

1. What is this project trying to achieve?

The project is aimed at implementing security requirements. In particular, the project aims to **automatically check for security requirements**. In this particular repository for the tutorial, it checks for incorrect password entry 5 times.

2. What methodology is used in the project?

The project is based on the **Requirements as code (RQCODE)** methodology. This is an approach in which **requirements are formalised in the form of program code**, allowing for automated verification and validation. It combines the concepts of **automated testing**, **requirement modelling** and **security compliance**.

3. Describe the tool used in the project to achieve the goal.

The project is using **RQCODE**, which describes and checks security requirements automatically. Some interfaces:

- `Requirement` – base class for requirements description.
- `Checkable` – interface to validate requirements.

4. During the presentation Ildar talked about “seamlessness”. How did he define it and why is it important for achieving the goals of the project?

By "seamless" Ildar meant **integrating security requirements into the development process without disrupting the developers' workflow**. This means that the requirements are expressed in the same language (Java) in which the underlying code is written, eliminating the need for third-party tools or complex specifications.

5. How does the project propose to formalize security requirements?

The project assumes to formalise security requirements in a form of Java classes, which derives from `Requirement` class and `Checkable` by transitivity. It allows:

- **Define requirements in the form of code.**
- **Automate verification.**
- **Integrate requirements into the software development process.**

6. What is the benefit of expressing requirements in Java before we write executable code in Java?

- **Automatic verification of code compliance with security requirements.** Code can be tested immediately after writing.
- **Single language for requirements and code.** Developers work with requirements in the same way as with regular classes, no need to learn new tools.
- **Minimising the cost of errors.** errors are identified early stages.