SDET Course

Design Patterns - Builder

3 Types of Design Patterns

- Creational
  - Singleton
  - **Builder**
  - Prototype
  - Factory Method
  - Abstract Factory

- Structural
  - Adapter
  - Composite
  - Proxy
  - Flyweight
  - Bridge
  - Facade
  - Decorator

- Behavioral
  - Strategy
  - Observer
  - Command
  - Memento
  - State
  - Template Method
  - Mediator
  - Chain of Responsibility
  - Interpreter
  - Visitor
  - Iterator

Agenda

- Description

- Diagram
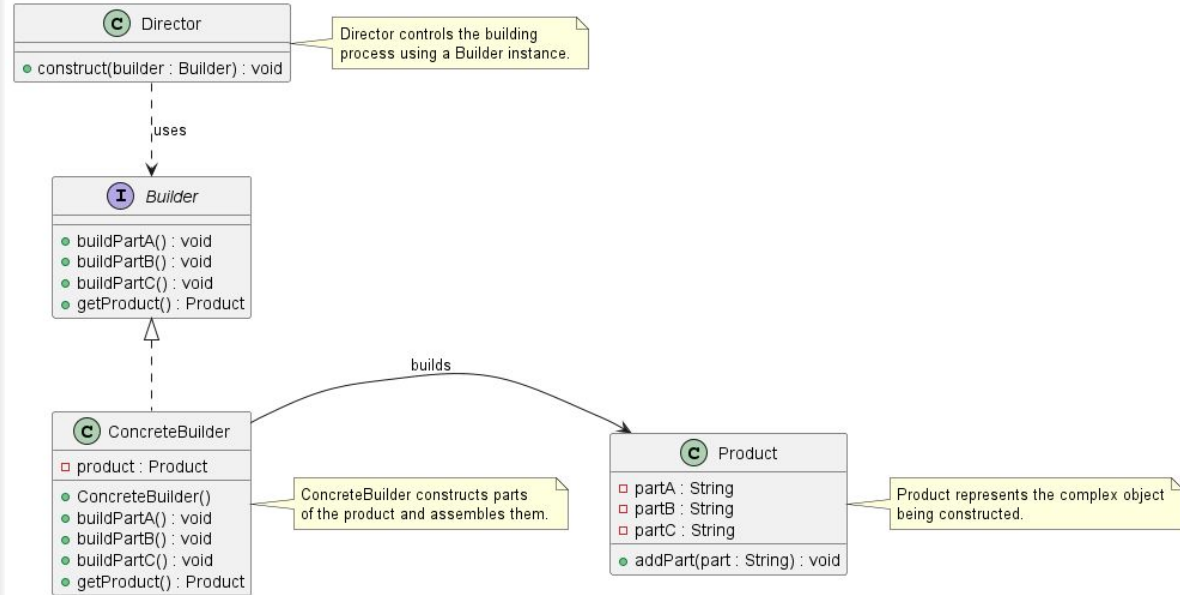
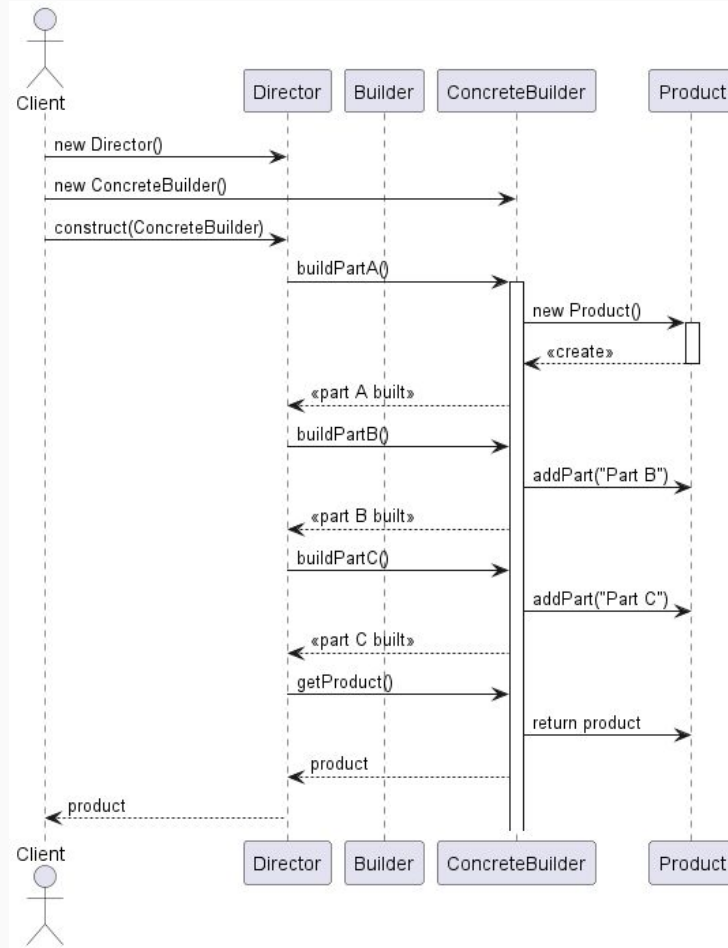- Code sample (Java)

- Use cases

Descri
on

Description

The Builder pattern is a creational design pattern that allows for the construction of complex objects step by step. It's especially useful when an object needs to be created with many possible configurations and parameters, some of which may be optional. The Builder pattern helps to maintain clean code with clear separation of concerns and makes the object construction process more controlled and flexible.

Class Diagram

Sequence Diagram

Code Sample

- General
  - Configuration file
  - SQL Query builder
  - Serialization object

- In Test Automation
  - Test data object
  - Serialization of Json / XML

Happy Coding