**Final Exam Planner**

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**Background Description**

At the end of every semester, the examiners at the university need to plan exam schedule before the examination starts. This task may become very complex and tedious due to the number of students and the subjects in which the students are being examined.

**why is it tedous? why problem? (efficient)**

The schedule plan must meet many specific criteria. For instance, one student should have one exam in consecutive days. Other external factors need to be considered as well. The rooms must be prepared beforehand so they correspond to the format of the examination. All those conditions make the process of planning more difficult and a real issue to be solved.

Some schools accomplish the planning of exams by making a spreadsheet and manually choose all the times for specific exams. The disadvantage is that the person that makes the plan must check if every exam is scheduled at a time that does not clash with any other exam.

Due to human factor, errors in planning might occur and the schedule might change at a time close before the examination. Those changes can make the exam stressful, both for students and professors. Such problem can be that the supposed room where the examination is held does not have the right technical functionalities such as HDMI port. This could be avoided if there was a system that could check all the criteria automatically.

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. Some solutions using computers already exist, but every university have different conditions and needs to plan their exams. It is hardly possible to make a system that will consider every need of all the different Universities. Therefore, it would be ideal if every university made their own system that meets their needs.

The whole problem also consists of the delivery of the exam plan. Even if the schedule plan was created perfectly without any errors, external factors might affect the schedule. A professor can become unable to come to work at the specified time or a student might become sick. The schedule must be flexible and delivered to the students in a way that the information is always updated and easy to access. If the schedule was delivered in a PDF file all the people being involved in the schedule would have to download a new file when a new version is published. 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.

With the use of modern technologies, it is possible to make the task much more efficient and easier than by using spreadsheets or just a pen and paper. Therefore, the problem is relevant to solve and open to new solutions.

**Problem Statement**

Main problem:

The process of planning final exam is slow and inefficient because the examiners must enter all the information manually. It is not possible to automatically check if the plan includes all conditions and therefore the plan is prone to human errors. Delivery of the information to students is inefficient as well because the information is not automatically updated.

Sub-problems:

1. How can the process be made faster?

2. How can the system help the user to check if all conditions are met?

3. How should the schedule be shown?

4. Could software solve this problem? What are the benefits?

5. How can the system be made more automatic?

6. What kind of user interface would be the easiest to use?

**questions/ main problem is statement**

**Definition of purpose**

The purpose is to help the administrator having a better tool for managing the exam periods.

**definition of purpose- what is better?**

**not knowing solution/ stay in problem solving**

**literature/ at least 1**

**Delimitation**

1. The service department will be contacted by the third party like the examiner itself.

2. The information about the students, classrooms, grades and the examiners schedule will also be inserted by the user.

# 

# Risk assessment

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Risks | Likelihood  Scale: 1-5  5 = high risk | Severity  Scale: 1-5  5 = high risk | Product of likelihood and severity | Risk mitigation e.g. Preventive- & Responsive actions | Identifiers | Responsible |
| The software could crash due to the amount of students. | 2 | 2 | 10 | Separate the students/classes into smaller groups. | Crash of the software. | João Dias |
| If the information is not handled properly there could be security fails. | 3 | 5 | 15 | Make the software run offline. | Spills in information. | Jan Lishak |
| There may be an overlap in the classroom reservation. | 1 | 3 | 3 | Leave an available room for written and one for oral exams. |  | Lenka Orincakova |
| There might be some student information incorrectly written | 4 | 4 | 16 | Put a button that will let the student suggest a fix. | Student having exams in time / subjects they should not | Juan Trebollle |