

# Personalisation and Machine Learning

## Mini Project Submission

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Please find below the link for the public GitHub repository that includes my Mini Project.

[https://github.com/22046361/PML\\_Mini\\_Project\\_Zaromytidou](https://github.com/22046361/PML_Mini_Project_Zaromytidou)

The repository includes the code used for the Model experimentations and a [Mini Project Analysis and Reflection PDF](#) summarising the project, also included in the zip folder.

The repository includes the notebook for Models 3,4,5,6,7. The code for the analysis and processing of the data is the same in all notebooks, with the differences mainly focusing on the architecture of the models.

### **Mini\_Project Summary.**

For this project, I chose Brief 1 among the proposed options. For this project I developed a Collaborative Filtering model that leverages user behaviour and preferences to provide personalized book recommendations. By capturing user-book interactions and learning latent features through embeddings, I aimed to make predictions for unseen user-book pairs. My goal was to generate accurate and relevant book recommendations based on user ratings. This involved data manipulation and experimenting on the architecture of a model to achieve better accuracy, fairness and accuracy. To assess the model's performance, I used different evaluation metrics, including a comparison of the metrics at the end.

*Thank you very much for the great lectures and variety of knowledge and methods shared during the term. Apologies for not being able to attend the in person the sessions ( I was teaching on Mondays and Thursdays...). I did however watched all your lectures online.*

*@ Louis, Congratulations on your new little arrival!*

Have a great summer! :)