



**SmartSchedule**

#	Student's Name	Student's ID
1	Rand Albeshar	442201693
2	Shahad Jaber Awaji	443201091
3	Deemah Alajaleen	443200931
4	Layan Almunasser	443201067

**Supervised By:**  
**Dr. Asma Alussayen**

## **Introduction**

The SmartSchedule project aims to develop an intelligent system for managing course schedules and examinations within the department. The system provides an interactive platform that enables real-time collaboration between scheduling and load committees, faculty members, and students, with version tracking and AI-driven recommendations. It relies on synthetic data for simulation and is delivered as a prototype to demonstrate how scheduling can be made more flexible, transparent, and efficient

## **GitHub Repository**

[Smart schedule github link](#)

## **Draft Schedule**

[Link to draft schedule](#)

## **Requirements Breakdown**

- **Functional Requirements**

- **Students**

1. The student shall be able to provide elective course preferences.
2. The student shall be able to view their schedules.
3. The student shall be able to view exam timetables.
4. The student shall be able to give comments on preliminary schedules.
5. The student shall be able to give Feedback on preliminary schedules.

- **Faculty Members**

6. The faculty member shall be able to view their preliminary schedules.
7. The faculty member shall be able to view their courses
8. The faculty member shall be able to view their sections
9. The faculty member shall be able to view their exams
10. The faculty member shall be able to provide feedback on their schedules
11. The faculty member shall be able to provide feedback on their assignments.
12. The faculty member shall be able to update their availability
13. The faculty member shall be able to update their teaching preferences

- **Scheduling Committee**

14. The registrar shall be able to enter student counts per level into SmartSchedule.
15. The scheduling committee member shall be able to view student counts per level.
16. The scheduling committee member shall be able to view the default number of students per section.
17. The scheduling committee member shall be able to modify the default number of students per section.

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18. The registrar shall be able to enter irregular-student data, including the
  - 18.1 student's name
  - 18.2 remaining courses from past levels
  - 18.3 courses needed to prevent falling behind.
19. The scheduling committee member shall be able to view irregular-student data entered by the registrar.
20. The scheduling committee member shall be able to send notifications to the registrar requesting irregular-student data.
21. The scheduling committee member shall be able to enter scheduling information from other departments and colleges before generating the preliminary schedule.
22. The scheduling committee member shall be able to create a survey to gather students' elective course preferences.
23. The scheduling committee member shall be able to publish the survey.
24. The scheduling committee member shall be able to set survey start and end dates.
25. The scheduling committee member shall be able to view survey responses.
26. The scheduling committee member shall be able to create a schedule.
27. The scheduling committee member shall be able to share versions of schedules with the load committee and students.
28. The scheduling committee member shall be able to receive feedback on schedules from the load committee and students.
29. The scheduling committee member shall be able to modify schedules.
30. The scheduling committee member shall be able to submit a final version of schedules to the deanship of registration.
31. The scheduling committee member shall be able to delete schedules.
32. The scheduling committee member shall be able to create an exam timetable.
33. The scheduling committee member shall be able to share versions of exam timetables with the students.
34. The scheduling committee member shall be able to receive feedback on exam timetables and students.
35. The scheduling committee member shall be able to modify exam timetables.
36. The scheduling committee member shall be able to submit a final version of exam timetables to the deanship of registration.

37. The scheduling committee member shall be able to delete exam timetables.
38. The scheduling committee member shall be able to add new scheduling rules.
39. The scheduling committee member shall be able to modify existing scheduling rules.
40. The scheduling committee member shall be able to delete existing scheduling rules.

- **Load Committee**

41. Load Committee members shall be able to view the schedule
42. Load Committee members shall be able to add feedback on the schedule .

- **User**

43. The user shall be able to sign up and create an account.
44. The user shall be able to log in using their credentials.
45. The user shall be able to log out.

- **System**

46. The system shall provide role-based authentication (student, faculty, committee).
47. The system shall provide notifications for relevant updates or deadlines.
48. The system shall auto-save changes in real time.
49. The system shall generate intelligent schedule recommendations using AI APIs.
50. The system shall allow search of schedules.
51. The system shall allow filtering of schedules.