

Project Year

2002

Project Team

Faculty: Robert Allen, Biomedical Engineering, Whiting School of Engineering

Fellow: William Tam, Computer Science, Whiting School of Engineering

Project Title

Design Repository

Audience

Undergraduate biomedical engineering students enrolled in the *Longitudinal Design Teams* course. Students can take the course several times, each time assuming a different role, based on experience and class rank.

Pedagogical Issue

Within the last decade, engineering educators have realized that experiencing design as an undergraduate is crucial to learning good design practices. The pedagogical issue this project addresses is how to best increase student autonomy in the process of learning design in biomedical engineering.

Solution

This project will create a Design Repository that will archive student team projects from the *Longitudinal Design Teams* course. By developing a system that captures the function, form, and rationale of previous designs, we will ensure that future students within the program will be able to learn from their predecessors. This design repository will be accessible through a web-based interface. Project-specific information will be available in a searchable, online format, at all times. The tool will help students enhance their learning experience by shortening design cycle time, enhancing the quality of designs, helping eliminate weaker alternative designs earlier in the design process, and reducing time to build and prototype. This tool could also be used to archive other design team projects in the biomedical engineering or other departments.

Technologies Used

Cold Fusion, HTML/Web Design, Adobe PDF