

iDB: A Searchable Online Database of Scientific Equipment in the College of Engineering

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Until recently, there was no direct way for students to locate pieces of scientific equipment in the College of Engineering. Finding a specific item meant going through a faculty member with Banner access and then performing time-consuming searches on a text file containing a listing of all the equipment for a particular department. Once an item was found, it was then necessary to locate and contact the responsible person, thereby adding an additional step to the process. Administrators in the College had no simple way to see what pieces of equipment were assigned to what faculty members, nor were they able to leave comments about the items for their own record-keeping purposes.

The goal of our research project was to develop a secure, easy-to-use system that could allow users to search for pieces of scientific equipment much as they might through an online catalogue. Not only would the system show items matching the search criteria, it would also display the responsible person's contact information corresponding to each item. Administrators would have the ability to perform very complex searches and record comments for their internal use. They would also be able to perform a variety of informative reports that would otherwise be difficult to construct.

This project required significant research in the areas of PHP programming, database design, and computer security. We conducted interviews with a variety of people who could potentially benefit from our project and designed the system based on their input. The end result was a web-based searchable database that included all of the required functionality described above. The system itself will be available for use this semester, though additional features are still being added.