

# Innopolis Design Patterns



Content subject to regular updates!

Welcome to the teaching materials of my elective course: [F20](#) / [S20](#) Introduction to Design Patterns.

In this course we will practice the important object-oriented principles through the study of the most important design patterns. Although the practical assignments will be in [Java](#), illustrations will also be given in other OO languages.



Figure 1. The S20 promotion (just before COVID-19!)

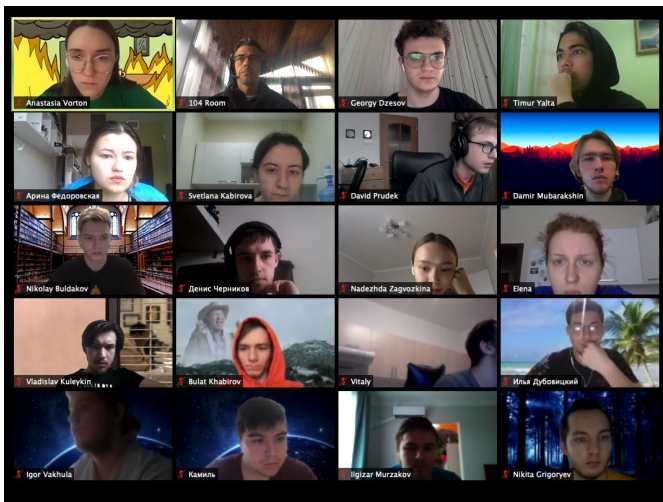


Figure 2. The S20 promotion (during COVID-19!)

## 1. Tools

You will need:

- A [GitHub](#) account

Please make sure to have the following tools:

- [Java](#) (version 8 minimum)
- [Maven](#) (or [Gradle](#) but you'll might have to adapt some build files)

Additional usefull tools:

- [Graphviz](#)
- [plantUML](#) plug-in for your favorite IDE

## 2. Schedule and organization



Dates for F20 session, and subject to modifications

### Week 1

Course introduction and organization

- [HTML / Slides](#)
- [TD1 / TP1 / Recording of Nov. 3rd](#)
  - TD assignment: <https://classroom.github.com/a/067TpXP5> (deadline 7/11/2020)
  - TP assignment: <https://classroom.github.com/a/BgyXsxwi> (deadline 13/11/2020)

### Week 2

- [TD2 / \[TP2\] / Recording of Nov. 9th](#)
  - TD assignment: <https://classroom.github.com/a/Foc7t1b8> (deadline 13/11/2020)



The remaining part of this file is now on [Innopolis Moodle](#) due to students requests.

## 3. Grading



Subject to discussion & evolution

Here is the list of elements for the evaluation:

- Weekly exercises (20%) The more you are in time, the more the code is OK, the more test you have, the better the grading is.
- Project (20%) Refactoring project, groups of 2 students max (end of semester week #?? and #??).
- Presentation on a particular pattern (10%) 180s "My Design pattern in 180s" (precise date to be confirmed).
- Quiz on concepts and lectures (20%) Timed online quiz (precise date to be confirmed).
- Final Exam (30%) Similar to the TD/TPs, timed exam (precise date to be confirmed).
- Participation in live lectures (10% bonus) Simple way for me to take into account that some are always there while others are not...
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Graded issues: successful merge requests (10% bonus) A list of graded issues will be available on the [Github issues](#) (see the board [here](#)).




You can propose graded issues!

## Usefull links

- The repo for this course: <https://github.com/jmbruel/InnopolisDesignPatterns>
- More on Design Patterns: <https://refactoring.guru/design-patterns> (thanks @??)
- Using [Maven](#) with [IntelliJ](#): [https://www.jetbrains.com/help/idea/maven-support.html#create\\_new\\_maven\\_project](https://www.jetbrains.com/help/idea/maven-support.html#create_new_maven_project) (thanks @Daria)

## Stay in touch

-  <http://bit.ly/innopolis-patterns>
- [jbruel@gmail.com](mailto:jbruel@gmail.com)
- [@jmbruel](#)
- Telegram group (for fun and quick exchange): <https://t.me/joinchat/FEE0MBu3Z-jq0exYKYBZ7w>
- <https://jmbruel.netlify.app>
- [Book an appointment](#)