

# Seminar #3

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## 1 Goal

You will get experience with JPA, and namely with ORM.

## 2 Getting Ready

- Ensure you have available the software stack installed during the first lab with Netbeans 8.2
- Clone the GIT repo <https://gitlab.fel.cvut.cz/ear/seminar-jpa>
- Open the project in Netbeans 8.2 and resolve any warnings/errors reported by Netbeans

## 3 Becoming Familiar

The project is a small and JPA-ized excerpt of a bigger one developed for safety management in the czech aviation industry. The system allows to create safety reports and classify them and their parts into large classifications. The system is based on Spring, JPA, and ReactJS. First, clean and build the project. You will find out that tests fail. Next, run it in Apache Tomcat.

The project has preconfigured connection to the krizik server database.

**Go through the structure of pom.xml, Java sources at src/main/java and resources at src/main/resource.**

## 4 Repair the project

The package cz.cvut.kbss.reporting.model contains JPA entities. But they are broken - some annotations are missing, some are wrong.

**Your task would be to repair the project and make it running.**

As a reference for available annotations, you can use<sup>1</sup> or to JPA 2 reference <http://www.objectdb.com/api/java/jpa/annotations>

<sup>1</sup>[https://cw.fel.cvut.cz/wiki/\\_media/courses/b6b33ear/lecture-02-jpa-h.pdf](https://cw.fel.cvut.cz/wiki/_media/courses/b6b33ear/lecture-02-jpa-h.pdf)

During this task, you might need some database client to explore how the database looks like in order to reconstruct the Java Mapping. We recommend PgAdmin II.

## **5 Results**

Once you make the application running and deployed correctly, you should be able to login into the application using the credentials (u: ear, p: ear) and see some records of aviation incidents. You can go through them. For your convenience, corrected mapping can be found in the previous commit in the same GIT repository. You only need to update jdbc.properties parameters to the version you used during this seminar.