Informed consent

[This IC form is an example and needs to be adapted to each particular study. Italic text between brackets are instructions for the researchers and need to be deleted from the final draft. Gray boxes indicate that more information needs to be given by the researchers. Other text can also be changed if relevant.]

Title of the research:
Investigating Personalized Explanation Generation of Classes for Students Using LLMs

Name + contact details of supervisor and researcher(s):
Supervisors:

Name: Mihai Bace
Email: mihai.bace@kuleuven.be
Faculty/Department/Research unit: Mens-Machine Interactie (HCI), Groep W&T, Campus Group T Leuven

Name: Maria Torres Vega
Email: maria.torresvega@kuleuven.be
Faculty/Department/Research unit: ESAT-STADIUS, Groep W&T, Campus Group T Leuven

Researchers:

Name: Yiman Wu
Email: yiman.wu@student.kuleuven.be
Faculty/Department: Campus Group T Leuven

Name: Furkan Ali Yurdakul
Email: furkanali.yurdakul@student.kuleuven.be
Faculty/Department: Campus Group T Leuven

Goal and methodology of the research:
This study investigates how personalized learning experiences generated by advanced AI models (Large Language Models or LLMs) affect students' understanding and engagement in both technical and non-technical subjects.

Participants will complete a short profile questionnaire about their academic background, learning preferences, and subject-specific goals. Depending on their group assignment, participants will interact with an online educational platform, receiving either personalized explanations or standard explanations of the lecture content. Their performance and experience will then be evaluated using a knowledge test and a user experience questionnaire.

Duration of the experiment:
1 hour

➢ I understand what is expected of me during this research.

➢ I know that I will participate in the following trials or tests:
- Complete a Student Profile Questionnaire about academic background, learning preferences, and goals.
- Interact with an online learning platform featuring content on AI Techniques for Detecting Email Threats.
- Take a Knowledge Test to evaluate understanding of the material.
- Complete a User Experience Questionnaire about the learning session.

➢ I know that my participation may be associated to risks or discomforts:
Participation involves minimal risk. Potential discomforts include:
- Time spent filling out questionnaires and taking tests.
- Slight stress or anxiety from answering test questions or reflecting on personal learning preferences.

Drawn up in duplicate.

➢ I or others can benefit from this research in the following ways:
Gaining insight into personalized learning techniques and deepen their understanding of AI concepts relevant to cybersecurity.
More broadly, this research contributes to advancing personalized education, potentially enhancing learning experiences for future students.

➢ My participation offers a contribution to the scientific research. I know that I will not receive any further reward or compensation for my participation.

➢ I understand that my participation to this study is voluntary. I have the right to stop participating at any time. I do not have to give a reason for this and I know that it will not have any negative repercussions for me.

➢ My personal data will be processed in line with the General Data Protection Regulation (GDPR). Only the data that are strictly necessary to achieve the research objectives will be processed. My data will be kept confidential at all times throughout the study and the researchers will take measures to protect my privacy. For example, my personal data will be pseudonymized, meaning that my data can no longer be linked to me without the use of additional information that is only accessible to the researchers. I understand that my pseudonymized data may be reused for other scientific research and possibly for teaching or academic lectures. More information about the processing of my personal data can be found in the attached information letter.

➢ I would like to be informed about the results of this research. The researchers may contact me for this purpose using the following e-mail address.

_____

➢ In case of further questions about the research I know that I can contact:
Yiman Wu: yiman.wu@student.kuleuven.be
Furkan Ali Yurdakul: furkanali.yurdakul@student.kuleuven.be

➢ This study has been reviewed and approved by the Social and Societal Ethics Committee (SMEC) of KU Leuven (*fill in approval number*; please use this number in any communication regarding the research). In case of complaints or other concerns with regard to the ethical aspects of this research I can contact SMEC: smec@kuleuven.be

➢ I know that I can contact the individuals/organizations below if I would experience any discomfort or difficulties as a result of some of the subjects that were the topic of this research:
Mihai Bace (Supervisor), mihai.bace@kuleuven.be
Maria Torres Vega (Supervisor), maria.torresvega@kuleuven.be

I have read and understood the information in this document and I have received an answer to all my questions regarding this research. I give my consent to participate.

Date:
Name and signature of the participant   Name and signature of the researcher

Drawn up in duplicate.