CASE STUDY

Course Registration:

1. Students submit registration forms with their name, identification number, and the numbers of the courses they wish to take. For each form, the registrar verifies that each courses selected is still open by referencing the course file. The file distinguishes courses that are still open from those that have been canceled or filled.

2. Subsequently, the registrar determines which of student's selections can be accepted or rejected. Then the registrar enrolls the student in the courses for which he or she has been accepted and updates the university's course file with the student name and identification number and recalculate the class size. If maximum enrollment has been reached, the course is closed. The enrollment process also updates the student master file with information about new student or changes in address. The registrar then sends each student applicant a confirmation-of-registration letter listing the course for which he or she is registered and noting the course selections that could not be fulfilled.

You are required to perform the following tasks:
1. Capture "shall" Statements and the external entities (Actors)
2. Allocate Requirements
3. Priorities Requirements
4. Requirements Traceability Matrix

Capture "shall" Statements and the external entities (Actors)

Para #	External Entity	Initial Requirements
1.0	Student	A student "shall" submit registration form of the courses they wish to take.
1.0	Registrar	A registrar "shall" verifies the requested course by referencing the course file.
2.0	Registrar	The registrar "shall" determine which of student's selection accepted or rejected.
2.0	Registrar	The registrar "shall" enroll the student in the courses for which he or she has been accepted.
2.0	Registrar	The registrar "shall" update the university's course file with the student name and identification number and recalculate the size of class.
2.0		System "shall" close the course if maximum enrollment has been reached.
2.0		System "shall" update the student master file with the information about new student or changes in address.
2.0	Registrar	The registrar "shall" send each student applicant a confirmation of registration letter listing the cost for which he or she is registered.

Allocate Requirements

Para #	Initial Requirements	Use Case Name
1.0	A student "shall" submit registration form of the courses they wish to take.	UC_Submit_form
1.0	A registrar "shall" verifies the requested course by referencing the course file.	UC_Verify_Course
2.0	The registrar "shall" determine which of student's selection accepted or rejected.	UC_Course_Availability
2.0	The registrar "shall" enroll the student in the courses for which he or she has been accepted.	UC_Student_Enrolled
2.0	The registrar "shall" update the university's course file with the student name and identification number and recalculate the size of class.	UC_Update_Course_File
2.0	System "shall" close the course if maximum enrollment has been reached.	UC_Close_Course
2.0	System "shall" update the student master file with the information about new student or changes in address.	UC_Update_Master_File
2.0	The registrar "shall" send each student applicant a confirmation of registration letter listing the cost for which he or she is registered.	UC_Send_Confirmation_Letter

Prioritize Requirements

Para #	Rank	Initial Requirements	Use Case ID	Use Case Name
1.0	Highest	A student "shall" submit registration form of the courses they wish to take.	UC_1	UC_Submit_form
1.0	Highest	A registrar "shall" verifies the requested course by referencing the course file.	UC_2	UC_Verify_Course
2.0	Highest	System "shall" close the course if maximum enrollment has been reached.	UC_3	UC_Close_Course
2.0	Highest	The registrar "shall" enroll the student in the courses for which he or she has been accepted.	UC_4	UC_Student_Enrolled
2.0	Medium	The registrar "shall" determine which of student's selection accepted or rejected.	UC_5	UC_Course_Availability
2.0	Medium	The registrar "shall" update the university's course file with the student name and identification number and	UC_6	UC_Update_Course_File

		recalculate the size of class.		
2.0	Medium	The registrar "shall" send each student applicant a confirmation of registration letter listing the cost for which he or she is registered.	UC_7	UC_Send_Confirmation_Letter
2.0	Lowest	System "shall" update the student master file with the information about new student or changes in address.	UC_8	UC_Update_Master_File

Requirements Traceability Matrix

Sr#	Para #	System Specification Text	Build	Use Case Name	Category
1	1.0	A student "shall" submit registration form of the courses they wish to take.	B1	UC_Submit_form	CMS
2	1.0	A registrar "shall" verifies the requested course by referencing the course file.	B1	UC_Verify_Course	CMS
3	2.0	The registrar "shall" determine which of student's selection accepted or rejected.	B1	UC_Course_Availability	CMS
4	2.0	The registrar "shall" enroll the student in the courses for which he or she has been accepted.	B1	UC_Student_Enrolled	CMS
5	2.0	The registrar "shall" update the university's course file with the student name and identification number and recalculate the size of class.	B1	UC_Update_Course_File	CMS
6	2.0	System "shall" close the course if maximum enrollment has been reached.	B1	UC_Close_Course	CMS
7	2.0	System "shall" update the student master file with the information about new student or changes in address.	B1	UC_Update_Master_File	CMS
8	2.0	The registrar "shall" send each student applicant a confirmation of registration letter listing the cost for which he or she is registered.	B1	UC_Send_Confirmation_Letter	CMS