Use Cases

The use cases illustrate the processes executed by system administration, CIS students and alumni, and program supporters and, thus, represent the way the system interacts with its users. The use cases document how the system users view the processes of the mentor program being developed.

UC Name (and Number): Enrollment (001)

Primary Actor(s): CIS Students and Alumni

Brief Description: CIS students and alumni enroll in the mentor program by visiting the website and providing his or her full name and email address. Submission of this information will serve as a request to administration to be enrolled.

UC Name (and Number): Authorization (002)

Primary Actor(s): System Administration, CIS Students and Alumni

Brief Description: The mentorship program administration will receive a notification after a CIS student or alumni has enrolled. Administration will then grant or deny the student or alumni access to the program via the website by accepting or rejecting the enrollment.

UC Name (and Number): Match (003)

Primary Actor(s): System Administration, Authorized Students and Alumni

Brief Description: Once an enrollment is authorized and deemed mentor or mentee by the system administration, he or she will be paired with a subsequent mentee or mentor based on his or her credentials such as major track, class, completed courses, career, and special interests.

UC Name (and Number): Communication (004)

Primary Actor(s): System Administration, Mentors and Mentees

Brief Description: Using an authorized user's inputted contact information, program administration will be able to put out email blasts and various notifications about upcoming events, deadlines, current opportunities, and new features.

UC Name (and Number): Report (005)

Primary Actor(s): System Administration

Brief Description: System administration will use program reporting features to generate data and draw conclusions regarding user satisfaction, progress, and interaction. Reports can be used for administrative monitoring purposes and proof of effectiveness to university executives and other stakeholders.

UC Name (and Number): Donate (006)

Primary Actor(s): CIS Alumni, Program Supporters

Brief Description: CIS alumni and supports can contribute to the program without getting directly involved through donations. Donations will be securely and efficiently submitted and accepted via PayPal.

Trace Matrix

		Use Cases					
		UC001	UC002	UC003	UC004	UC005	UC006
Requirements	R1	X					
	R2		X	X			
	R3				X		
	R4					X	
	R5						X

Risk Assessment

Risk 1: The evolution of the program's website could be delayed due to the project developers lacking significant experience with C# prior to this project.

Likelihood of risk: High probability of risk.

Potential impact on the project: This risk is likely to increase the project completion time by 75 percent compared to hiring a professional to build the program.

Ways to address this risk: Adequate review of C#, learned in CIS 199, in CIS 420 will reduce the initial learning curve when the programming tasks begin. Also, assuming there will be some students with externally acquired skills in C#, one student with a higher level knowledge of C# should be assigned to each group and a student with moderate C# or other programming skill is preferred. These students will provide experiential knowledge to the team so that C#-related and programming related issues are mitigated efficiently.

Risk 2: The development management of this system is subject to scope creep as the program changes and grows because the CIS department has not employed any such program previously.

Likelihood of risk: Moderate probability of risk.

Potential impact on the project: This risk is likely to cause missed deadlines and possibly cost overruns.

Ways to address this risk: It is very important that the client's vision and prioritization of the project before beginning implementation. In depth review of the planning and development stage documentation and communication with the client will ensure vigilance from the start. With that said, the project team should understand fully the requirements in order to meet the client's needs effectively and also avoid gold plating in order to guard against issues of scope creep.

Risk 3: Inaccurate estimates - The initial success estimates calculated in the planning and development phases could prove to be inaccurate because assumptions have been made based on general, high-level data.

Likelihood of risk: Low probability of risk.

Potential impact on the project: This risk is likely to cause user dissatisfaction with the program, reluctance to participate, and lack of funding for intended future program improvements and projects.

Ways to address this risk: Since the CIS program has no data of its own in regards to the success of a mentoring program, it is essential that the project team look at multiple possible outcomes of the project being implemented. The starting point of the analysis will be rooted in the assumption that an adequate number of students and alumni will participate willingly based on Dr. Barker's knowledge of drop rates and conversations with alumni, and average donation numbers from various sites. From here, an NPV analysis will be conducted looking at outcome with the average, assumed numbers and also outcomes with percentage variations on the base points.