Empowering Capstone Students in Client Interactions

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Undergraduate Capstone in Informatics and Software Engineering

- Student teams are matched with commercial, non-profit, academic, and government sponsors to develop software.
- Students act as an external consulting and software development house, and the sponsor is their client.
- Instructors act as coaches to the student teams. Class sessions include refresher lectures, discussion, student presentations, and studio critique.

Client Expectations and "Managing Up"

- Students have strong technical knowledge, but have little experience with "real world" organizations.
- "Soft skills" like "managing up" and having productive disagreement with clients are central learning goals.
- In presentations, more than half of student teams cite managing sponsor relationships as a key challenge.

Students Struggle with Sponsor Expectations Slides from Student Presentations Changing and Managing our sponsor's **How We Manage** • We have struggled with this since our first meeting with the sponsor. Our sponsors want to solve a problem which, even at a professional level, cannot be entirely solved. **Sponsor Expectations** We cannot meet 100% of their requirements and expectations, in business or in technology Therefore, learning how to change and manage our sponsor's expectations within our capability and knowledge in order to complete a realistic final prototype that both our team and our sponsors will Surprise! What are Sponsor Expectations? The standard of our code was not up to par with our sponsor's expectation high priority goals, system features, and ideal successfu implementation of the project's objectives! During the last 15 weeks, with sponsor expectations we had to find what is feasible with our timeline & with what we know, plan out sprints with what features we can build out, research & learn new coding languages and svstems like Firebase, receive feedback from sponsors on current work/designs & Managing a Sponsor's No one on team had experience with app development **Expectations** Report data was processed by them in Non-technical Excel format

Moments of Disagreement between Sponsors and Students

- Effort and Knowledge Expectations
- Disregarding Capstone Course Requirements
- Late Project Changes and "Scope Creep"
- Unethical or Illegal Requests
- Bad Sponsor Behavior

Mentoring to Empower

Capstone Mentorship Focuses on 3 Key Components

Encourage students to recognize their own expertise and the value of their contribution.

Help students to communicate their analyses and decisions.

Act as a strong advocate for students, and be willing to intervene when necessary.