AIFo 2021 Graded Miniproject

This document specifies the miniproject. It will be graded and it counts 30% of your AIFo grade (the other 70% come from a written exam).

1. Important Dates:

Start:　　　　　Monday, September 27th 2021
Deadline:　　　Sunday, October 31st 2021 (upload your report before 23:59)

2. Teamwork!

- We recommend to work in teams of two people. Larger teams are not allowed. Working alone is possible but not recommended!
- Collaborate effectively! You learn more and you are faster when you discuss your ideas or problems.
- Both team members will get the same grade. We reserve the right to interview (randomly selected) team members in order to make sure no one gets a free ride! Note that fraud is not accepted at OST and may have severe consequences.

3. Specification

The goal of this miniproject is to write a Chat-Application in Java. The Java Client provides a command-line interface and uses the Dialogflow API.
Grading will be based on your report (PDF- File to be uploaded on Moodle), the source-code is not graded.

3.1. Minimal requirements

To obtain a grade 4.0, the following minimal requirements need to be implemented:

- Dialogflow **Agent**:
  Spefication of a chat-bot in Dialogflow. You are free to start from a predefined agent but you have to specify at least one additional intent and entity.
- Java **Client**:
  Implementation of a simple command line interface in Java. The client reads text input, sends it to Dialogflow (using the Dialogflow API) and writes the agent's response to the command line.
- **Report** (PDF File):
  Describe the architecture, the concepts you used, the features you implemented, and whatever you consider interesting. Make a few screenshots that clarify the usage of your client. Document both, the Dialogflow backend and the Java client.
  - o write in German or English
  - o The length of the report should be between 4 and 10 pages.
  - o Show screenshots of your client application to show how it's performing
  - o Do not copy large code-fragments into the report.
  - o Structure your report. Write at least four sections:
    - ▪ **Introduction** where you give some context and explain the goal of the project.
    - ▪ Documentation of the **Java Client**: What your kind of service your client is providing. Screenshots of the working client
    - ▪ Some details about the **Dialogflow-backend**. E.g. which intents etc. did you specify.
    - ▪ **Discussion**: what you learned, what are the limitations of the chat-bot, etc.

o   Focus on relevant content. Be concise. Remove clutter:
https://www.acrolinx.com/blog/how-to-tidy-up-your-writing/

3.2. How to get extra points (and a better grade)

We do not specify a list of criteria to get extra points. Anything that goes beyond the minimal requirements is appreciated. You can add more intents and make the dialog more complex. Or you can browse the Dialogflow documentation and use some of the countless options. You could implement a more advanced process using so called fulfillments. In general, be creative! Implement an interesting chat-bot! Also, make sure your report explains how you structured your software project. Use appropriate diagrams to document the architecture. For a project that shows some original implementations (something that goes beyond the examples given in the exercise session), and which is reasonably well documented, you can expect a grade around 4.5 to 5.5.

The grade 6 will be given for exceptional projects which exhibit some additional technical creativity.

4.   How to submit your report

There will be an assignment called "Graded Project Report Submission" on Moodle (in the week 6 section). If you work in a team, both team members will have to upload the (same) PDF File. Do not upload the source code.

5.   Manage your resources!

It is easy to get lost in the sea of possibilities and spend way too much time on this project. This project is worth 30% of your final AIFo-grade. Manage your resources accordingly.

6.   Respect the deadline

If you do not hand-in a report by the deadline, we have to give you a grade 1.0. If you are unable to meet the deadline for important reason (illness, military service, etc.) the deadline can be discussed. Contact us as early as possible!