# BUSINESS USE CASES

# Submit individual study program

Business event: the student decides he wants to send an individual study program

Trigger: Student goes to the submit form with the intention to submit his individual study program along with his possible exemptions

Preconditions: registered for a contract

Active Stakeholders: Student, educational committee

Interested Stakeholders: Faculty administration

Normal business flow:

1. Student decides to submit his study program
2. Student registers an exam slot for each course (include:register exam slots)
3. If Student also has exemptions to send
   1. Student submits all exemptions for courses (extend: apply for exemptions)
4. Student submits individual study program together with any exemptions
5. The faculty administration checks whether the program is valid
6. The faculty administration finds that the program is valid and sends back feedback that it is approved
7. Student receives the message that the study program is valid

Alternate business flow:

Exception business flow:

exception flow 1: The administration finds that the program sent is not valid for a certain reason or multiple reasons

1.The faculty administration sends that the input given is not valid to the student and why

2. the student has to resubmit the study program, making sure it is now valid

Exception flow 2: if the student hasn’t given a valid study program in three weeks, then the committee decides the study program for the student

1. Committee decides the study program and approves it
2. Committee lets the student know they decided the study program in his stead

exception flow 3: The administration does not approve certain exemption(s)

1. Faculty notices an exemption request it does not approve
2. Faculty sends for each exemption an explanation to the student, letting them know why the exemption was not approved

Exception flow 4: if the student hasn’t booked an exam slot for each course

1. The administration selects exam slots
2. The administration lets the student know they decided the exam slots

post condition: Student has submitted an individual study program that is valid and has been approved and all sent exemptions have been approved

# Register exam slots

Business event: Student decides he is going to register exam slots

Trigger: Student goes to the form for exam slots

Preconditions: The courses are in the study program the student is going to send

Active Stakeholders: Student, faculty administration

Interested Stakeholders:

Normal business flow:

1. Student goes in to book exam slots
2. Student looks at the possible exam slots
3. Student chooses one of the exam slots for each of the courses
4. Student gets reaffirmation that his exam slot has been approved
5. Student goes away with the exam slot being booked

Alternate business flow:

Exception business flow:

exception flow 1: Student tries to book an exam slot that is already full

1. The student receives a message saying that this exam slot is already full and that he should choose another one
2. The student has to choose a valid exam slot

post condition: Student has booked a valid exam slot for his courses

# Register for diploma contract

Business event: the student wishes to register for a diploma contract and take the courses connected to the contract

Trigger: Student goes to the register form with the intent to register for a diploma contract at the university

Preconditions: None

Active Stakeholders: Student

Interested Stakeholders: Faculty administration, Student administration

Normal business flow:

1. Student walks in to register for a diploma contract at the university
2. If the Student hasn’t been registered yet, or returns after several years  
   a. The student requests a student id at the administration (extend: Request student id)
3. Student requests to register
4. Faculty receives request for the contract
5. Faculty checks whether the student in question is allowed to enrol
6. Faculty sees that there is no problem and lets the student know the registering was successful
7. Student is now registered for the diploma contract

Alternate business flow:

Exception business flow:

Exception flow 1: The student has failed 4 examinations previous year without having a CSE above 50%

1.The faculty receives the request

2.faculty lets the student know they cannot enrol for this academic year

Exception flow 2: student failed 6 examinations within 3 academic years

1.The faculty receives the request

2.faculty lets the student know they cannot enrol for the coming 3 academic years starting from when they failed the examinations

post condition:

The student has been registered for the diploma contract.

# Register for second chance

Business event: The student wishes to retake exam(s)

Trigger: Student goes to the form to register for a second chance

Preconditions: The courses the student retakes are part of his study program

Active Stakeholders:Student

Interested Stakeholders: faculty administration

Normal business flow:

1. Student goes to the form for second chances
2. Student decides which courses to retake
3. Student books exam slots for all the courses he wishes to retake (include:register exam slots)
4. Student goes away with his exam slots booked

Alternate business flow:

Exception business flow:

Exception flow 1: if the student hasn’t booked an exam slot for each course

1. The administration selects exam slots
2. The exam slots lets the student know they decided the exam slots in his stead

post condition: The student has registered for a second chance for certain courses, and has booked exam slots for them

# Random information for business use cases

Enrol in university

Business event: the student wishes to register for a contract and take the courses connected to the contract

Trigger: Student goes to the register form with the intent to enrol at the university

Preconditions: None

Active Stakeholders: Student

Interested Stakeholders: Faculty administration

Normal business flow:

1. Student walks in to enrol in the university
2. Student decides to register for a contract, choosing one of the ones below

a.register for diploma contract  
b.register for exam contract

c.register for credit contract

1. Faculty receives request for the contract
2. If the Student hasn’t been registered yet, or returns after several years  
   a. The student also requests a student id at the administration
3. The student identifies all courses he wants/needs to take this year
4. The student hands his program in (include: Submit individual study program)
5. Student is now registered and handed in a valid individual study program

Alternate business flow:

Exception business flow:

post condition: The student has been registered, and has a valid individual study program

Business event:

Trigger:

Preconditions:

Active Stakeholders:

Interested Stakeholders:

Normal business flow:

Alternate business flow:

Exception business flow:

post condition:

rules for checking whether an individual study program is valid:

-if the student is a first-year student, he takes all courses of the first phase, unless he has exemptions for these

-the student has between 40 and 75 study points and is a full-time student

-the student has between 0 and 30 study points and is a part-time student

-the student has taken all mandatory classes that he has failed and not tolerated of previous years

-the student has taken a course and satisfies the entry requirements

-a student can only take courses, if he has taken all the mandatory courses of the previous phases

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# OCL

1. that fulltime students registering for a study program must take at least

all the courses of the first phase

self.takencontract.individ  
->select(self.takencontract.individualStudyprogram .year=1& self.takencontract.offeredContract.offeredCourses.phase=1)->includesAll (self. takencontract.offeredContract.offeredCourses.phase=1)

2.that students cannot take courses for which they do not satisfy stated

entry requirements (Student.takencontract.individualStudyprogram.offeredCourses.possiblerequirements.alternativerequirements) forAll(Strongrequirement.courseId.&weak.

3. that a student can not take courses of some phase if he/she has not taken all

courses of all preceding phases,

->forAll(student:Student

4. that a student cannot subscribe for the same course in different

Contracts

Self.takenContract.indiv.offeredcourse->isUnique(coursed)

5. that a student is blocked for 1 year on a diploma contract if he/she has failed 4 times for

some course and his/her CSE is below 50%,

CSE= sum(self.takencontract.individualstudyprogram.doneCourse.score>=10| doneCourse.studypoints)/ sum(student.takencontract.individualstudyprogram.doneCourse.offeredCourses.studypoints)

self.CSE<0.5 self.takencontract.indiv.offeredCourses  
6.

that a student can only tolerate courses for which

he/she had a score of 8 or 9 and the total number of tolerated study points cannot exceed 10% of the total

amount of study points for the program at stake

(individualStudyprogram.takenCourse->select(tolerated=true)->forAll(