

# **Routine Generation and Modification System (RGMS)**

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**UG02-32-13-004**

## **User Requirement**

### **User 1:**

Kaniz Farhana (Runa)

Executive, Admin.

Dept. of CSE, State University of Bangladesh

### **Requirements:**

1. A routine will be generated. It can be manual or automated.
2. Fixed courses should be given higher priority unless number of failed student is greater than number of fixed course student of any course.
3. Room should be given according to their availability and capability.
4. No student should have more than 4.30 hour class in a day and more than 5 day in week.
5. Conflict should be shown. It means that if there is any time slot where one student has two courses, name of the student should pop up.
6. There should be option for searching of makeup class slot of any course.
7. The software itself should be able to mail the routine to all the teachers.

### **User 2:**

Md. Masud Tarek

Asst. Professor and Head

Dept. of CSE, State University of Bangladesh

### **Requirements:**

1. The name/ Id of the course, associate course teacher's name will be given as input in several ways. The system will take course id, student id and credit as input from a excel file. And the system should ask the user to give manual input of the corresponding course teacher.
2. The list of course should be in one side of the screen and the main routine (initially blank) will be in the middle.
3. The routine should be divided in 7 day and various slot in one day.
4. User should be able to drag any course and drop it in routine's divided slot.
5. Conflict should be shown with color, the more the conflict is, the more deep the color will.
6. Conflict should be based upon four categories. They are batch conflict, teacher conflict, room conflict, student conflict.

# Analysis and Combination of the user requirements

Based on the user's requirement stated above, the system should do the following.

1. The name/ Id of the course, associate course teacher's name will be given as input in several ways. The system will take course id, student id and credit as input from a excel file. And the system should ask the user to give manual input of the corresponding course teacher.
2. The list of course should be in one side of the screen and the main routine (initially blank) will be in the middle.
3. The routine should be divided in 7 day and various slot in one day.
4. User should be able to drag any course and drop it in routine's divided slot.
5. Conflict should be shown with color, the more the conflict is, the more deep the color will.
6. Conflict should be based upon four categories. They are batch conflict, teacher conflict, room conflict, student conflict.
7. Fixed courses should be given higher priority unless number of failed student is greater than number of fixed course student of any course.
8. Room suggestion will be given according to their availability and capability.
9. No student should have more than 4.30 hour class in a day and more than 5 day in week. Unless a warning will show.
10. The software will have a button which will mail the routine to all the teachers.