Section 3.1 – Functional Requirements

Issue #24 and #40

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | UC4 | | |
| Use Case Name: | Browse Course List | | |
| Created By: | Ideawin-Bunthy Koun | | Last Updated By: |
| Date Created: | January 25th, 2016 | Last Revision Date: | |
| Actor(s): | Student | | |
| Goal/Actor Goals: | Browse the course list from the course calendar. | | |
| Description/Summary: | The user can view available courses and access information pertaining to them. | | |
| Preconditions: | * User must be logged in as a Student. * Course list must be available. | | |
| Post-conditions: | A list of courses is displayed. | | |
| Minimum Guarantee: | The system fails to display a list of courses and displays an error message to the user. | | |
| Basic Flow: | 1. User opens a session with the scheduler. 2. User selects the ‘Browse Course List” feature. 3. System displays list of courses. 4. User selects a course from that list. 5. System displays information about the selected course. | | |
| Risk assessment: | 3/5 | | |
| Importance assessment: | 5/5 | | |

This use case allows the user to browse a list of all relevant courses taken from the course calendar. The user has to log into the system and select the ‘Browse Course List’ option. The system will display a page containing all the courses in order by name. The user can scroll the page and view any courses he or she is interested in with their description.

|  |  |  |
| --- | --- | --- |
| Use Case ID: | UC5 | |
| Use Case Name: | View Course Sequence | |
| Created By: | Ideawin-Bunthy Koun | Last Updated By: |
| Date Created: | January 25th, 2016 | Date Created: |
| Actor(s): | Student | |
| Goal/Actor Goals: | Allows the user to know their progression in the program. | |
| Description/Summary: | User can view a complete course sequence of the program the student is enrolled in. | |
| Preconditions: | * User must be logged in as a Student * The system has access to a course sequence. | |
| Post-conditions: | The system displays a course sequence. | |
| Minimum Guarantee: | The system fails to display a course sequence and displays an error message to the user. | |
| Basic Flow: | 1. Student logs into the scheduler. 2. Student selects the option to view his or her course sequence. 3. Course sequence is displayed to the student. | |
| Risk assessment: | 1/5 | |
| Importance assessment: | 3/5 | |

This use case allows the user to view his or her program’s course sequence according to the user’s chosen courses or the generic course sequence if a schedule has not yet been generated. The user needs to log into the scheduler and select the ‘View Course Sequence’ option. The system will then display a page which contains the course sequence for the next four years that the student has to follow.

|  |  |  |
| --- | --- | --- |
| Use Case ID: | UC6 | |
| Use Case Name: | Generate Schedule | |
| Created By: | Ideawin-Bunthy Koun | Last Updated By: |
| Date Created: | January 25th, 2016 | Last Revision Date: |
| Actor(s): | Student | |
| Goal/Actor Goals: | Obtain a suggested schedule for the next four years. | |
| Description/Summary: | The system can generate a 4-year schedule for the user based on the student’s preferences and constraints and on prerequisite and co-requisite policy. | |
| Preconditions: | * User must be logged in as a Student. * The system must have access to course schedules. * The system must have access to the student’s records. | |
| Post-conditions: | The system generates a schedule with no overlaps. | |
| Minimum Guarantee: | The system fails to generate a schedule and displays an error message to the user. | |
| Basic Flow: | 1. User opens a session with the scheduler. 2. User selects the ‘Generate Schedule’ feature. 3. User selects his or her options and preferences. 4. System responds by displaying a schedule that meets the user’s preferences and constraints. | |
| Risk assessment: | 5/5 | |
| Importance assessment: | 5/5 | |

This use case allows the system to generate a schedule by first allowing the user to select his or her preferences. Once selected, the system will generate a schedule based on these preferences and the student’s records, such as previously enrolled courses, prerequisites and co-requisites as well as currently enrolled courses. The schedule will also be kept inside the system once it has been generated.