

# Milestone 1 Term Project

**Project ID: CS311-G25**

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## Algorithm Description:-

We will use our own scheduler Algorithm to build the automated Web tool that can generate an optimized timetable. We will enter basic data (i.e., rooms, classes, teachers and their available time slots and course details), and it will output an optimized timetable considering all the constraints and limitations that are defined. On satisfying all these constraints, the algorithm will generate the best possible Timetable.

### 1- Add Classrooms:-

0%

1- ADD CLASS ROOMS

2- ADD CLASSES

3- ADD TEACHERS

4- ADD COURSES

5- TIME TABLE

Room-1 Name

X

Room-2 Name

X

Room-3 Name

X

ADD MORE

SUBMIT AND NEXT >

### 2- Add Classes:-

25%

1- ADD CLASS ROOMS

2- ADD CLASSES

3- ADD TEACHERS

4- ADD COURSES

5- TIME TABLE

Class-1 Name eg. Session18

X

Class-2 Name eg. Session18

X

Class-3 Name eg. Session18

X

ADD MORE

SUBMIT AND NEXT >

3- Add Teachers:-

50%

1- ADD CLASS ROOMS

2- ADD CLASSES

3- ADD TEACHERS

4- ADD COURSES

5- TIME TABLE

X

Teacher-1 Name  
Sir Irfan

Monday

1

1

1

1

1

1

1

1

8-9AM

9-10AM

10-11AM

11-12AM

12-1PM

1-2PM

2-3PM

3-4PM

Tuesday

0

0

0

0

1

1

1

1

8-9AM

9-10AM

10-11AM

11-12AM

12-1PM

1-2PM

2-3PM

3-4PM

Wednesday

1

1

1

1

1

1

1

1

8-9AM

9-10AM

10-11AM

11-12AM

12-1PM

1-2PM

2-3PM

3-4PM

Thursday

1

0

0

1

1

1

0

0

8-9AM

9-10AM

10-11AM

11-12AM

12-1PM

1-2PM

2-3PM

3-4PM

Friday

1

1

1

1

1

1

0

0

8-9AM

9-10AM

10-11AM

11-12AM

12-1PM

1-2PM

2-3PM

3-4PM

ADD MORE

\*Select "0" if teacher is available and "1" if teacher is busy in below time slots

4- Add Courses:-

75%

1- ADD CLASS ROOMS

2- ADD CLASSES

3- ADD TEACHERS

4- ADD COURSES

5- TIME TABLE

X

Course-1 Name  
MVC

Session 17  
Select Class

Sir Irfan (DOM)  
Select Teacher

1, 1  
Select Credit Hourse

X

Course-2 Name  
PSP

Session 18  
Select Class

Sir Irfan (DOM)  
Select Teacher

1, 1  
Select Credit Hourse

X

Course-3 Name  
Calculus

Session 19  
Select Class

Sir Irfan (DOM)  
Select Teacher

1, 1  
Select Credit Hourse

ADD MORE

SUBMIT AND NEXT

5- Generate Timetable:-

100%

1- ADD CLASS ROOMS

2- ADD CLASSES

3- ADD TEACHERS

4- ADD COURSES

5- TIME TABLE

GENERATE TABLE

6- Generated Tables:-

Class Name: **Session 18**

DAYS	8-9AM	9-10AM	10-11AM	11-12AM	12-1PM	1-2PM	2-3PM	3-4PM
MONDAY	PPSD, Sir Hassan (DSE), N6	0	COAL, Sir Tayyab (DOCS), N6	PPSD, Sir Hassan (DSE), N6	0	0	0	0
TUESDAY	OOP, Sir Ali (DCS), N6	OOP, Sir Ali (DCS), N6	PPSD, Sir Hassan (DSE), N6	0	0	FE, Sir Imran (DOE), N5	0	0
WEDNESDAY	COAL lab, Sir Fakhar (DOCSL), N6	COAL lab, Sir Fakhar (DOCSL), N6	COAL lab, Sir Fakhar (DOCSL), N6	0	0	0	COAL, Sir Tayyab (DOCS), N6	COAL, Sir Tayyab (DOCS), N6
THURSDAY	0	0	PSP, Sir Irfan (DOM), N5	0	0	FE, Sir Imran (DOE), N5	0	PSP, Sir Irfan (DOM), N5
FRIDAY	OOP lab, Sir Farooq (DCSL), N5	OOP lab, Sir Farooq (DCSL), N5	OOP lab, Sir Farooq (DCSL), N5	0	0	0	0	0

 PDF OF SESSION 18<sup>SLOW</sup>

 IMG OF SESSION 18<sup>FAST</sup>

Class Name: **Session 17**

DAYS	8-9AM	9-10AM	10-11AM	11-12AM	12-1PM	1-2PM	2-3PM	3-4PM
MONDAY	TWPS, Sir Imran (DOE), N5	TWPS, Sir Imran (DOE), N5	TWPS, Sir Imran (DOE), N5	OS, Sir Tayyab (DOCS), N5	0	0	0	0
TUESDAY	MVC, Sir Irfan (DOM), N5	MVC, Sir Irfan (DOM), N5	OS, Sir Tayyab (DOCS), N5	DSA, Sir Ali (DCS), N5	0	0	SE, Sir Hassan (DSE), N5	SE, Sir Hassan (DSE), N5
WEDNESDAY	DSA lab, Sir Farooq (DCSL), N5	DSA lab, Sir Farooq (DCSL), N5	DSA lab, Sir Farooq (DCSL), N5	0	0	0	CS17, Sir Tufail (DOH), N5	CS17, Sir Tufail (DOH), N5
THURSDAY	DSA, Sir Ali (DCS), N5	OS, Sir Tayyab (DOCS), N5	0	DSA, Sir Ali (DCS), N5	0	0	0	0
FRIDAY	0	0	0	0	0	0	0	0

 PDF OF SESSION 17<sup>SLOW</sup>

 IMG OF SESSION 17<sup>FAST</sup>

Class Name: **Session 19**

DAYS	8-9AM	9-10AM	10-11AM	11-12AM	12-1PM	1-2PM	2-3PM	3-4PM
MONDAY	0	ITC, Sir Tayyab (DOCS), N6	SD, Sir Hassan (DSE), N7	0	0	0	0	0
TUESDAY	0	0	0	BE, Sir Imran (DOE), N6	0	0	0	0
WEDNESDAY	PF, Sir Ali (DCS), N7	PF, Sir Ali (DCS), N7	SD, Sir Hassan (DSE), N7	0	0	0	0	0
THURSDAY	ITC, Sir Tayyab (DOCS), N6	SD, Sir Hassan (DSE), N6	0	ITC, Sir Tayyab (DOCS), N6	0	0	Calculus, Sir Irfan (DOM), N5	0
FRIDAY	BE, Sir Imran (DOE), N6	BE, Sir Imran (DOE), N6	PF, Sir Ali (DCS), N6	0	0	0	Calculus, Sir Irfan (DOM), N5	0

 PDF OF SESSION 19<sup>SLOW</sup>

 IMG OF SESSION 19<sup>FAST</sup>