UML Class Diagram Cheatsheet

khalilstemmler.com

Shape

Description



Package

 $\ensuremath{\mathsf{A}}$ collection of classes and interfaces.

Interface

Interface name written underneath the <interface> annotation. Methods underneath.

<abstract> Component

+ componentDidMount(): void + render(): void // abstract

Abstract class

Same as the interface shape. Abstract methods marked as abstract with comments or "abstract methodName(): returnType".

User
- nameProperty: String
+ isActive(): boolean

Class

Properties or attributes sit at the top, methods or operations at the bottom + indicates public, - indicates private, and # indicates protected



These should be drawn vertically

Inheritance

B inherits from A. Creates an "is-a" relationship. A is a generalization.



Implementation/realization

B is a concrete implementation/realization of \mathbf{A} .

А ----- В

Association

A and B call each other.



One way association

A can call B's properties/methods, but not vice versa.



Aggregation

A has 1 or more instances of B. B can survive if A is disposed.

Ex: Professor (1) "has-many" classes $(\theta..*)$ to teach. Ex: Pond $(\theta..1)$ "has-many" ducks $(\theta..*)$. Ducks can survive if the pond is destroyed.



Composition

A has 1 or more instances of B. B cannot survive if A is disposed.

Ex: User (1) "has a" UserName (1). UserNames can't exist as separate parts in away from a User in our application.



Note

Descriptive text that can be attached to any item.

1 of 1 2/26/2024, 12:18 PM