Angular Standalone Directives: Usage and Best Practices

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What We Solved
Problem:
- Standalone directive created.
- Error: "Directive is standalone and cannot be declared in NgModule."
Solution:
- Standalone Directives must be imported (not declared).
- Added the directive to imports array of AppModule.
- Console logs now fire correctly and directive is working.
Quick Rules
Situation What To Do
: :
Directive is standalone: true Import it into imports array
Directive is NOT standalone Declare it inside declarations array
Correct Example
In any module to (when directive is standalone).
In app.module.ts (when directive is standalone):
<pre>import { HighlightDirective } from './directives/highlight.directive';</pre>
@NgModule({
declarations: [
AppComponent,
// Do NOT declare HighlightDirective here
],
imports: [
BrowserModule,

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```
HighlightDirective // Correct place to add
],
bootstrap: [AppComponent]
})
export class AppModule { }

If AppComponent was also standalone (optional approach):
@ Component({
    selector: 'app-root',
    standalone: true,
    templateUrl: './app.component.html',
    imports: [HighlightDirective]
})
export class AppComponent { }
```

Best Practices for Standalone Directives

- Use standalone: true for all small reusable directives.
- Group multiple standalone directives into a single Shared Module only when needed.
- Prefer Renderer2 over direct DOM manipulation (nativeElement.style) for safety.
- Name directive selectors uniquely with prefixes like app, e.g., [appHighlight].
- Keep logic minimal inside directives (Single Responsibility Principle).
- Add @Input() parameters if customization needed.
- Document standalone usage clearly in code comments.
- Lazy-load directive with loadComponent if used in dynamic contexts.

Future Tip: Going Fully Standalone

- Modern Angular (15+) recommends even AppComponent, feature modules, pages be standalone.
- Smaller NgModules = Faster app bootstrapping and better lazy loading.
- Cleaner and more maintainable project structures.

Final Checklist

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Item Status
: :
Console log working? Yes
Directive imported correctly? Yes
Best practices followed? Yes
Happy Angular coding! Always verify the directive's structure and imports.
(Generated by ChatGPT Advanced Angular Deep Dive Assistant)