## MGMCEThan 2k19

## **Problem Statements**

- 1. <u>Exam Seat allocation Program</u>: Seat allocation in exams is done by coordinators, manually before exams for every set of students, class-wise. This requires a considerably good amount of time. Develop a program/portal/app to generate the complete seat allocation of entered number of students, available blocks, invigilators and pairing (if required).
- 2. <u>Automatic Timetable Generator</u>: Every semester, HoDs develop a new timetable for all the classes of the department, manually. Develop a program/portal/app that generates timetable for the classes to be conducted, lab hours, club activities slots, according to available faculties, free blocks and labs. Include all constraints from current schedule of college.
- 3. <u>Book Rental</u>: Every semester brings new subjects, and resource collection for those subjects until arrival of authentic notes. Develop a platform, where seniors can donate their notes for their juniors to access. PDFs, PPTS, Documents can be uploaded, Paper materials can be clicked and uploaded as "Available" matter. Students can then claim for the copies of it.
- 4. <u>"Hello College" BOT</u>: Any person entering the college campus with any purpose needs to know where exactly to head to, to avoid time wastage. Develop a Software BOT that contains the complete map of the college campus (floor wise), HoDs, representatives, labs and other important points of the college.
- 5. <u>The Mentor's Place</u>: Students face many personal and professional issues in their college life, that needs to be solved under guidance of an expert. Develop a platform for students to interact with their mentors, submit their problems, and talk about them. The experts should get notifications for the questions asked through their login portal. Also provisions to set up appointments with mentors should be available.
- 6. <u>Lecture tracker:</u> Develop a course tracker that tracks the lecture series for a course .The teacher puts in a lecture notes and references at the end of every lecture and system searches internet for resources that supplement the lecture topic such as open source projects, books references and academic papers.
- 7. <u>College portal for uploading projects and assignments:</u> At present there is no platform to connect students and staffs. Develop a platform or portal where students could put up their project, share their problems, contribute to projects, or any possible work.
- 8. <u>QR based attendance</u>: In past days students marked their attendance on paper but sometimes there are chances of losing the paper.In that case we can't calculate the attendance.So to overcome this issue we implement system that will hide all information of students (identity card) inside Qr code.So when student will scan the Qr code at that time the date and time of scanning will be stored in database.

- 9. <u>Library management</u>: Develop a system for users of library. The user should get the notification regarding due dates of issued books, users should get personalised recommendations based on information of previous readings, reading patterns, authors.
- 10. <u>Hostel management:</u> Develop a solution for college hostel management. The solution should provide features for allocation of rooms, reallocation, number of rooms empty, number of students from particular department. The application should allow report generation (student wise, building wise, number of rooms empty/occupied).