

TRINITY COLLEGE DUBLIN

INFORMED CONSENT

LEAD RESEARCHERS: Alex Randles

BACKGROUND OF RESEARCH: The Knowledge and Data Engineering Group (KDEG) is located within Trinity College and focuses on researching challenges posed by knowledge discovery, representation and engineering. This knowledge is often represented as RDF data. Creating RDF data requires the creation of mappings, which are definitions that describe the transformation from source to target data. Our research will lead to finding a better way to improve the quality of the RDF data being produced by these mappings.

Creating these mappings has a steep learning curve, which can result in poor quality mappings being generated. These poor-quality mappings can often be unnoticed as the state of the art in RDF data quality focuses on the published datasets which are generated by these mappings. These mapping quality issues can grow exponentially within the resulting dataset. Furthermore, changes can occur within the source data used by these mappings after the RDF data has been created, resulting in inaccurate information. We aim to address the challenge by improving the quality of these mappings while capturing information related to source data changes. We have designed the Mapping Quality (MQ) framework to facilitate the quality assessment and refinement of these mappings and change detection within the source data used by these mappings. The framework is hoped to improve the quality of mappings, thus improving the quality of the datasets generated by these mappings, while providing fresh data.

PROCEDURES OF THIS STUDY:

- You are going to be briefed on the experiment task and what to do in the experiment.
- You will be asked to use the MQ framework to complete these tasks.
- You will be asked to fill out a usability test survey.

This experiment will take place online over a conference call via a video conferencing platform.

The total duration could take up to an hour to perform the tasks and fill the questionnaire. Audio and video will not be recorded during your session. The resulting data stored will be summary tables with the numeric answers of the usability test survey and numeric ratings for the information provided by the framework.

Your data (usability test survey and information ratings) will not be identifiable since it will be coded with a participant number and stored using the IT services called MyZone Google Drive which complies with GDPR rules. The lead researcher (Alex

Randles) and the supervisor (Prof. Declan O'Sullivan) will be the only people with access to the data until its publication in an open data repository.

We will perform a quantitative & qualitative analysis of the usability test survey using statistical summaries, reporting aggregated results. None of your personal details will be recorded and you are free to stop and leave the experiment at any point if you so choose.

PUBLICATION: The goal will be to publish the results of the usability test at Semantic Web conference and workshops, such as Extended Semantic Web Conference (ESWC) and International Semantic Web Conference (ISWC); and other relevant journals, as well as the PhD thesis of the lead researcher at Trinity College Dublin.

CONFLICTS OF INTEREST:

My supervisors will not take part in the experiment. Potential participants of the experiment will not be provided with any prior information before the experiment.

Individual results will be anonymized and published in open data repositories for reproducibility and research will be reported on the aggregate results.

DECLARATION:

- I am 18 years or older and am competent to provide consent.
- I have read, or had read to me, a document providing information about this research and this consent form. I have had the opportunity to ask questions and all my questions have been answered to my satisfaction and understand the description of the research that is being provided to me.
- I agree that my data is used for scientific purposes, and I have no objection that my data is published in scientific publications in a way that does not reveal my identity.
- I understand that if I make illicit activities known, these will be reported to appropriate authorities.
- I understand that I may refuse to answer any question and that I may withdraw at any time without penalty.
- I understand that if the results of the research have been published, <or my data has been fully anonymised so that it can no longer be attributed to me>, then it will no longer be possible to withdraw.
- I understand that I may stop electronic recordings at any time, and that I may at any time, even subsequent to my participation [request to] have such recordings destroyed (except in situations such as above).
- I understand that, subject to the constraints above, no recordings will be replayed in any public forum or made available to any audience other than the current researchers/research team.
- I freely and voluntarily agree to be part of this research study, though without prejudice to my legal and ethical rights.
- I understand that my participation is fully anonymous and that no personal details about me will be recorded.

- I understand that if I or anyone in my family has a history of epilepsy then I am proceeding at my own risk.
- I understand that personal information about me, including the transfer of this personal information about me outside of the EU, will be protected in accordance with the General Data Protection Regulation.
- I have received a copy of this agreement.

By signing this document, I consent to participate in this study, and consent to the data processing necessary to enable my participation and to achieve the research goals of this study.

PARTICIPANT'S NAME:

PARTICIPANT'S SIGNATURE:

Date:

Statement of investigator's responsibility: I have explained the nature and purpose of the research study, the procedures to be undertaken and any risks that may be involved. I have offered to answer any questions and fully answered such questions. I believe that the participant understands my explanation and has freely given informed consent.

RESEARCHERS CONTACT DETAILS: alex.randles@adaptcentre.ie

RESEARCHER'S SIGNATURE: *Alex Randles*

Date: