Angular Tree-Shakeable Providers Cheat Sheet

✔ What is Tree Shaking?

- A build optimization that removes unused code from the final bundle.

✔ Tree-shakeable Provider:

@Injectable({ providedIn: 'root' })

Only included if actually injected.

✔ Benefits:

- Smaller bundle size

- No need to declare in NgModule.providers

- Singleton service

✔ Scopes:

providedIn: 'root'   => App-wide singleton

providedIn: SomeModule => Lazy module scope (tree-shakeable)

providedIn: 'platform' => Shared across apps

providedIn: 'any'   => New instance in every module

✔ DOs:

- Use 'providedIn' instead of NgModule.providers

- Use lazy modules for feature-specific services

- Migrate legacy providers to use 'providedIn'

✔ DON'Ts:

- Don't declare in both 'providedIn' and NgModule.providers

- Don't use 'platform' unless required

- Avoid using 'any' unless needed

✔ Gotchas:

- Tree shaking only works when service is not referenced anywhere

- Services in component providers are not tree-shakeable