Designing Digital Education Class Project

Information for front page of any research instrument

Project title: DFA and regular languages - Digital learning activity

Who is completing the study?: We, Evanah Deschanel, Zhichen Fang, and Lucas Jung, are EPFL Masters Students completing a research project for our CS course entitled "Digital Education and Learning Analytics". The course is taught by Pierre Dillenbourg and Patrick Jermann.

What is the purpose of the study?: The purpose of this study is to compare the effect of two learning approaches applied to the topic of DFAs and regular languages: Problem Solving before Instruction (PS-I) and Instruction before Problem Solving (I-PS).

Is the study anonymous?: Yes, you are not asked to identify yourself at all. The data is collected and stored without you being identified.

What activities are you asked to do?: You will be asked to answer questions through different phases of the experiment: general demographic questions, pre-test to evaluate your prior knowledge about the topic, and post-test to evaluate the knowledge you gained at the end of the experiment. You will also need to read instructions about the topic, and engage in a problem solving activity where you will try to solve a given question about DFAs.

Are there risks involved in participating?: The activities involved are normal teaching, learning or assessment activities and should not pose any particular risks. However, if you do experience discomfort or inconvenience and would like to discuss it with someone, you can contact the course teacher, Pierre Dillenbourg (pierre.dillenbourg@epfl.ch).

Do you have to participate?: No. Your participation is completely voluntary. You can chose not to take part or to stop at any time. You can also skip any questions that you do not wish to answer. If you are part of the EPFL course, your participation in this study is not linked to your grade or to assessment in any way.

Can I withdraw from the study?: Yes, even if you begin, you can withdraw from the study if you like. However, because the study is anonymous and we cannot identify which data came from which participant we cannot withdraw your data after it has been collected.

What are the benefits of the study?: You will learn about DFAs and regular languages, and your participation will help us study how different teaching methods impact learning.

What are the possible end uses of the study?: The data is being collected as part of a project in the "Digital Education and Learning Analytics" CS course. We will prepare a report and a presentation based on the data.

How will data be stored?: Data will be collected and stored safely in accordance with the Swiss Federal Law on data protection (RS 235.1). Only those working on the project (students and staff that are supporting them) and members of the Research Ethics Committee will have access to the data. All data will be deleted at the end of the course.

What if I am hurt during the study?: Since the study is non-invasive and addresses only normal teaching, learning and assessment activities, you should not be hurt. Any damage to your health which is directly related to the above study and is demonstrably the fault of EPFL, is covered by the general liability insurance of EPFL (policy number 30/5.006.824 of Baloise Insurance). Beyond this, your health and/or accident insurance will apply.