

## Single Responsibility Principle

Application represents simple eshop, in which a user can order specified number of available products. It is accessible via a web browser at localhost:8080

### Tasks

1. Look at the source files and identify SRP violations
2. What are the negative impacts of these violations?
3. How would you solve the SRP violations (at least theoretically)?

## Open/Closed Principle

Application allows persisting of Comments into various types of files

### Tasks

1. Imagine, you want to extend the app with persisting into JSON. Find all places in the code, which you would have to modify to implement the extension.
2. Refactor the project so that it follows OCP.

## Liskov Substitution Principle

Project contains multiple serializers (CVS, JSON, Compression), which implement interface SimpleSerializer. In the Main class is a showcase of (de)serialization of two different objects for different combinations of serializers.

### Tasks

1. Read the contract in SimpleSerializer. Based on the contract, identify the LSP violations in the individual Serializers.
2. HINT: Try to run the Main method.

## Interface Segregation Principle

### Tasks

1. Discussion – can you give any examples of good and bad interfaces?

## Dependency Inversion Principle

Application implements recommendation services, which recommend how to dress/where to go for lunch based on the weather forecast.

### Tasks

1. Find violations of DIP
2. Rewrite the code so that it adheres to the DIP
3. What benefits does the DIP implementation brings?
4. (Optional) Explain the difference between DIP, Dependency injection and Inversion of Control