1. **Stakeholders:**

Office Manager: They need to be able to verify room reservations made by different students as well as accessing statistics about past room usage

Teachers: They need to be able to reserve different rooms that are available.

Students: They need to be able to request reservations for the rooms that are available

Tutors: They need to be able to access the system to view their schedule as well as enter their availability and different stipulations for working.

Schedule Maker: They need to be able to view all of the available tutors and use this information to create a weekly schedule that will adhere to all of the requirements.

1. **Actors and Goals**

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| Actor | Goals | Use Case |
| Tutor, Schedule Maker  Tutor DB | Be able to enter availability, and different stipulations for the schedule | EnterTutorAvailability(UC-4) |
| Student, Teacher, Manager  Room DB | View the current schedule of all the rooms available for reservation | ViewCurrentSchedule(UC-1) |
| Student, Teacher, Manager  Room DB | Reserve a room given that it’s available | ReserveRoom(UC-2) |
| Manager  Room DB | View the statistics of each of the rooms showing how often rooms are reserved | ViewRoomStatistics(UC-3) |
| Schedule Maker  Tutor DB | Create a schedule using the availability provided by the tutors | CreateSchedule(UC-6) |
| Schedule Maker  Tutor DB | Manage all available tutors allowing their information to be changed or deleted | ManageTutors(UC-5) |
| Schedule Maker  Tutor DB | View statistics about previous schedules, like when more tutors are generally needed | TutoringStatistics(UC-7) |

1. Use Cases

**UC#1 Viewing Current Room Schedule**

Any user should be able to open the program and look at the current schedule of rooms. This will show which rooms are currently available as well as which are currently in use. If a room is available, it will give the user an option to reserve the room. The schedule should be updated in real time so that multiple requests are not made to the same room.

**UC#2 Reserving a Room**

Users should be able to go from the current schedule to a screen that will allow them to reserve a room. Teachers and department staff should be able to reserve a room with no questions asked. Students trying to make a reservation will have a request sent to the Office Manager that will then have to either approve or deny the request. Reserved rooms are not able to be requested.

**UC#3 Viewing Statistics of Room Reservations**

The office manager should be able to open the program and have an option to view statistics about past room reservations. This will allow the user to see which rooms are reserved the most often as well as what times are the most popular for reservations.

**UC#4 Entering Tutoring Availability**

Tutors should be able to log in and provide the schedule maker with their availability. This will allow them to enter their hours available for each week. They will also be able to enter their work stipulations that will affect when and how they are scheduled. They should be able to update the provided information when necessary.

**UC#5 Managing Current Tutors**

The schedule maker should be able to view all of the current tutors that are in the system. They should be able to add new tutors, edit currently existing tutors and delete any of the existing tutors. Deleting should require verification before fully deleting the tutor.

**UC#6 Creating a Schedule**

The schedule maker needs to be able to create a weekly schedule based on the tutors that they have available. The program should suggest tutors so that each table is covered by a tutor with that subject listed at all times of the day. The schedule maker should just have to confirm the schedule will work and then let the tutors know.

**UC#7 Viewing Statistics for Tutoring**

The schedule maker should be able to view statistics for when tutors are most in demand. They should have a way to view when extra tutors needed to be scheduled as well as how often. This will help them determine whether they should initially schedule more tutors on certain days or at certain times.

