

TP 0 ICT301

Diagrammes UML SOLID -

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PLAN DES DIAGRAMMES

Page 3 : SRP - Avant (Violation - Classe Book avec plusieurs responsabilités)

Page 4 : SRP - Après (Correction - Classes séparées : BookSRP, Printer, Saver, etc.)

Page 5 : OCP - Avant (Violation - Calcul d'aire avec if/switch)

Page 6 : OCP - Après (Correction - Interface Shape et polymorphisme)

Page 7 : LSP - Avant (Violation - Héritage Rectangle → Square)

Page 8 : LSP - Après (Correction - Interface Shape commune)

Page 9 : ISP - Avant (Violation - Interface Worker unique)

Page 10 : ISP - Après (Correction - Interfaces séparées Workable/Eatable)

Page 11 : DIP - Avant (Violation - Dépendance directe sur MySQLDatabase)

Page 12 : DIP - Après (Correction - Injection via interface Database)

OrderProcessor

- database: MySQLDatabase

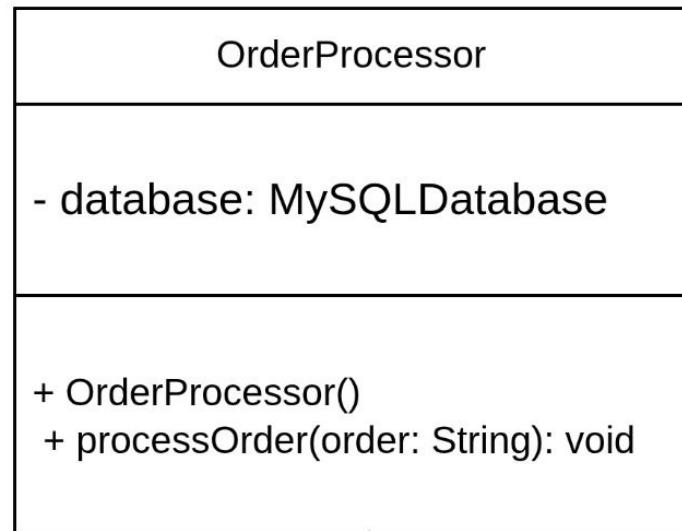
+ OrderProcessor()

+ processOrder(order: String): void

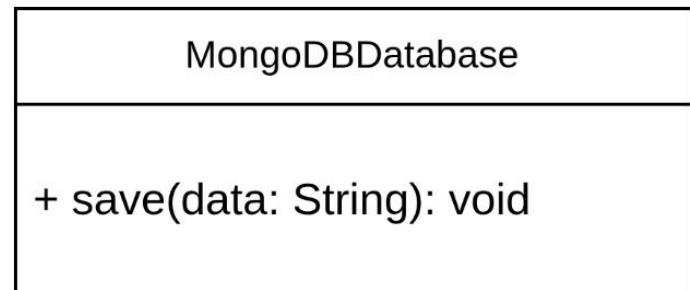
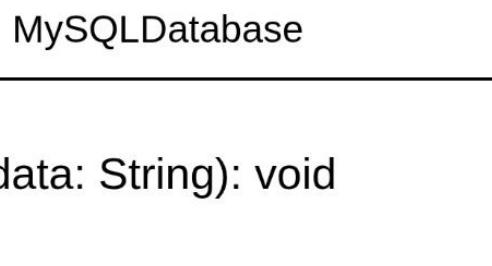
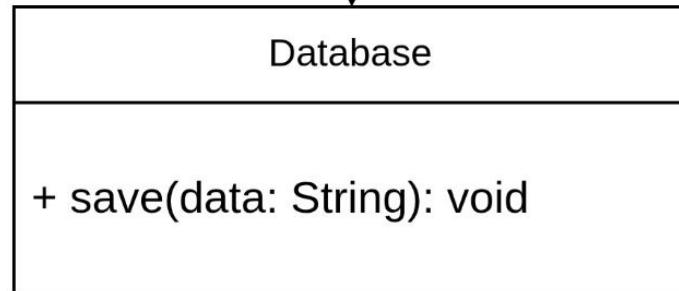
Depends

MySQLDatabase

+ save(data: String): void



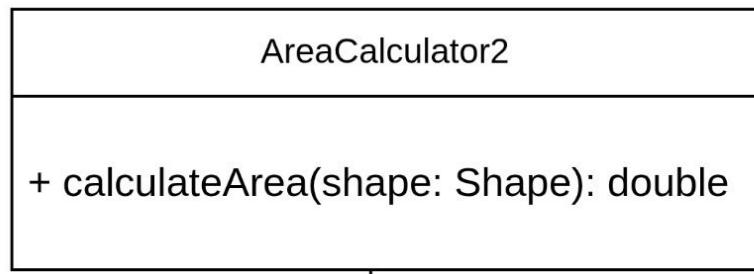
Depends



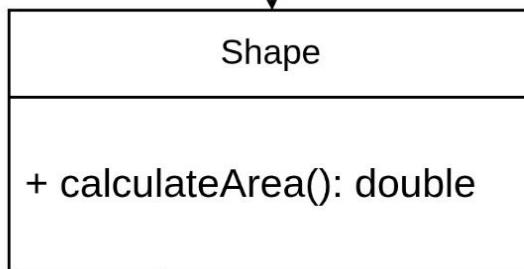
Book

- title: String
- author: String
- content: String

- + Book(title: String, author: String, content: String)
- + getTitle(): String
- + getAuthor(): String
- + getContent(): String
- + printToScreen(): void
- + saveToDatabase(): void
- + emprunter(lecteur: String): void



Use



Rectangle

- width: double
- height: double

+ Rectangle(width: double, height: double)
+ calculateArea(): double

Circle

- radius: double

+ Circle(radius: double)
+ calculateArea(): double

Rectangle

width: int

height: int

+ setWidth(width: int): void

+ setHeight(height: int): void

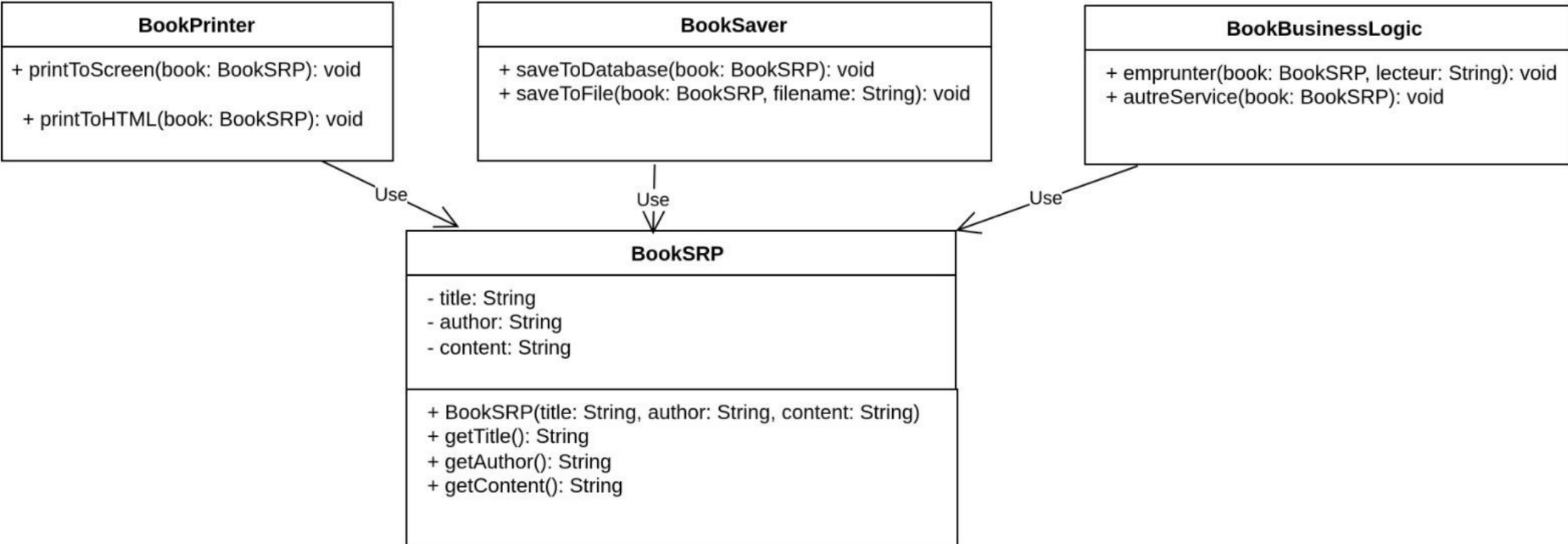
+ getArea(): int

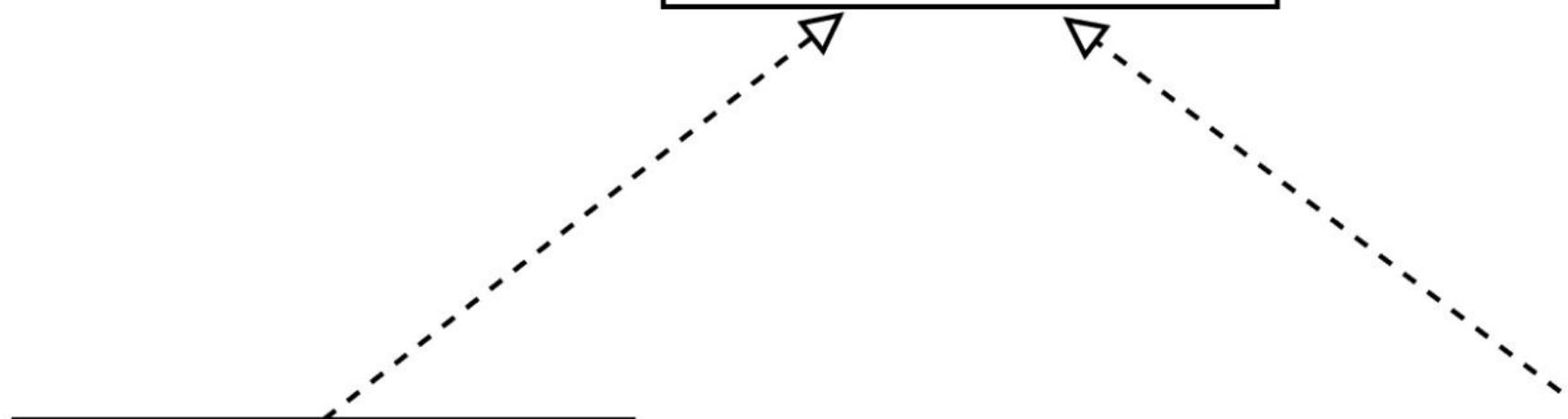
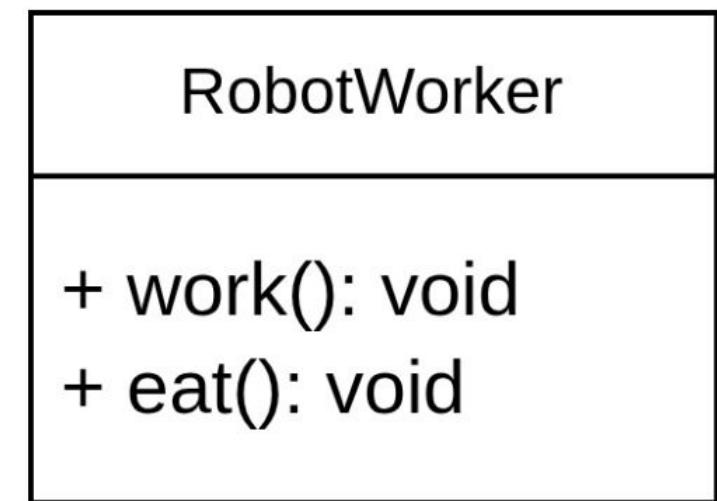
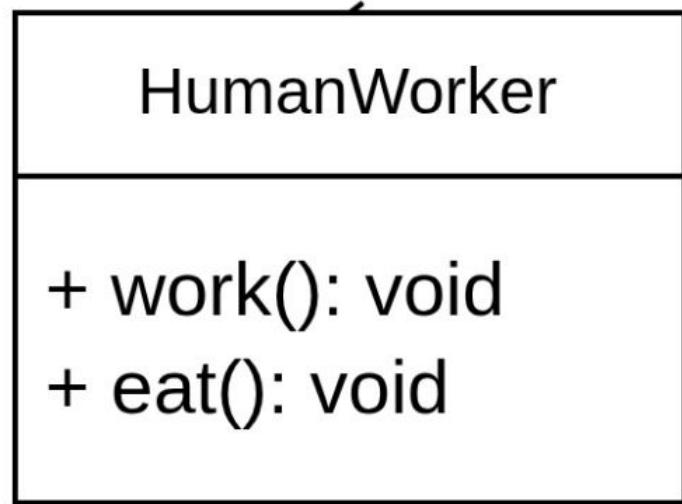
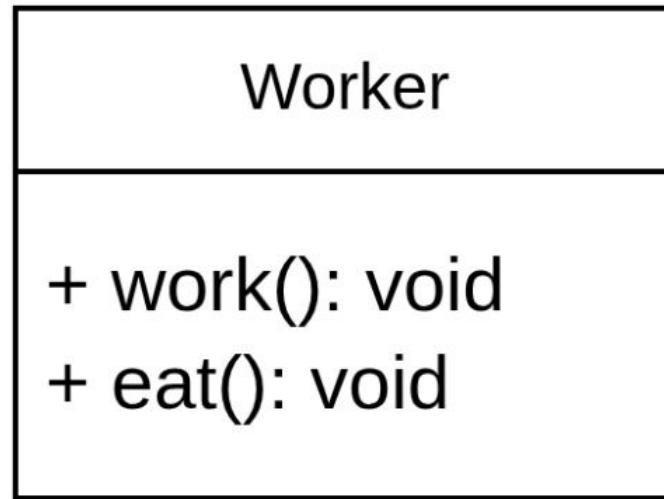


Square

+ setWidth(width: int): void

+ setHeight(height: int): void





AreaCalculator2

+ calculateArea(shape: Shape): double

Use

Rectangle

- width: double
- height: double

+ Rectangle(width: double, height: double)
+ getWidth(): double
+ getHeight(): double

Use

Circle

- radius: double

+ Circle(radius: double)
+ getRadius(): double

