A blue and white logo

Description automatically generated with low confidence

Lê Thanh Phương Nam

ITITWE19025

**REPORT LAB 2**

Use UCMs (Use Case Models) to analyze the business processes below  
at the IU\_VNU

**1.** The Course Registration Process.

1. Characteristic Information

|  |  |
| --- | --- |
| **Goal In Context:** | Students must register for the courses between the minimum and the maximum number of credits for a semester |
| **Scope:** | International University, Academic Affairs Office |
| **Level:** | Task |
| **Pre-Condition:** | Students are studying at IU  Students are second-year students and above  Students don’t owe tuition fee |
| **Success End Condition:** | Students complete the course registration successfully  The registered courses are added to the students’ schedule |
| **Failed End Condition:** | Students fail to complete the course registration  Students don’t register enough credits for a semester  Students are freshmen  Students owe tuition fees |
| **Primary Actor:** | Student: Students who are studying at IU and want to register for courses  OAA: the office is responsible for handling the process  Advisor: A advisor in charge of following and supporting the students  Major Office: The office in charge of the study process of students in their major |
| **Trigger Event:** | Students log in to Edusoft and start the course registration |

1. Main Success Scenario

|  |  |  |
| --- | --- | --- |
| **Step** | **Actor** | **Action Description** |
| 1 | Major office | Make a survey for students to do to predict the number of classes, students, lecturers… and post it on the fan page of each school |
| 2 | Student | Do the survey and choose which course to register for the next semester |
| 3 | Major office | Get the results of the survey, then send them to OAA |
| 4 | OAA | Make the course schedule based on the result of the survey and the schedules of lecturers |
| 5 | OAA | Upload the course schedule, the number of classes, the number of students, the lecturer, room |
| 6 | OAA | Notify the time for the demo and the official course registration on Edusoft |
| 7 | OAA | Check and approve students who satisfy all the conditions to take the registered courses |
| 8 | Student | Students who were approved, do demo course registration on Edusoft and plan the timetable |
| 9 | Student | Do the official course registration on the Edusoft website to automatically update the timetable with successfully registered courses |
| 10 | Advisor | Check students' registered courses, if there are no problems, report them to OAA |
| 11 | OAA | Save the registered courses on the system and update the timetable |
| 12 | Student | Students can add or drop courses at the add-drop course week on the Edusoft website for updating the new timetable |
| 13 | Advisor | Check students' registered courses, if there are no problems, report them to OAA |
| 14 | OAA | Save registered courses on the system and OAA finalizes tuition fees for students |
| 15 | Student | Check courses have been approved for the tuition fee |

1. Scenario Extensions

|  |  |  |
| --- | --- | --- |
| **Step** | **Condition** | **Action Description** |
| 1a | Students can’t receive the survey | Students contact their school or advisor to receive the survey |
| 2a | Students can’t access the survey | Students contact the major office to fix it |
| 6a | The system fails to upload the announcement | OAA announces via students’ emails or Facebook |
| 7a | Students don’t satisfy any condition | Students cannot register for courses |
| 8a | Students owe tuition fees | -Students cannot register  -Students can register at the add-drop course week if they have paid the full tuition fee |
| 8b | Students are freshmen | Students cannot register for courses |
| 8c | Out of registration time | Students register for courses at the add-drop course week |
| 8d | Students have not taken the prerequisite courses for the registered course | Students cannot register for that course |
| 8e | The class that students want to register for is out of slots | Students need to make a form to request to open more classes, then send it to Major Office |
| 8f | Students are taking a gap semester or year | Students cannot register until the re-enrollment email is sent to OAA |
| 8g | Students are suspended | Students cannot register until the re-enrollment email is sent to OAA |
| 8h | Students don’t register with the required number of credits | -If students register less than the required minimum credit, the system notifies students to register more credit. Then students can add more courses during the add-drop course week  -If students register more than the required maximum credit, the system notifies students to edit at add-drop course week |
| 8i | Students are junior | Students can register without the required number of credits |
| 8j | Students want to register 2 courses at the same time | Students can register only one of them |
| 10a | Students want to change the timetable after the advisor has already approved | Students contact the advisor to change the timetable |
| 10b | The timetable has a problem | Advisor contacts students to support making an appropriate timetable |
| 11a | OAA updates the wrong timetable | Students contact OAA for checking and correcting |
| 12a | The number of credits is below the minimum credit after dropping a course | The course registration is canceled and students cannot study that semester |
| 12b | The number of credits is over the maximum credit after adding a course | OAA contacts students to drop 1-2 courses to satisfy the specified number of credits |
| 12c | Students miss both the official course registration and the add-drop course week | Students will receive an email from OAA and cannot study that semester |
| 13a | Students want to change the timetable after the advisor has already approved | Students contact the advisor to change the timetable |
| 13b | The timetable has a problem | Advisor contacts students to support making an appropriate timetable |
| 14a | OAA updates the wrong information about the course | Students contact OAA for checking and correcting |
| 15a | Students want to drop courses after this time | Students need to make a request form to drop that course and send it to OAA |
| 15a | The courses are not yet added or removed | Students contact OAA for supporting and checking |

1. Scenario Variations

|  |  |  |
| --- | --- | --- |
| **Step** | **Variable** | **Possible Variations** |
| 1 | Contact | Unable to contact the student to take the survey |
| 2 | Survey form | Students can’t access the survey |
| 4 | Class Schedule | OAA set class schedule does not match the survey results |
| 5 | System | Upload wrong information or unsuccessfully upload |
| 6 | System | Fail to post a notification |
| 8 | System | is not accessible for official course registration |
| 9 | System | Fail to update the timetable |
| 11 | System | Fail to update the timetable |
| 12 | System | Fail to update the new timetable |
| 14 | System | Fail to update the information of registered courses (Tuition fee) |
| 15 | System | is not accessible for checking |

1. Related Information

|  |  |
| --- | --- |
| **Schedule:** | From the end of the semester to the first week of the next semester |
| **Priority:** | Must |
| **Performance Target:** | 1 week and 4 days |
| **Frequency:** | Every semester every year |
| **Super Use Case:** | Course registration |
| **Sub Use Case(s):** | -Arranging the timetable  -Checking the timetable  -Updating the timetable  -Adding/Dropping courses |
| **Channel To Primary Actor:** | -Student: student’s phone number, parents’ phone number, email, home address, social media  -OAA: office, email, phone number, website, social media |
| **Secondary Actor(s):** | -Major Office  -Advisor |
| **Channel(s) To Secondary Actor(s):** | -Major Office: office, phone number, email  -Advisor: office, phone number, email |

1. Open Issues

|  |  |
| --- | --- |
| **Issue ID** | **Issue Description** |
| Issue 1 | The subject has the wrong number of credits |
| Issue 2 | Students hack the system when registering for a course |
| Issue 3 | Students want to change the course after the add-drop course week |
| Issue 4 | Students register for courses that are not in their curriculum |

**2. The Tuition Fee Payment Process**

1. Characteristic Information

|  |  |
| --- | --- |
| **Goal In Context:** | The student must pay the tuition fee as prescribed by the school each semester sign the course. |
| **Scope:** | International University, OAA, OFP |
| **Level:** | Task |
| **Pre-Condition:** | The student must be an international university student.  The student must have registered for the next semester's course at the minimum credit level. |
| **Success End Condition:** | Student completes tuition payment.  Student debt on the website is 0 VND. |
| **Failed End Condition:** | The student has failed to pay the tuition fee or has already paid but still owes more than the prescribed amount |
| **Primary Actor:** | Student: someone who has graduated from high school and passed a national or school examination  OAA: The office in charge of system management and students  System: Website and banking support viewing and paying for students’ tuition fees  OFP: the office in charge of student tuition fees |
| **Trigger Event:** | Students begin to register for courses for the next semester. |

1. Main Success Scenario

|  |  |  |
| --- | --- | --- |
| **Step** | **Actor** | **Action Description** |
| 1 | Student | Start to register for the course, edit the last course of the week "Add-Drop" enough credits as prescribed on the edusoft website. |
| 2 | OAA | Get a list including the name of each subject, the total number of credits,.. from the system, calculate and make statistics of tuition fees from the number of registered student credits and surcharges |
| 3 | OAA | Update each student's tuition statistics on the system |
| 4 | Student | Students login the edusoft website in the tuition section to view tuition fees |
| 5 | Student | Students proceed to pay the full tuition fee directly to OFP before the midterm exam or ibanking of OFP International University |
| 6 | OFP | Receive the payment fee and return the payment confirmation bill to the Student |
| 7 | OFP | Statistics of the list of students who have paid tuition fees or the amount owed by each student and notify OAA |
| 8 | OAA | Get a list and update each student's outstanding tuition on the system |
| 9 | Student | Log in to the edusoft website to check the student's outstanding tuition amount  If the outstanding amount is 0 VND, the tuition fee payment process is successful |

1. Scenario Extensions

|  |  |  |
| --- | --- | --- |
| **Step** | **Condition** | **Action Description** |
| 3a | OAA updates the wrong tuition fee | If there is any problem, students should notify OAA for checking and calculating again. |
| 3b | Students have scholarships | OAA reduces the tuition fee based on the scholarships  Students just pay the tuition fee that is already minus by scholarships to the OFP |
| 5a | Students can’t pay directly at OFP | Students can pay online by credit card or e-wallet through university bank accounts including Agribank, Vietcombank, BIDV |
| 5b | Pay tuition fees late | Students who pay tuition fees late after the specified date must present a tuition receipt or a confirmation of tuition payment from the Edusoftweb system upon entering the exam room. |
| 6a | OFP didn’t give students the receipts | Students can contact OFP to receive the receipts |
| 6b | The information on the receipts is wrong | Students contact OFP to correct the wrong information |
| 7a | OFP statistics wrong information | If there is any problem, students should notify OAA for contacting the OFP to check again. |
| 9a | OAA updated for wrong student information | Students should notify OAA for checking again, removing the update for wrong information and updates for the right information |
|  |  |  |
|  |  |  |

1. Scenario Variations

|  |  |  |
| --- | --- | --- |
| **Step** | **Variable** | **Possible Variations** |
| 1 | Course registration | Insufficient registration of required credits |
| 2 | Tuition fee | Incorrect statistics on the total number of credits and tuition fees of registered subjects of students |
| 3 | Pay method | Pay Cash Directly or Online transaction |

1. Related Information

|  |  |
| --- | --- |
| **Schedule:** | From the 2nd week of the course to before the Midterm Exam |
| **Priority:** | Must |
| **Performance Target:** | 6 to 7 weeks |
| **Frequency:** | Every semester every year |
| **Super Use Case:** | Students pay tuition |
| **Sub Use Case(s):** | Register for the course  Calculating tuition fee  Check outstanding balance  Check tuition fees after paying |
| **Channel To Primary Actor:** | Student: student’s phone number, parent’s phone number, student’s email, address.  OAA: office, email, phone number, website, fan page. |
| **Secondary Actor(s):** | OFP  System |
| **Channel(s) To Secondary Actor(s):** | OFP office, phone number, email, website.  System: the Edusoft website, ibanking |

1. Open Issues

|  |  |
| --- | --- |
| **Issue ID** | **Issue Description** |
| Issue 1 | The system is not accessible for checking and uploading tuition fee |
| Issue 2 | The system displays the wrong tuition fee |
| Issue 3 | The student failed to pay to OFP banking (wrong account or system error) |
| Issue 4 | The student’s tuition fee is calculated wrong by OAA |

**3. The Grading Process for students.**

# 1. Characteristic Information

|  |  |
| --- | --- |
| **Goal In Context:** | Students are graded based on many factors such as attendance score, in-class score, midterm exam score, final exam score, etc. |
| **Scope:** | International University, Office of Academic Affairs, Lecturer |
| **Level:** | Strategic |
| **Pre-Condition:** | -Students are studying at IU  -Students have done the homework, exercises given by the lecturer and finished midterm, final examinations |
| **Success End Condition:** | -Students are graded  -The grade is uploaded on Edusoft, Blackboard |
| **Failed End Condition:** | -Students are not graded  -Students violate rules in class or in school  -There is no grade uploaded on Edusoft, Blackboard |
| **Primary Actor:** | -Student: Students who are studying at IU  -Lecturer: who directly grades students  -Office of Academic Affairs: the office is responsible for handling the process |
| **Trigger Event:** | Students start to study the course |

# 2. Main Success Scenario

|  |  |  |
| --- | --- | --- |
| **Step** | **Actor** | **Action Description** |
| 1 | Student | Students complete quizzes, homework, midterm, final examinations. |
| 2 | OAA | For official college testing, OAA will cut the student's marked information from the student's paper exam |
| 3 | OAA | Distributing randomly cut assignments to lecturers |
| 4 | Lecturer | Mark the test, make statistics, and send the results back to OAA |
| 5 | OAA | OAA will insert the marked cut off information into the student's paper exam |
| 6 | OAA | OAA statistics and sends each student's score back to the lecturer in charge of that student.  OAA update the result to the edusoft website |
| 7 | Lecturer | The lecturer receives a list of results from OAA and shows the results to the students he/she is in charge of |
| 8 | Student | Students check their results .If the mistake is to be remarked, they must notify the lecturer in charge, otherwise, move on to step 13. |
| 9 | Lecturer | The lecturer receives, records the student's re-marking requests, and reports it to OAA |
| 10 | OAA | OAA receives the list and goes to the archive to get the correct student work that requires remarking. Then send it back to the lecturer who notified the re-mark. |
| 11 | Lecturer | The lecturer remarks on the paper exam and updates the new results for OAA |
| 12 | OAA | OAA receives new results from each student and updates them on the edusoft website. |
| 13 | Lecturer | For in-class Quizzes, the lecturer will manually self-grade and update: quizzes scores, attendance scores, distribution scores of each student for OAA ahead of time |
| 14 | OAA | OAA receives statistics, scores the final assessment according to the distribution points set by the lecturer |
| 15 | OAA | OAA updates the final assessment results of each student on the edusoft website and the system |
|  |  |  |
|  |  |  |

# 3. Scenario Extensions

|  |  |  |
| --- | --- | --- |
| **Step** | **Condition** | **Action Description** |
| 1a | Students can not complete official school exams | Students who cannot participate in official exams without personal reasons are allowed to take additional tests because the student is banned from taking the exam by OAA due to suspension, gapping, or unpaid tuition. |
| 1b | Students cheat or don't take Quizzes or Exams | The student's score column will be graded 0 points by OAA or Lecturer |
| 4a | Lecturers grade/statistics wrong | If there is any problem with the score, the Student can report it to OAA to remark the exam |
| 6a | OAA’s statistics are wrong or the results sent and the results on the system do not match | If there is any problem with the score, the Student can report it to OAA to remark the exam |
| 7a | Lecturers statistic wrong list of students want to remark | If there is any problem with the score, the Student can report it to OAA to remark directly |
| 15a | OAA updated the wrong information | If there is any problem with the score, the Student can report it to OAA to fix/solve the problem |
|  |  |  |
|  |  |  |

# 4. Scenario Variations

|  |  |  |
| --- | --- | --- |
| **Step** | **Variable** | **Possible Variations** |
| 1 | Regarding the mid-term exam | OAA organizes the issue of exam questions: a teacher directly goes to class and is assigned the task of preparing for the exam. |
| 1 | Regarding the final exam | OAA organizes the issue of exam questions: one or a group of lecturers directly in class is assigned the task of preparing and OAA will synthesize the topics taught by the lecturers into a common topic. |
| 4 | Official grading scale | 100-point scale |
| 13 | theory scores | including quiz scores and attendance scores (do not miss more than 20% of the lessons) |
| 13 | Distribution points | The total % of the component points in a module is 100%:  - Score of practice, exercises, essays: 20% - 40%;  - Midterm test score: 20% - 40%;  - Final exam score: 30% - 50%;  Particularly for practical courses, the percentage of component points is regulated as follows:  - Score of practical exercises in the semester: 70% - 80%  - Final exam score: 20% - 30%  In the case of online learning and teaching, the percentage of component points is specified as  after:  - Score of practice, exercises, essays: 30% - 60%;  - Midterm test score: 20% - 40%;  - Final exam score: 20% - 40%; |
| 15 | final result grading | From 90 to 100 will be graded: Excellent, Letter score: A+, GPA: 4.0  From 80 - 90 will be graded: Excellent, Grade: A, GPA: 3.5  From 70-80 will be graded: Good, Letter score: B+, GPA: 3.0  From 60-70 will be graded: Average Good, Letter Grade: B, GPA: 2.5  From 50-60 will be graded: Average, Grade Point: C, GPA: 2.0  If a student's point is less than 50 points, the student will be asked to repeat the course by OAA |
| 15 | system | is not accessible for checking and uploading Scores |
| 15 | system | displays the wrong student’s scores |
|  |  |  |
|  |  |  |

# 5. Related Information

|  |  |
| --- | --- |
| **Schedule:** | From the beginning to the end of the course |
| **Priority:** | Must |
| **Performance Target:** | 3 months |
| **Frequency:** | Every semester every year |
| **Super Use Case:** | Grading process |
| **Sub Use Case(s):** | -Reviewing the grade  -Remarking on the exams  -Updating the grade  -Done midterm, final examinations |
| **Channel To Primary Actor:** | -Student: student’s phone number, parents’ phone number, email, home address, social media  -OAA: office, email, phone number, website, social media  -Lecturer: office, phone number, email |
| **Secondary Actor(s):** | -Major Office |
| **Channel(s) To Secondary Actor(s):** | -Major Office: office, phone number, email |

# 6. Open Issues

|  |  |
| --- | --- |
| **Issue ID** | **Issue Description** |
| Issue 1 | Lecturers give unfair marks |
| Issue 2 | Students do the exam but don’t submit the exam paper |
| Issue 3 | Lecturers or OAA lost the exam papers or student’s submission |
| Issue 4 | Lecturers mark later than the deadline |
| Issue 5 | Students’ exam papers are not readable due to the unreadable student’s handwriting |