05 - Hometask
Solid Principles

1. Identify SOLID principles

Single Responsibility Principle:

HttpInterceptorHandler has only one responsibility: it applies an interceptor to an HttpRequest
Route: packages/common/http/src/interceptor.ts, Line 61

HttpErrorResponse has only one responsibility: it provides additional context about the state of the HTTP layer when an error occurred.
Route: packages/common/http/src/response.ts

Open Closed Principles

HttpInterceptor: It enhances the behavior of each interceptor by implementing intercept method without the need to change base class/interface HTTP interceptor.
Route: packages/common/http/src/interceptor.ts, Line 61

Liskov Substitution Principle

Parser (packages/compiler/src/ml_parser/parser.ts) is extended to **HTMLParser**
We can also see that **HtmlParser** is the superclass for **I18NHtmlParser** (packages/compiler/src/i18n/i18n_html_parser.ts), from the code we can assume that it would be possible to use I18NHtmlParser (subtype) instead of HTMLParser without breaking the code.

Interface Segregation Principle

The directives file (packages/core/src/metadata/directives.ts) demonstrates how to use ISP with certain pragmatism and common sense. Instead of adding attributes to “Directive” interface, it is extended into “Component” interface so that new attributes will be added to this specific entity.

Dependency Inversion Principle

AnimationBuilder (packages/animations/src/animation_builder.ts) is the abstract class for **BrowserAnimationBuilder** (packages/platform-browser/animations/src/animation_builder.ts) further Usages of BrowserAnimation builder depend on the abstraction (AnimationBuilder) instead of details (BrowserAnimationBuilder).

2. Violations of SOLID Principles

SRP is violated in HTTRequest class packages/common/http/src/request.ts,

In this case HTTP request because it has several responsibilities like detect the content type of the header (detechContenTypeHeader, Line 307), and serialize the request body (serializeBody, Line 277) this could be done in different classes.

However, this would not change a lot because HTTP request body depends on HTTP specification, which may not have breaking changes.