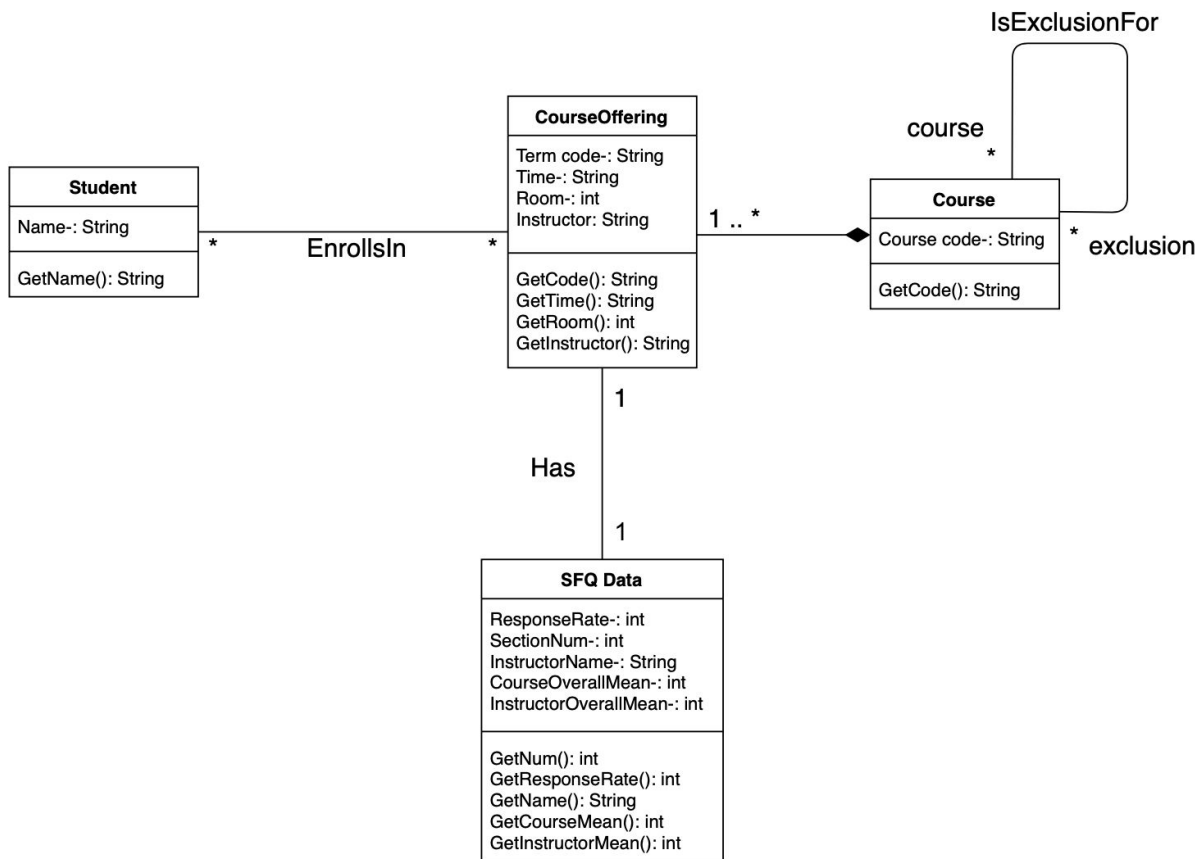
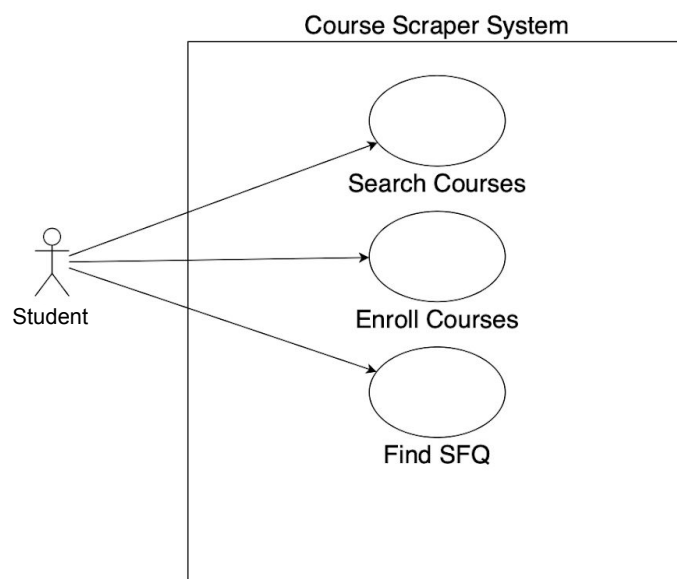


Team-11 Activity 1 Submission

Class Diagram



Use-case Diagram



Use-case specification

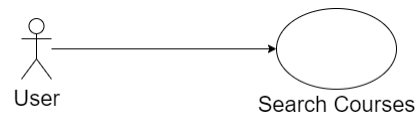
Task 1

HWANG, Junyeol

Brief Description

This use case describes how a student searches courses for different terms and subjects.

Use-case Diagram



Basic Flow

{Enter Term}

1. The use case begins when a student types a base URL, a term number and a subject code and click the search button.
2. The system displays courses and their information such as course titles, course slots, the total number of sections, the total number of courses, instructors on the console.
3. The use case ends.

Alternative Flows

A1: Invalid Term

At {Enter Term} if the entered base URL is invalid,

1. The system displays 404 page not found on the console.

Task 2: Filter

KIM, Jaehyeok

Use Case: Search Courses

Brief Description

This use case describes how a student can search for courses to enroll for a specific term utilizing the filters.

Use-case Diagram



Basic Flow

1. The use case begins when the student clicks the Search button or one of the check boxes or "Select All" button after entering the Base URL, Terms and Subject on the Main tab.
2. The system displays the interface for entering Base URL, Terms and Subject.
{Enter URL}
3. The student indicates the base url, term and subject keyword that he wants to look for.
{Select Filter}
4. While the student has an activity to perform
 - 4.1. If Select All button is clicked
 - 4.1.1. All checkboxes are checked and the system displays the courses that starts at AM and ends at PM, that has a section with slots on all days of the week, that are 4Y CC, that do not define exclusion and that have labs or tutorials.
 - 4.2. If De-select All button is clicked
 - 4.2.1. The system displays all courses scraped without any filterings and checkboxes are unchecked.
 - 4.3. If AM / PM checkbox is clicked
{Check AM & PM}
 - 4.3.1. The system displays the courses which have a slot in AM / PM while considering already checked boxes.
 - 4.5. If any boxes of days of the week is clicked
{Select Days}
 - 4.5.1. The system displays only all sections of the courses that have slots on the selected boxes while considering already checked boxes.
 - 4.6. If Common Core box is clicked
 - 4.6.1. The system displays only all sections of the courses that are 4Y CC while considering already checked boxes.

- 4.7. If No Exclusion box is clicked
 - 4.7.1. The system displays only all sections of the courses that do not define exclusion while considering already checked boxes.
- 4.8. If With Labs or Tutorial box is clicked
 - 4.8.1. The system displays only all sections of the courses that had labs or Tutorials while considering already checked boxes.
- 5. The use case ends.

Alternative Flows

A1: Invalid URL

At {Select Filter} if the entered URL, or Term, or Subject is invalid,

1. The system informs the student that at least one of the inputs is invalid.
2. The Flow of events is resumed at {Enter URL}.

A2: Simultaneous Occurrence of AM and PM Filter

At {Check AM & PM} if both AM and PM checkboxes are checked,

1. The system instead displays only all sections of the courses that have a slot that starts at AM and ends at PM, or a section has a slot in AM and another slot in PM.

A3: Simultaneous Occurrence of Days Filter

At {Select Days} if more than two days boxes are checked,

1. The system instead displays only all sections of the courses that have a slot on all checked days.

A4: Uncheck Boxes

At any points in 4,

1. The student can cancel any filter boxes.
2. The system displays the courses without applying the unchecked filter.

Task 3: List

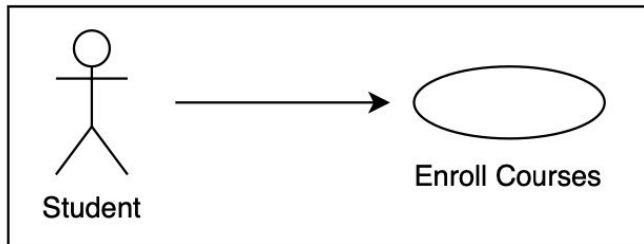
KIM, Jaehyeok

Use Case: Enroll Courses

Brief Description

This use case describes how a student can enroll in courses.

Use-case Diagram



Basic Flow

1. The use case begins when the student performs the use case Search Courses using Filters.
2. The student searches courses using the filters on the Filter tab.
3. The system displays the result of the Search in a table with Course Code, Lecture Section, Course Name, Instructor and Enroll as columns.
4. While the student has an activity to perform
 - 4.1. If a Enroll checkbox of a course is checked
 - 4.1.1. The system displays the enrolled sections on the console
5. The use case ends.

Alternative Flow

A1: Cancel Enrollment

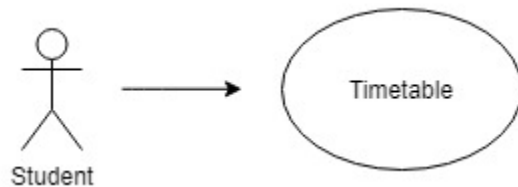
At any point in 3,

1. The student can cancel the enrollment
2. Then, the system uncheck the checkbox of the dropped course and displays the enrolled section on the console without the dropped one.

Brief Description

This use case displays graphics of timetable.

Use Case Diagram



Basic Flow

1. The use case begins when enrollment status is changed.
2. The system displays the graphics of student's timetable.
{ Check enrollment status}
3. Checking whether the courses is enrolled.
{Create the block}
- 4.1.1 Create a block on the timetable tab for each slot of the enrolled section.
- 4.1.2 Each block should contains 1.course code 2.section code in two lines.
{Color}
- 4.2.1 Detecting the colors which are not used.
- 4.2.2 Applying background color to the enrolled section.
5. The use case ends.

Alternative Flows

Variant Flow

A1: No course enrolled

At {Check enrollment status} is zero

1. The use case ends.

Variant Flow

A2: Time Crash

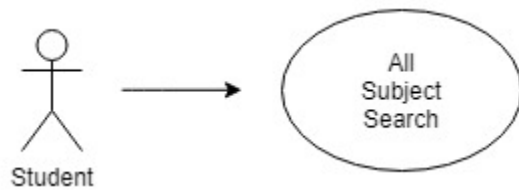
At {Create the block} discover time conflict

1. the boxes of the time clashed slot will be overlapped.
2. The overlapped area will be displayed in different color.
3. The use case ends.

Brief Description

This use case display the list of all subjects from a term.

Use Case Diagram



Basic Flow

1. The use case begins when student clicks the button “All subject Search”
2. The system displays the interface for displaying all subjects
{Subject numbers}
3. Printing total number ALL_SUBJECT_COUNT in console (ALL_SUBJECT_COUNT=size of list)
{Subject Search}
- 4.1.1 the system searches one subject from starting of subject list
- 4.1.2 Printing “is done” in console after one subject scraped
- 4.1.3 Updating progress bar graphics by (fraction / ALL_SUBJECT_COUNT)
- 4.1.4 Repeating 4.1.1 to 4.1.3 until all subjects are scraped.
{total courses}
- 4.2.1 Print TOTAL_NUMBER_OF_COURSE which courses are with course code.
- 4.2.2 Filter/List/Backend shows different results.
5. The use case ends.

Alternative Flows

Variant Flow

A1: No course selected

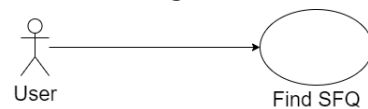
At {Subject numbers} is zero

2. The system print total number = 0.
3. The Flow of event is resumed at {total courses}

Brief Description

This use case describes how a student finds SFQ with his/her enrolled courses or instructors' average SFQ score.

Use-case Diagram



Basic Flow

{Enter Term}

1 The use case begins when a student enters the SFQ URL.

{Select Activity}

2 The use case begins when a student clicks the action he/she wants the system to perform.

2.1 If "Find SFQ with my enrolled courses" is selected,

2.1.1 The system displays unadjusted SFQ data of the enrolled courses on the console.

2.2 If "List instructors' average SFQ" is selected,

2.2.1 If multiple sections are available for a course.

2.2.1.1 Take the average unadjusted SFQ data and print it on the console.

2.2.2 Else

2.2.2.1 The system displays all instructors' name and their unadjusted SFQ score on the console.

3 The use case ends.

Alternative Flows

A1: Invalid Term

At {Enter Term} if the entered URL is invalid,

1. The system displays 404 page not found on the console.