INFORMATION SHEET FOR PARTICIPANTS

REENTRUST ALGORITHM PLAYGROUND

[CUREC reference number CS_C1A_19_039**]**

1. ***What is the purpose of this research?***

Recommender systems help users find information items more efficiently. They are widely used in our daily life, for example, helping us find books (Amazon), music (Spotify) or hotels. However, these systems are facing increasing scrutiny in recent years, due to biases in the recommendations, such as books by particular authors or hotels of specific price ranges.

As a result, users may be discriminated against and lose trust in recommendation results generated by computers. The working hypothesis is that users would establish a better belief of the recommender systems if they could have a better understanding of how specific recommendations are generated. However, little evidence has demonstrated that a better understanding of recommender algorithms can indeed lead to positive confidence or trust of these systems.

Therefore, the Algorithm Playground study in the ReEnTrust project aims to explore exactly that.

The study hopes to the answer the following questions:

- To what extent an interaction paradigm would enhance users' understanding of recommender algorithms.
- To what extent the understanding of algorithms can lead to more trust of these algorithms.

2. ***Why have I been invited to take part?***

You have been invited because you are over 18 years old and have had past experiences with recommender systems, such as hotel booking, movie recommendations and etc. We are interested in finding out about how different explanation styles may help you understand the algorithms and how this may make you feel about these algorithms.

3. ***Do I have to take part?***

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No. You can ask questions about the research before deciding whether or not to participate. If you do agree to participate, you may withdraw yourself from the study at any time, without giving a reason, by advising the researchers of this decision. You can withdraw from the study prior to 30/11/20.

4. *What will happen to me if I take part in the research?*

If you are happy to take part in the research, you will be asked to complete an online experiment in person and respond to a few short interview questions. You will be asked about how different explanation styles may help you understand the algorithms and how this may make you feel about these algorithms.

The study should last less than 60 minutes. No prior knowledge is required, as long as you are over 18 years old and are a regular user of the Internet.

During the interview audio recordings will be taken. These will be transcribed in order to facilitate our data analysis, with all personally identifiable information (such as names) being removed. The audio recordings will then be deleted. All data will be kept confidential and securely as described below (section 7). We intend to quote extracts from these data in our project publications and reports.

5. *Are there any potential risks in taking part?*

There are no known risks to take part in the study. We have mechanisms in place to ensure that information collected during the study will be kept anonymous, and not disclosed to anyone besides named below

6. *Are there any benefits in taking part?*

We hope this study will inform you about current research about how to design better recommender systems.

7. *What happens to the data provided?*

The information you provide as part of the study is the **research data**. Any research data from which you can be identified (eg. your name, date of birth, audio recording), is known as **personal data**. It does not include data where the identity has been removed (anonymous data). All personal data from the audio recordings will be removed during transcription in order to reduce the likelihood that any personally identifying or re-identifiable information will be retained. The recordings will be destroyed after they have been transcribed.

The online experiment platform will collect any personal data about you, such as your name or IP address.

Written consent will be sought from the participants of the face-to-face interviews. Digital consent will be sought from the participants of the online studies only. The consent forms and **research data** will be stored confidentially on an encrypted university hard disk for a minimum of 10 years.

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Responsible members of the University of Oxford may be given access to data for monitoring and/or audit of the research.

All research data will be stored for at least 10 years after publication or public release of the work of the research. We may retain and store your personal data for an additional period of time as necessary for the purposes of the study, and for further research.

8. What will happen to the results of the study?

As part of this project we will produce publications in academic journals and University publications (including webpages) and will present our findings at conferences and other events. These activities might include the use of short data excerpts such as transcript extracts and questionnaire responses. All data excerpts will be anonymised in the ways described above.

9. Who is organising and paying for the study?

The ReEnTrust project is funded by the Engineering and Physical Sciences Research Council. It is a collaboration between the Universities of Oxford, Nottingham and Edinburgh. The project is led by Professor Marina Jirotka in the Department of Computer Science at the University of Oxford. EPSRC reference EP/R03363/1.

10. Who has reviewed the study?

This project has been reviewed by, and received ethics clearance through, the University of Oxford Computer Science Departmental Research Ethics Committee.

11. Who should I contact for further information?

If you have any questions or require more information about this study, please contact project researcher Jun Zhao.

Dr Jun Zhao
Department of Computer Science
University of Oxford
Parks Road
Oxford
OX1 3QD

01865 273875

jun.zhao@cs.ox.ac.uk

12. Who do I contact if I have a concern about the study or I wish to complain?

If you have a concern about any aspect of this project, please speak to our project leader at the University of Oxford:

- Professor Marina Jirotka marina.jirotka@cs.ox.ac.uk or 01865 270550.

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Professor Jirotka will do her best to answer your query. Your concern should be acknowledged within 10 working days and you will be given an indication of how she intends to deal with it. If you remain unhappy or wish to make a formal complaint, please contact the chair of the Research Ethics Committee at the University of Oxford (using the contact details below) who will seek to resolve the matter in a reasonably expeditious manner:

Chair
University of Oxford Computer Science Departmental Research Ethics Committee.
Department of Computer Science
University of Oxford
Parks Road
Oxford
OX1 3QD

ethics@cs.ox.ac.uk

13. Data Protection

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study.

The University will process your personal data for the purpose of the research outlined above. Research is a task that is performed in the public interest.

Further information about your rights with respect to your personal data is available from http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/individualrights/.

**Thank you for reading this information sheet and for considering taking part in this research.
Please feel free to ask any questions if you would like further details of the study.**

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