

### **Assignment 3: Sequential Recommendations**

Due: **November 25, 2023**

Points: 30/100

Submit: Upload files at Moodle

Motivated by the sequential methods we discussed in class (please see also at the corresponding research paper <https://homepages.tuni.fi/konstantinos.stefanidis/docs/sac20.pdf>), the goal of the third assignment is to design (**Score: 30%**) and implement (**Score: 30%**) a new method for producing sequential group recommendations. Also, provide detailed explanations and clarifications about why the method you propose works well for the case of sequential group recommendations (**Score: 25%**).

Hint: There is no need to design a method from scratch. For the needs of this assignment, you can suggest simple modifications of the existing approach, e.g., by proposing and using alternatives for group aggregation that ensure good results for the group.

Produce a group of 3 users, and for this group, show the top-10 recommendations in 3 different sequences, i.e., the 10 movies with the highest prediction scores in 3 rounds, using the **MovieLens 100K** rating dataset (**Score: 5%**).

Any programming language for your assignment is acceptable. Please explain any assumptions you made.

Prepare also a short presentation (about 5 slides) to show how your method works (**Score: 10%**).

Submit your files at Moodle the latest at **November 25, 2023 (before 11.00pm)**. Some instructions on how to run your codes are necessary.

**Note:** For each 1-week delay in an assignment submission, you lose 10% of your assignment score.

The assignment may be completed in pairs. Each pair submits one only assignment, and both students are expected to understand, be able to explain, and be able to modify the implementation.