



# Práctica 4: Angular

## APLICACIONES WEB

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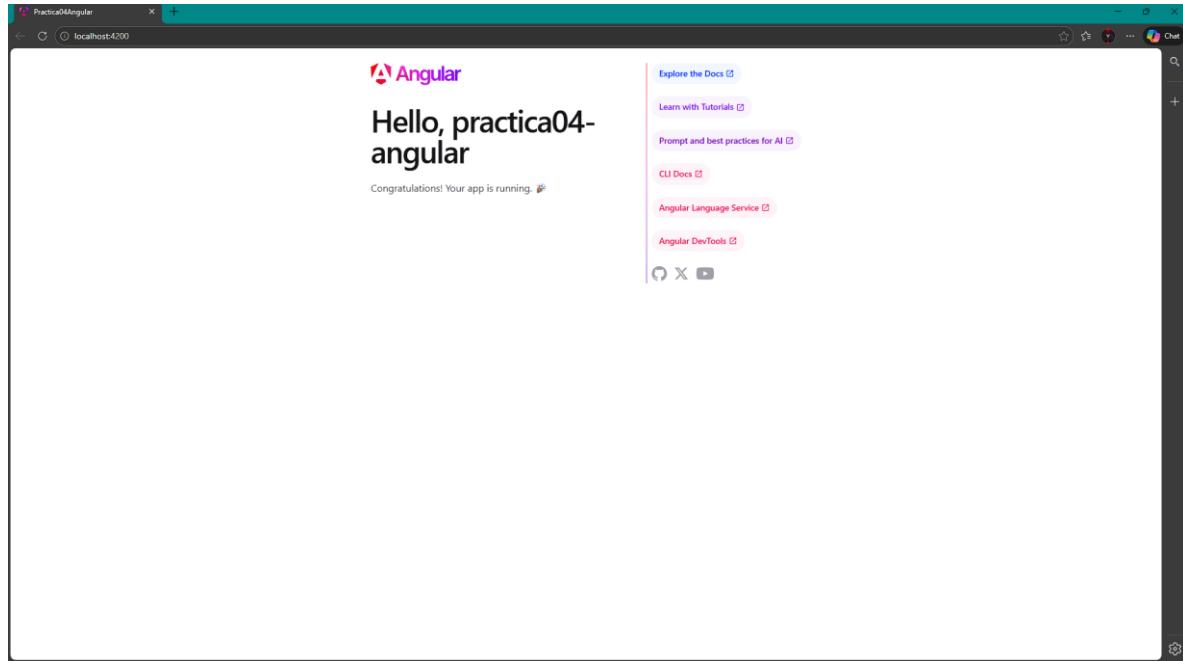
Grupo:04\_01

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Varga

Carrera: Ingenieria en  
Tecnologias de la Información  
e Innovaciòn Digital

Fecha: 22/01/2026

## SECCIÓN A: Crear el proyecto con Angular



## SECCIÓN C: Instalar Bootstrap en Angular

The screenshot shows the Visual Studio Code (VS Code) interface. The command palette is open at the top, with the 'Generate code' option highlighted. The terminal tab is active, displaying the output of the command 'ng new practica04-angular'. This command creates a new Angular project named 'practica04-angular'. The terminal then shows the execution of 'npm install bootstrap', which installs the Bootstrap CSS framework. The Explorer sidebar on the left shows the project structure, including files like 'index.html', 'style.css', and 'server.ts'. The right side of the interface features the 'Build with Agent' extension, which provides options to generate agent instructions for AI integration.

```
PS C:\Users\AlexVilade\OneDrive\Documentos\GitHub\Practicas_web_AlejandroVargasLazca\practica04-angular> ng new practica04-angular
PS C:\Users\AlexVilade\OneDrive\Documentos\GitHub\Practicas_web_AlejandroVargasLazca\practica04-angular> npm install bootstrap
added 2 packages, and audited 495 packages in 4s
111 packages are looking for funding
  run `npm fund` for details
found 0 vulnerabilities
PS C:\Users\AlexVilade\OneDrive\Documentos\GitHub\Practicas_web_AlejandroVargasLazca\practica04-angular>
```

The screenshot shows the VS Code interface with the following details:

- Explorer View:** Shows the project structure under "PRACTICAS WEB\_ALEJANDROVARGASLAZCA".
- Terminal:** Displays the command "ng serve" being run, showing the application is running at <http://localhost:4200>.
- Output Panel:** Shows multiple logs from the "angular" package indicating dependency optimization and file changes.
- Code Editor:** Shows the "index.html" file with the Angular template code.
- Bottom Status Bar:** Shows the current file is "index.html", the status bar has 11 errors and 1 warning, and the file was last saved at 11:01.

## SECCIÓN D: Crear los componentes base del sitio

The screenshot shows the VS Code interface with the following details:

- Explorer View:** Shows the project structure under "PRACTICAS WEB\_ALEJANDROVARGASLAZCA".
- Terminal:** Displays the command "ng generate component components/navbar" being run, creating files like "src/app/components/navbar/navbar.component.ts" and "src/app/components/navbar/navbar.component.css".
- Output Panel:** Shows the command "ng generate component components/navbar" being run, with the message "CREATE src/app/components/navbar/navbar.spec.ts" and "CREATE src/app/components/navbar/navbar.component.css".
- Code Editor:** Shows the "navbar.html" file with the newly generated navigation bar code.
- Bottom Status Bar:** Shows the current file is "navbar.html", the status bar has 11 errors and 1 warning, and the file was last saved at 11:01.

## SECCIÓN E: Crear las páginas del sitio

The screenshot shows the VS Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Cl Practicas\_Web\_AlejandroVargasLazca
- Explorer:** Shows the project structure for 'Practicas\_Web\_ALEJANDROVARGASLAZCA'. The 'src/app' folder contains components like 'header', 'navabar', 'home', and 'footer'. Other files include 'index.html', 'style.css', 'angular.json', and 'main.container.ngt'.
- Editor:** The main editor pane displays the 'index.html' file content, which includes a Bootstrap card with an image and a button labeled 'Acceder'.
- Bottom Status Bar:** Ls 30, Col 8, Spaces 4, UTF-8, CRLF, Go Live, Prettier.

## SECCIÓN F: Armar el layout principal (práctica anterior)

The screenshot shows the VS Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Cl Practicas\_Web\_AlejandroVargasLazca
- Explorer:** Shows the project structure for 'Practicas\_Web\_ALEJANDROVARGASLAZCA'. The 'src/app' folder contains components like 'header', 'navabar', 'home', and 'footer'. Other files include 'index.html', 'style.css', 'angular.json', and 'main.container.ngt'.
- Editor:** The main editor pane displays the 'app.module.ts' file content, which defines the 'AppComponent' with its selector and imports for 'RouterOutlet', 'Header', 'Navabar', and 'Footer'.
- Bottom Status Bar:** Ls 13, Col 29, Spaces 2, UTF-8, CRLF, TypeScript, Go Live, Prettier.

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "PRACTICAS\_WEB\_ALEJANDROVARGASLAZCA". The "src/app" folder contains components like "contact", "home", and "listado".
- Code Editor:** The current file is "app-footer.html" (line 6). The code includes an Angular template with directives like <app-header>, <app-navbar>, and <router-outlet>.
- Terminal:** Shows the command "ng new Práctica01" and the path "src/app/footer/footer.html".
- Bottom Status Bar:** Displays "ln 6, Col 26" and other standard status bar information.

## SECCIÓN G: Crear páginas adicionales

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "PRACTICA4". The "src/app/contact" folder contains "contact.html" (selected) and "contact.css".
- Code Editor:** The current file is "contact.html". It contains an Angular form with fields for Nombre and Correo, and a "Enviar" button.
- Terminal:** Shows the command "ng serve" being run in the directory "C:\Users\AlexV\Blade\OneDrive\Documentos\GitHub\Practicas\_Web\_AlejandroVargasLazca\Práctica4\práctica4-angular". The output shows the build process and the application bundle generation complete.
- Bottom Status Bar:** Displays "You 5 days ago" and other standard status bar information.

Página 2: Tabla (Listado)

File Edit Selection View Go Run Terminal Help ⏪ → Q Practical

EXPLORER OPEN EDITORS PRACTICA4

- listado.html
- listado.css
- listado.html
- listado.spec.ts
- listado.ts
- app.config.server.ts
- app.config.ts
- app.css
- app.html
- app.routes.server.ts
- app.routes.ts
- app.spec.ts
- app.ts
- index.html
- main.server.ts
- main.ts
- server.ts

listado

listado.html

listado.css

listado.html

listado.spec.ts

listado.ts

app.config.server.ts

app.config.ts

app.css

app.html

app.routes.server.ts

app.routes.ts

app.spec.ts

app.ts

index.html

main.server.ts

main.ts

server.ts

OUTLINE

TIMELINE

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS esbuild - práctica4-angular + v ↻

```
PS C:\Users\AlexVLBlade\OneDrive\Documentos\github\Practicas_Web_AlejandroVargasLazca\Practica4\practica4-angular> ng serve
scripts.js | scripts | 107.73 kB
main.js | main | 19.79 kB
| Initial total | 404.53 kB

Server bundles
Initial chunk files | Names | Raw size
main.server.js | main.server | 21.07 kB
server.js | server | 1.81 kB
polyfills.server.js | polyfills.server | 243 bytes

Application bundle generation complete. [5.518 seconds] - 2026-01-28T15:08:42.701Z
Watch mode enabled. Watching for file changes...
NOTE: Raw file sizes do not reflect development server per-request transformations.
→ Local: http://localhost:4200/
→ press h + enter to show help
```

You, 5 days ago In 1, Col 1 Spaces: 4 UTF-8 CRLF ⓘ HTML 🌐 Go Live ✎ Prettier

CHAT + ↻

Build with Agent

AI responses may be inaccurate.

Generate Agent Instructions to onboard AI onto your codebase.

+ listado.html

Describe what to build next

Agent Auto ⓘ

## SECCIÓN H: Configurar rutas

File Edit Selection View Go Run Terminal Help ⏪ → Q Practical

EXPLORER OPEN EDITORS PRACTICA4

- listado.html
- listado.css
- listado.html
- listado.spec.ts
- listado.ts
- app.config.server.ts
- app.config.ts
- app.css
- app.html
- app.routes.server.ts
- app.routes.ts
- app.spec.ts
- app.ts
- index.html
- main.server.ts
- main.ts
- server.ts

listado

listado.html

listado.css

listado.html

listado.css

listado.html

listado.spec.ts

listado.ts

app.config.server.ts

app.config.ts

app.css

app.html

app.routes.server.ts

app.routes.ts

app.spec.ts

app.ts

index.html

main.server.ts

main.ts

server.ts

OUTLINE

TIMELINE

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS esbuild - práctica4-angular + v ↻

```
PS C:\Users\AlexVLBlade\OneDrive\Documentos\github\Practicas_Web_AlejandroVargasLazca\Practica4\practica4-angular> ng serve
scripts.js | scripts | 107.73 kB
main.js | main | 19.79 kB
| Initial total | 404.53 kB

Server bundles
Initial chunk files | Names | Raw size
main.server.js | main.server | 21.07 kB
server.js | server | 1.81 kB
polyfills.server.js | polyfills.server | 243 bytes

Application bundle generation complete. [5.518 seconds] - 2026-01-28T15:08:42.701Z
Watch mode enabled. Watching for file changes...
NOTE: Raw file sizes do not reflect development server per-request transformations.
→ Local: http://localhost:4200/
→ press h + enter to show help
```

You, 5 days ago In 1, Col 1 Spaces: 2 UTF-8 CRLF ⓘ TypeScript 🌐 Go Live ✎ Prettier

CHAT + ↻

Build with Agent

AI responses may be inaccurate.

Generate Agent Instructions to onboard AI onto your codebase.

+ app.config.ts

Describe what to build next

Agent Auto ⓘ

The screenshot shows a VS Code interface with the following details:

- File Explorer:** On the left, it lists the project structure under "OPEN EDITORS".
  - practica4-angular**:
    - home.html
    - index.html
    - node\_modules
    - public
    - src
      - app
        - components
        - pages
          - contact
      - css
      - ts
    - home
      - home.css
      - home.html
      - home.spec.ts
      - home.ts
    - listado
      - listado.css
      - listado.html
      - listado.spec.ts
      - listado.ts
    - app.config.server.ts
    - app.config.ts
    - app.configs
    - app.html
    - app.routes.server.ts
    - app.routes.ts
    - app.spec.ts
    - app.ts
- Editor:** The main editor area displays the content of `home.html`. The code uses Bootstrap 4 classes like `container`, `row`, `col-md-8`, and `col-md-4` to structure the page.

```
<main class="container mt-4">
  You, 5 days ago * practica 4 ...
  <div class="row">
    <section class="col-md-8">
      <div class="card mb-3">
        <div class="card-body">
          <h5 class="card-title">Bienvenido:</h5>
          <p class="card-text">
            Esta es mi primera interfaz web mejorada con Bootstrap.
          </p>
          
        </div>
      </div>
    </section>
    <aside class="col-md-4 d-md-block d-none">
      <div class="card">
        
        <div class="card-body">
          <h5 class="card-title">Información secundaria:</h5>
          <p class="card-text">contenido adicional</p>
          <a href="#" class="btn btn-primary">Acceder</a>
        </div>
      </div>
    </aside>
  </main>
```
- Live Preview:** A right-hand panel shows a live preview of the web application's home page.
- Build with Agent:** A sidebar on the right provides options to build the code using AI:
  - All responses may be inaccurate.
  - Generate Agent Instructions to onboard AI onto your codebase.
- Bottom Status Bar:** Shows file information (home.html), workspace status (Agent ✓ Auto ✅), and terminal output (You, 5 days ago | Ln 1, Col 1 | Spaces: 4 | UTF-8 | CRLF | HTML | Go Live | Pretty).

## SECCIÓN I: Navegación con RouterLink

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** On the left, it displays the project structure for "practica4-angular". The "navbar.html" file is currently selected.
- Code Editor:** The main area shows the content of the "navbar.html" file, which includes HTML and CSS code for a navigation bar.
- AI Panel:** A large vertical panel on the right is titled "Build with Agent". It includes a message stating "All responses may be inaccurate.", a link to "Generate Agent Instructions", and a text input field asking "Describe what to build next".
- Bottom Status Bar:** Shows file status (You, 5 days ago), line count (Ln 1, Col 1), spaces used (Spaces: 4), and other settings like "Auto" and "Prettier".

The screenshot shows the Visual Studio Code (VS Code) interface. The title bar says "Q\_Practical". The left sidebar has "OPEN EDITORS" and "PRACTICA4" sections. The main editor area shows the file "Ts navbar.ts" with the following code:

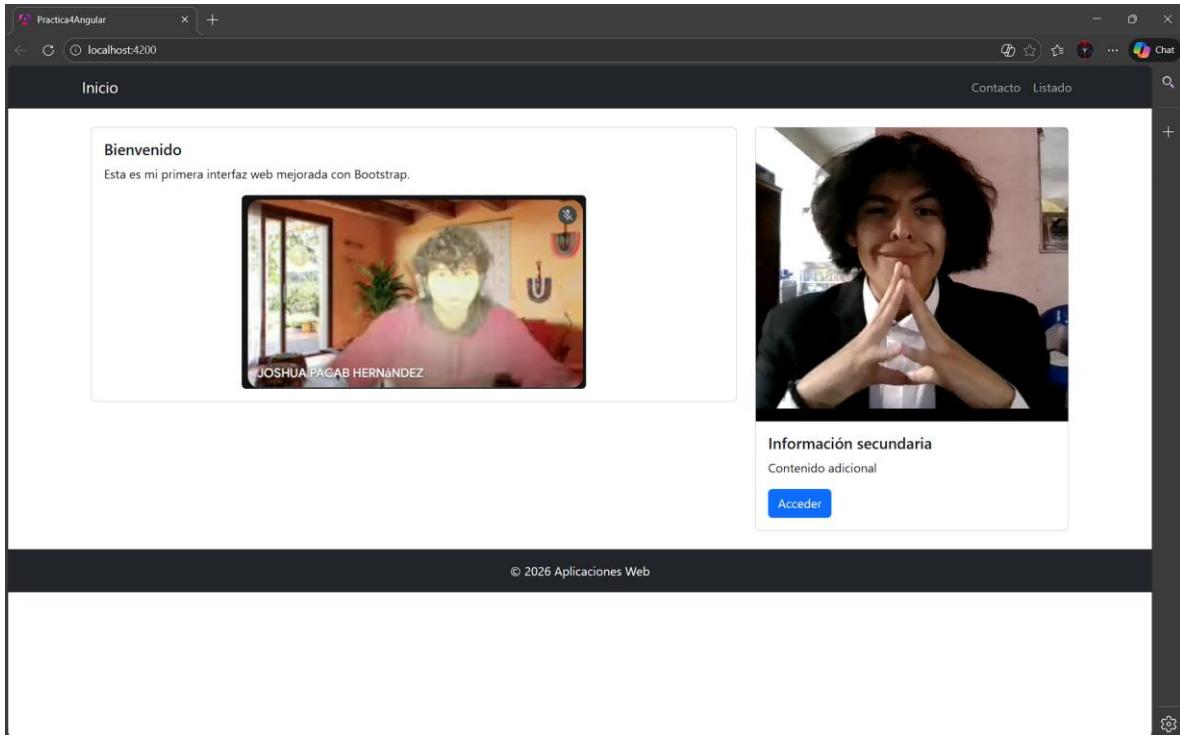
```

1 import { Component } from '@angular/core';
2 import { RouterLink } from '@angular/router';
3
4 @Component({
5   selector: 'app-navbar',
6   standalone: true,
7   imports: [RouterLink],
8   templateUrl: './navbar.html',
9   styleUrls: ['./navbar.css'],
10 })
11 export class Navbar {
12
13 }
14

```

The status bar at the bottom shows "You, 5 days ago" and "Ln 1, Col 1". On the right side, there's a "CHAT" section with a message "Build with Agent" and a note "AI responses may be inaccurate. Generate Agent Instructions to onboard AI onto your codebase." Below the chat is a "TypeScript" status indicator.

## SECCIÓN J: Visualización de imágenes



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**Contacto**

Nombre

Correo

**Enviar**

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