

Project Summary

MATUI project: a method decision support tool for collecting data from users.

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In human-centred computing, computer researchers must know the needs of future users in order to propose a solution corresponding to their expectations (adapted interface, functionalities, etc.). They must therefore include humans by taking into account their work, their environment and must understand their needs.

To do this, they must mobilise data production methods from the Social Human Sciences (SHS) (interviews, questionnaires). However, most often, they lack the training to choose these methods and use them. They therefore encounter difficulties in understanding the needs of users.

In order to facilitate their choice, Nadine MANDRAN and Sophie DUPUY who work at the LIG (Grenoble Computer Science Laboratory) proposed a decision tree in 2018 called the MATUI diagram.

The objective of the project is to develop a web application to help computer science researchers choose a method or tool that will help them collect information from users. The aim is to make the MATUI diagram easier to use and more widely available.

The project needs to computerise the MATUI diagram in two ways:

- Being able to create and edit the diagram (a person can add or delete a part, an association of documents with a method or a tool, etc.)
- Being able to use the diagram (a person can use it to access the result of a particular method and the documents helping to apply it).

The product of the project is a web application allowing on the one hand to create (or modify) the MATUI diagram and on the other hand to use it. The application must support three distinct roles.

People with the "user" role will have access to an interface to answer questions corresponding to the MATUI alternatives. At the end of the questionnaire, they will get the result of a method (or tool) to be used and additional documents related to the result to help them in its application.

People with the "administrator" role will have access to an interface for editing MATUI. An administrator will be able to add decision rules, links between rules, conditions, remove them from the diagram, edit them... He will also be able to add documents to each of the present methods.

People with the "super-administrator" role will have access to the same interface as administrators. But they will also be able to manage members' accounts (delete and modify roles). For example, a super-administrator will be able to change a person from "user" to "administrator". If a member causes problems, he will also be able to delete the account.

The application is built under a client-server architecture on LIG servers with React technologies (and the ReactFlow library) for the frontend and PHP for the backend.