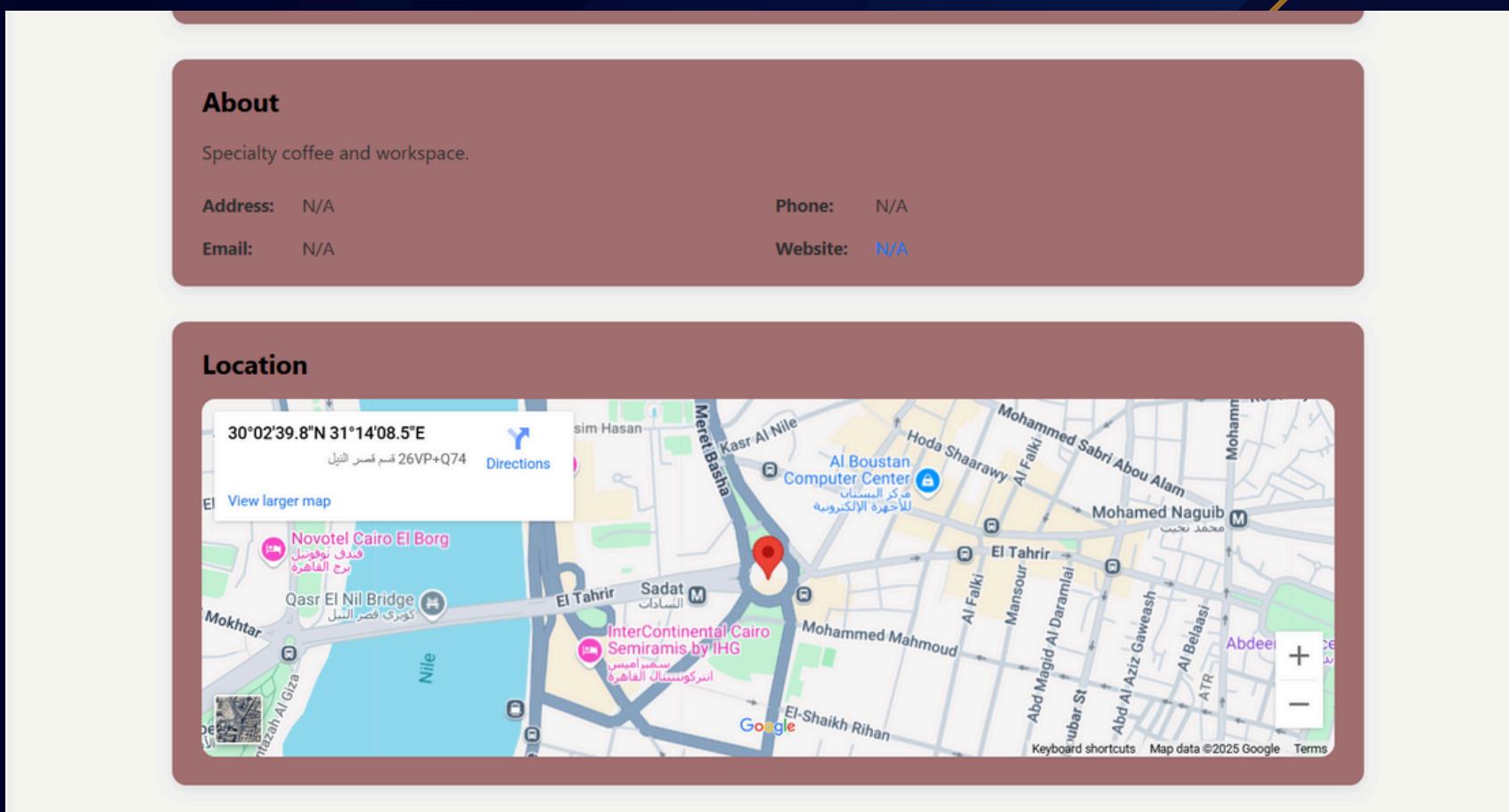
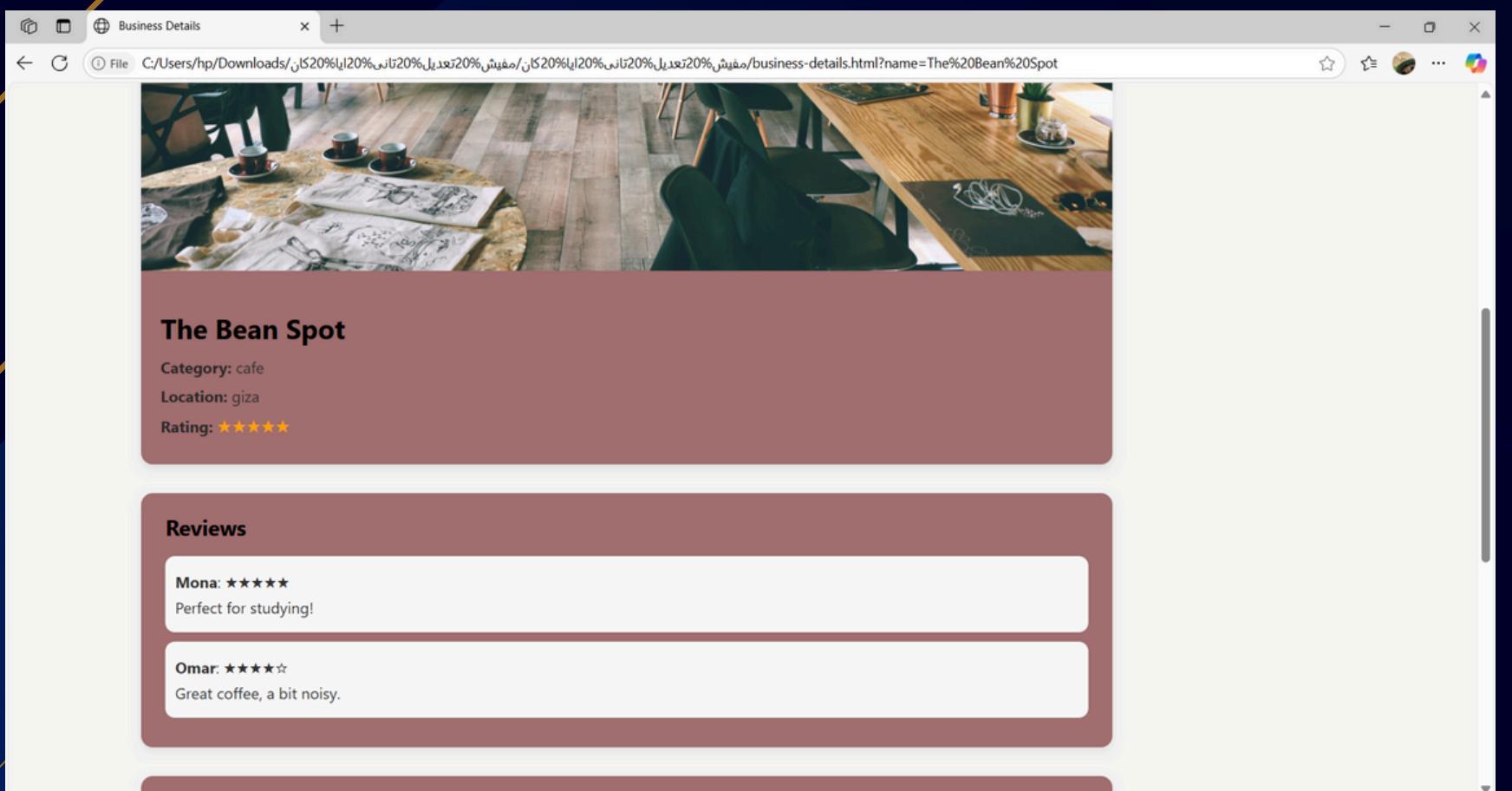
# Implementation

## Business Cards – Short info + ratings



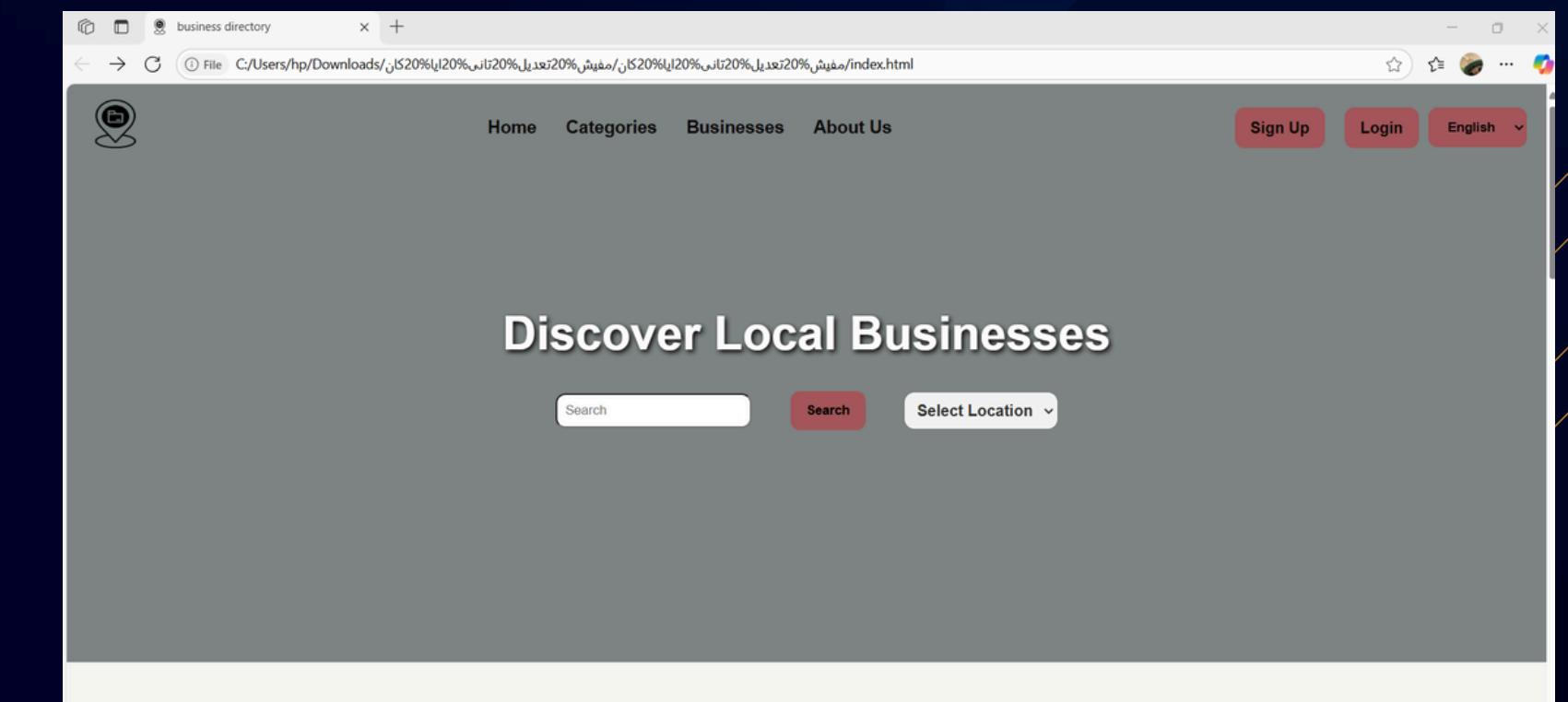
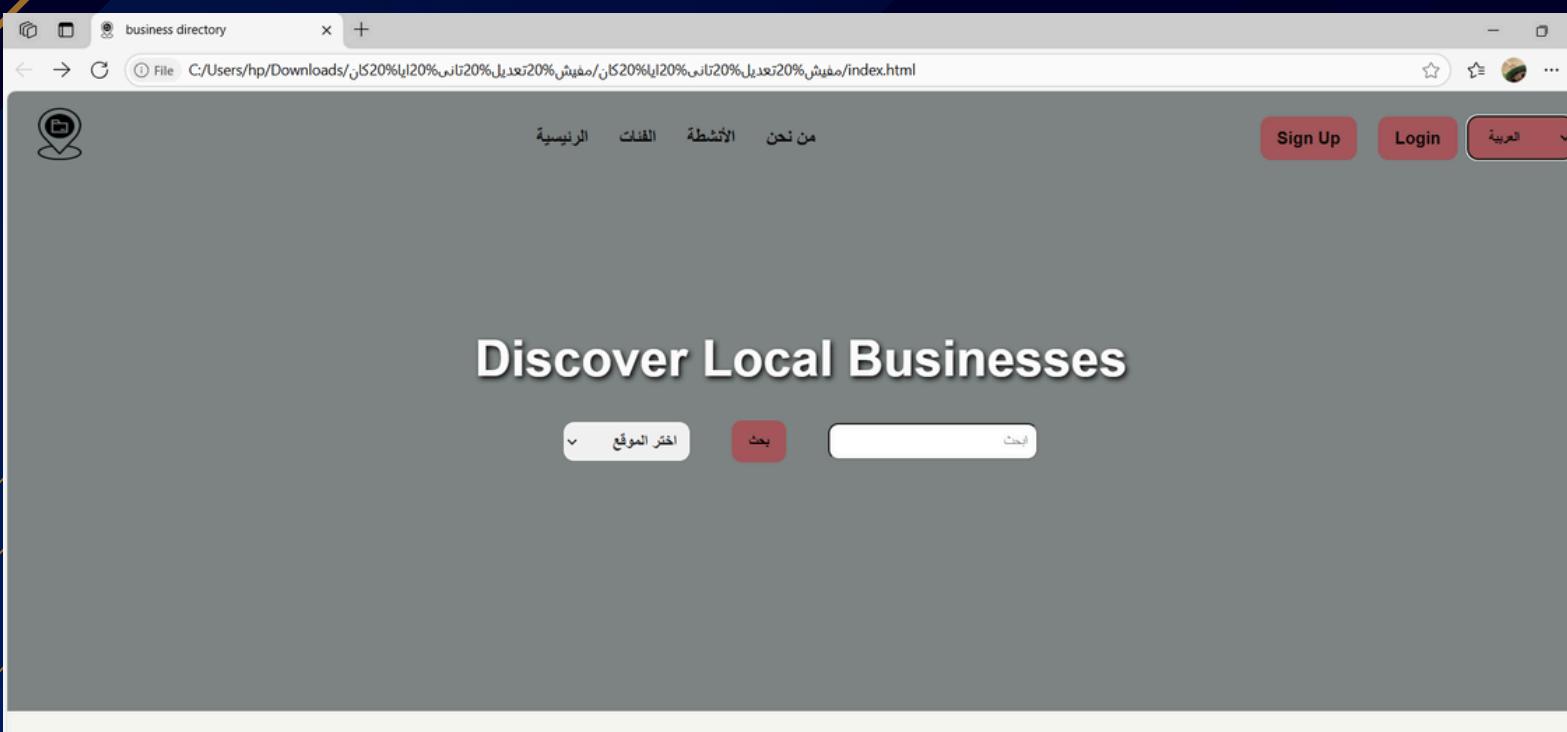
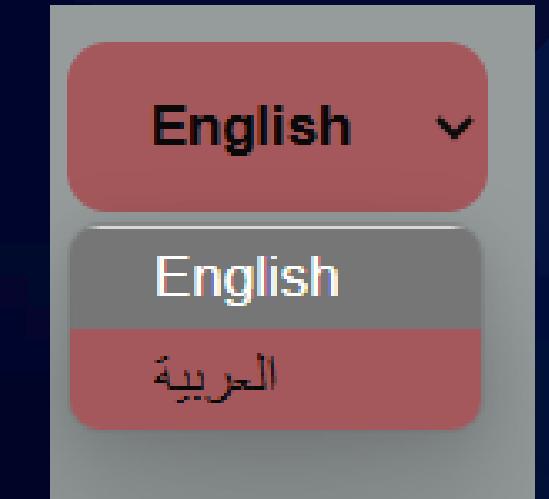
# Implementation

# Details Page – Map + contact



# Implementation

## Language toggle view



# Testing Approach

Manual testing on:

- Chrome, Firefox, Edge, Safari
- Android, iOS, iPad

Checked:

- Filters, maps, responsiveness, language
- Lighthouse performance test

# Testing Results

## Results:

- Load time < 2 sec
- 90/100 accessibility score
- All features worked correctly
- No bugs in search/filter/maps

# User Feedback Summary

10 users tested

Average ratings (out of 5):

- Navigation: 4.8
- Mobile experience: 4.7
- Language support: 5.0
-  “So simple and useful”
-  “Loved the Arabic support!”

# Usability Highlights

- Works on all devices
- Easy navigation
- Clear business cards
- Maps are useful
- Font and icons are readable

05

# Challenges & Closing

# Challenges & Solutions

Challenge	Solution
RTL layout	Used logical CSS properties
Large JSON file	Optimized structure
Maps loading slowly	Lazy-loading added
Arabic text overflow	Used text-overflow: ellipsis

# Lessons Learned

- Simplicity = better UX
- Real users give the best insights
- Arabic support needs attention
- Performance testing is important
- Design and code should be modular

# • Limitations

- Static data (no backend)
- No user login or business submissions
- Limited filters
- No user reviews yet

# Future Work

- Add backend + admin dashboard
- User login & business reviews
- Mobile app version
- Dark mode
- Advanced filters (price, open hours, etc.)

# Gantt Chart Timeline

Week 1–2

Planning

Week 5–8

Development

Week 11–12

Report & final touch

Week 3–4

Design

Week 9–10

Testing



# Thanks!

Thank you for your attention!

GitHub: [<https://github.com/Abdelrahman4542/local-business-directory>]

Contact us:

Y.M.: [yassminmohmmed7@gmail.com](mailto:yassminmohmmed7@gmail.com),  
A.M.: [abdelrahmanhelmy445@gmail.com](mailto:abdelrahmanhelmy445@gmail.com),  
A.M.: [SETUP12312345@gmail.com](mailto:SETUP12312345@gmail.com),  
M.A: [engmaielomdakhalifa@gmail.com](mailto:engmaielomdakhalifa@gmail.com)

QR CODE



We're happy to answer your questions!