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# Summary

VIA University College needs to plan exam schedule before the examination starts. The schedule plan must meet many specific criteria. Scheduling in general is simple task but when there are so many conditions for the right plan, the task can become very complex. Computers might possibly help to speed up the process of scheduling.

Our system is able to do: 1) the administrator collects the information, 2) the administrator is uploading the information and system checks the requirements, 3) the schedule is created.

The system contains information about students, co-examiners and examiners. The schedule must be flexible and delivered to the students in a way that the information is always updated and easy to access. It would be better if the schedule could be viewed by a student or a teacher in a way that it filters all irrelevant information.

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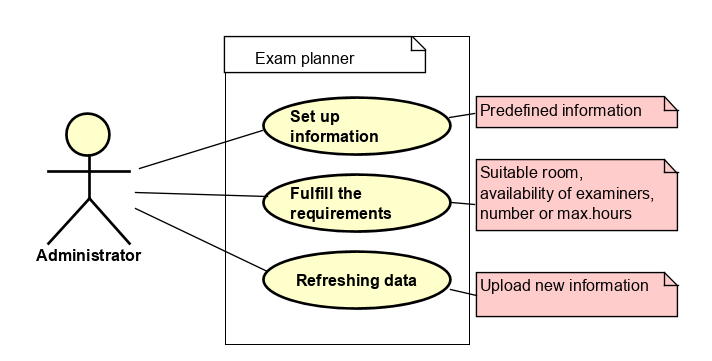
# Functional requirements

1. As an administrator, I want to be registered as only administrator with access to all information.
2. As an administrator, I want to be able to upload information about teachers, students and classrooms.
3. As an administrator, I want the system to check if there are two exams in the same day, with the right amount of time between them.
4. As an administrator, I want the system to check if the rooms are suitable for exams and if the examiners and co-examiners are available.
5. As an administrator, I want the system to check that the examiners’ and co-examiners’ work day is 8 hours max.
6. As an administrator, I want the system to check if the written exam is before oral exam.
7. As an administrator, I want the system to check if the time of the written exam is 3 hours and the time of the oral exam is 20 minutes.
8. As an administrator, I want the system to check if the exam on 7th semester is at least 3 days before graduation.
9. As an administrator, I want the system to check if the class for the exam is the same as class used during the semester.
10. As an administrator, I want the system to check if the service department is informed about the exam at least one day in advance to prepare the room for exam.

# Non - functional requirements

1. Every update in the system includes writing to a file.

# Use Case Diagram



# Use Case Description

|  |  |
| --- | --- |
| **Use case** | **Set up the information** |
| **Summary** | Upload information needed to create a schedule for all the exams. |
| **Actor** | Administrator |
| **Precondition** | The administrator must be registered as only administrator. |
| **Postcondition** | The system is predefined with all necessary information. |
| **Base sequence** | 1. Enter username and password. 2. Go to schedule page. 3. For each program:    1. Make a list of all programmes at VIA and all semesters related to it.    2. Choose a class.    3. Make a list of students in particular class (X, Y, Z, etc).    4. Make a list of courses for each class.    5. Make a list of examiners in specific class.    6. Make a list of co-examiners related to the course. 4. Make a list of all classrooms at VIA. 5. Assign the classroom to specific class. 6. Define features of each classroom. 7. Set the maximum of teachers’ working hours to 8. 8. Set the maximum time of written exam to 3 hours and oral to 20 minutes. |

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| --- | --- |
| **Use case** | **Fulfill the requirements** |
| **Summary** | Check if all requirements for specific exam are met. |
| **Actor** | Administrator |
| **Precondition** | Administrator creates an exam. |
| **Postcondition** | Exam requirements are checked. |
| **Base sequence** | 1. The system shows every program which is taught at VIA UC. Choose the program for exam. 2. Select the semester you want to have exam in. 3. Every semester has more classes. Choose the class (X, Y, Z, etc.). 4. System filters the courses taught in the class. Choose the course for exam. 5. Choose the type of exam (written, oral). 6. Choose the date of exam. 7. Choose the examiner. 8. If the examiner is not available, go to step 5. 9. If none of the dates suit the examiner, go to step 6. 10. Choose the co-examiner. 11. If the co-examiner is not available, go to step 5. 12. If none of the dates suit the co-examiner, go to step 9. 13. Select the room. 14. If the room is occupied, go to step 13. 15. Upload the current list of students for the exam. |

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| **Use case** | **Refreshing data** |
| **Summary** | Refresh data when information is changed. |
| **Actor** | Administrator |
| **Precondition** | Uploading new information about room, students, co-examiners and examiners. |
| **Postcondition** | New schedule is uploaded, and new information is added. |
| **Base sequence** | 1. The system is using the latest information about school. If there is a new information about students, examiners, co-examiners or rooms, upload it. 2. Upload new schedule with new information. |

# Link between requirements and use cases

**Use case Covered requirements**

Set up the information 1,5,6

Fulfill the requirements 3,4,7,8

Refreshing data 2