

1. UML Class Diagram and Converting into Code
 - 1.1. Class Diagram Basics
 - 1.2. Class Structure
 - 1.3. Relationship between classes
2. Solid Principles
 - 2.1. Single Responsibility Principle (SRP)
 - 2.2. Open/Closed Principle (OCP)
 - 2.3. Liskov Substitution Principle (LSP)
 - 2.4. Interface Segregation Principle (ISP)
 - 2.5. Dependency Inversion Principle (DIP)
3. Code smells refactoring
4. Design Patterns
 - 4.1. Creational Design Pattern
 - 4.1.1. Singleton Design Pattern
 - 4.1.2. Factory Design Pattern
 - 4.1.3. Abstract Factory Design Pattern
 - 4.1.4. Builder Design Pattern
 - 4.1.5. Prototype Design Pattern
 - 4.2. Behavioral Design Pattern
 - 4.2.1. Strategy Design Pattern
 - 4.2.2. Chain of responsibility Pattern
 - 4.2.3. Command Pattern
 - 4.2.4. Iterator Pattern
 - 4.2.5. State Pattern
 - 4.2.6. Memento Pattern
 - 4.2.7. Visitor Pattern
 - 4.2.8. Observer Pattern
 - 4.3. Structural Design Pattern
 - 4.3.1. Adapter Design Pattern
 - 4.3.2. Composite Design Pattern
 - 4.3.3. Template Method
 - 4.3.4. Proxy Pattern
 - 4.3.5. Facade Pattern
 - 4.3.6. Flyweight Pattern

4.3.7. Decorator Pattern

4.4. Architecture Design Patterns

4.4.1. Layers pattern

4.4.2. Client-Server pattern

4.4.3. Master-Slave pattern

4.4.4. Pipe-Filter pattern

4.4.5. Broker pattern

4.4.6. Peer-to-Peer pattern

4.4.7. Event-Bus pattern

4.4.8. Model-View-Controller pattern