Mouser is a desktop app designed to optimize research that uses animal experimentation. Animals are often used in experiments to analyze the effects of drugs and other products, and Mouser is a way to optimize this analysis. Mouser will allow researchers to manage their own scientific experiments, where they can enter animal measurements, configure experiment information, and control which users can access the experiment. Using Mouser, animals can be measured in any way based on the user’s specifications, like weight or blood pressure, and this data can be managed easily with the application.

This application was requested by Dr. Karoly Toth, Research Professor at Saint Louis University. The application is meant for SLU researchers but can be expanded to work for other organizations/research projects.

- Integrated with RFID for automatic data input
- Sound confirmation minimizing time spent at the computer while in the laboratory
- User Admin has the ability to assign roles to other users and restrict certain use cases
  - Automatic group configuration based on weight

Source Code

Developers (GitHub)

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Upon completion, the newly-created experiment will be displayed and become available for selection in the experiment menu.

The Create New Experiment button will take the user to an input page to customize the experiment’s data.

The user will then configure how the animal groups will be organized within the experiment.

After experiment creation, the user can start working on things like data collection, mapping RFID, and data analysis.

The Map RFID page (as shown right) is used to enter each animal into the experiment. If the RFID is enabled for the experiment, the user can use barcodes or chips associated with each animal for easy data entry.