

UNITED STATES MILITARY ACADEMY

Project IPR 1

CS393: DATABASE SYSTEMS

SECTION H1

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____ WE CERTIFY THAT WE HAVE COMPLETELY DOCUMENTED ALL SOURCES THAT WE USED TO COMPLETE THIS ASSIGNMENT AND THAT WE ACKNOWLEDGED ALL ASSISTANCE WE RECEIVED IN THE COMPLETION OF THIS ASSIGNMENT.

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Objective

The research program director wants a database to track research done by cadets.

Situation

A researcher is uniquely identified by their name and c number. Every researcher has their contact information and year of graduation attached. A researcher has the ability to join a project, update information, create a report for their project, and change their project's data.

A project has a sponsor, researcher, department, and title. A project is identified by its title and a unique ID. A project also has a bio that describes the project.

A faculty advisor can be an advisor for multiple projects. A faculty advisor can add a new project from the department and name the project. They can add and remove researchers from the project, update user information, and change project data. Faculty advisors can also create project specific reports.

A sponsor can sponsor an unlimited amount of research projects or 0 research projects. Sponsors will have a dollar amount per project. A sponsor can create reports that outline the cadets they sponsor, the project progress, and the total amount of money allocated. The sponsor can name the project and update user information.

The program director keeps track of where sponsorship money is going and the progress of each project. The program director can create reports that summarize the overall progress of research in the department, total sponsorship, and specific projects. The program director can also add projects and change project data, add and remove members from projects, and update any user information.

The system administrator has full autonomy over the entire environment. Specifically, they can generate reports, update user roles and system settings, remove members, and update user information.

Use Case Diagram



Data Model

