

Use-Case Specification: Generate Schedule

Brief Description

The purpose of this Use-Case is to describe what the system does when it generates a potential schedule of courses. Students are able to use the system to generate schedules, which the system handles through Sugar.

Actors

1. Student

Preconditions

network connection, modern browser, valid account

Basic Flow of Events

1. The use case begins when Student requests a schedule.
2. Use Case: Authenticate is performed.
3. The Website presents options for different saved preferences.
4. The Student selects a set of preferences.
5. The Website prompts for a semester to schedule for.
6. The Student selects a semester.
7. The System uses Sugar and the Preferences, Semester, and Schedule of Courses to generate a schedule.
8. The Website presents the Student the generated schedule.
9. The use case ends successfully.

Alternative Flows

Unauthenticated

If in step 2 of the basic flow, the use case: Authenticate does not complete successfully, then

1. The use case ends with a failure condition.

No Preferences

If in step 3 of the basic flow the Student does not have any preferences saved, then

1. Use Case: Generate Student's Preferences is performed.
2. The use case resumes at step 3.

Invalid Semester

If in step 6 of the basic flow, the Student selects a semester which is not currently valid (in the past, too far in the future, etc.), then

1. The Website shall display the message "Invalid Semester - please try again"
2. The use case resumes at step 5.

No Schedule

If in step 7 of the basic flow, the System is unable to generate a schedule, then

1. The Website shall display the message "Schedule could not be generate with supplied preferences and semester choices"

2. The use case resumes at step 3.

Instructor Permission Required

If in step 8 of the basic flow, the generated schedule contains a course that would require Instructor Permission, then

1. The Website displays a notice containing this information
2. The use case resumes at step 8.

Quit

If at any point prior to step 8 of the basic flow, the Student disconnects from the Website for any reason, then

1. Any pending actions are cancelled.
2. The use case ends.

Postconditions**Successful Completion**

The Student has received the generated schedule.

Failure Condition

The logs have been updated accordingly.