

ABSTRACT

Building an Engineer Day and High School Shadow are semi-annual outreach events hosted by Cal Poly's Society of Women Engineers section during fall and spring quarters. The events focus on encouraging women and minorities to take an interest in engineering. These events are the two largest outreach events hosted by The Society of Women Engineers and need to run smoothly in order to provide student attendees with a meaningful experience.

Building an Engineer Day and High School Shadow are currently un-organized and un-planned, which leads to problems with officer retention, increase in expediting process and a low attendance rate at the events. This project's objective was to solve these issues by establishing requirements and creating solutions to meet those requirements. The engineering design process of this project was the Plan, Do, Check, Act method.

The requirements were satisfied by creating a Microsoft Access system and a Microsoft Excel document. These two files work together in order to help plan and run Building an Engineer Day and High School Shadow. The Microsoft Excel document contains a timeline, data analysis and many more features that are needed during the planning of each event. The Microsoft Access system helps with the actual running of the events.

A prototype was first created of the Microsoft Access system in order to establish if its creation positively affected the events. After conducting and analyzing a time study it was proven that the new Microsoft Access system is more effective than the previously used method. This led into further development and eventual creation of a Microsoft Access system for both High School Shadow and Building an Engineer Day.

High School Shadow and Building an Engineer Day have two individual files that are used to plan and organize their events. These files will be stored in the event's Google Drive and another copy will be stored in the Society of Women Engineer's PolyLearn site. The document has been created for single time use; therefore previous records will be saved on the event's Google Drive and be available for future officer to review, before they begin planning the upcoming event.