



COMSATS UNIVERSITY, ISLAMABAD
DEPARTMENT OF COMPUTER SCIENCE
Sessional-II Examination, Fall 2020
Part-3

Class/Section: -	BSCS – 7 B	Marks: -	15
Subject: -	Special Topics in CS-1	Time: -	30 Minutes
Instructor: -	Muhammad Rashid Mukhtar	Dated: -	Dec 4, 2020

Please read these instructions carefully

Every Module has 10 feature points. See the list at the end and Find your module then to your feature point to implement only one feature point.

2. You will only implement you part of question paper.
3. Any wrong or copied code attempt can lead to failure

Problem Statement:

Your software company has to implement a Hospital Management System, which includes various roles and activities which are listed below.

You will only implement your part of activity

Module 1:

Patient Console:

1. Can fill in the form to register online using his/her email, system will return MPR(Medical Patient Record) Number on registering.
2. Can search and view specific doctor using his name and can see his timing
3. Can search and view list of doctors by using specialization like Child Specialist etc.
4. Can request to book an appointment for specific doctor by filling the form and intended date and time.
5. Can see his visit history after providing MPR Number in the system.
6. Can see details of specific visit like prescription details, next date etc.
7. Can view status of request and can cancel his request for appointment.
8. Can see the Medical report by providing MPR Number in report section
9. Can edit patient profile like phone number etc.
10. Can delete his account by going to profile and delete the account option.

Module 2:

Reception Console:

1. Add the Doctor into the system by proving doctor's detail like specialization etc.
2. Update doctor timing in the system by fetching previous and update new.
3. booking a timeslot against patient booking request (See Module 1, Part 4).
4. Adding visit and initial health details when a patient arrived at hospital.
5. Can view patient visit history by giving MPR Number.
6. Can verify appointment by searching MPR Number with specific doctor name.

7. Can search and view the medical report of patient to take print out.
8. Can add patient visit payment details by manually taking payment from patient.
9. Remove the doctor from the system.
10. Blacklist (can't re-register)/Delete the patient account.

Module 3:

Doctor Console:

1. Can view visit and initial health details when a patient arrives.
2. Can view patient visit history by providing MPR Number
3. Can add prescription related to current visit.
4. Can modify last visit prescription.
5. Can see the list of appointments for specific date
6. Can search and view the medical report of patient.
7. Can search patient with specific prescription or disease type.
8. Can take day off if no scheduled appointments are there by putting leave application in system.
9. Can delete a specific prescription by providing MPR number and date of visit.
10. Can see the payment details of the patient of current visit.

Module 4:

Top Management Console:

1. Can view total number of visits in date range.
2. Can view total payments done by patients today
3. Can see appointments list for specific doctor today
4. Can view monthly payments revenue.
5. Can see available doctors on specific day
6. Can search and view the patient profile.
7. can add new receptionist.
8. Can delete receptionist
9. View patient by selecting specialization like child specialist.
10. Can broadcast a message to all staff.

Work to implement as per each part.

- A. You will design and write code for REST API where user can access above resources and URIs for getting information. Do highlight if you assume something in implementation. **You have to design model, schema and route.**

#	Reg #	Student Name	Module	Feature Point
1	FA16-BCS-056	SAIM MALIK	4	1
2	FA17-BCS-054	MUHAMMAD JAFAR	4	2
3	FA17-BCS-055	MUHAMMAD KASHIF	4	3
4	FA17-BCS-056	MUHAMMAD MUBEEN AFZAL	4	4
5	FA17-BCS-058	MUHAMMAD MUTAHHAR BIN MUZAFFAR	4	5
6	FA17-BCS-060	MUHAMMAD RAMISH	4	6
7	FA17-BCS-061	MUHAMMAD SANA UR REHMAN	4	7
8	FA17-BCS-064	MUHAMMAD TALHA FARAZ	4	8
9	FA17-BCS-065	MUHAMMAD TAYYAB SHEIKH	4	9
10	FA17-BCS-066	MUHAMMAD USAMA	4	10
11	FA17-BCS-069	MUHAMMAD USMAN FIAZ	3	1
12	FA17-BCS-070	MUHAMMAD ZAEEM NAVEED SHEIKH	3	2
13	FA17-BCS-071	MUHAMMAD ZUBAIR ABDULLAH KHAN	3	3
14	FA17-BCS-072	NAUMAN YOUSAF	3	4
15	FA17-BCS-073	NIHA REHAN	3	5
16	FA17-BCS-075	NOOR MUHAMMAD	3	6
17	FA17-BCS-076	OSAMA ZAFAR	3	7
18	FA17-BCS-078	SAIF UR RASHID	3	8
19	FA17-BCS-079	SAYAD MUHAMMAD SHAHZAIB	3	9

#	Reg #	Student Name	Module	Feature Point
20	FA17-BCS-081	SHAMIL KHAN NIAZI	3	10
21	FA17-BCS-082	SHER ALAM KHAN	2	10
22	FA17-BCS-083	SUMAYYA IFTIKHAR	2	9
23	FA17-BCS-085	SYED FAIZAN AHMED	2	8
24	FA17-BCS-086	SYED HAMZA HUSSNAIN	2	7
25	FA17-BCS-088	SYED MUHAMMAD IRTESAM	2	6
26	FA17-BCS-089	SYED USMAN WAHEED	2	5
27	FA17-BCS-090	TAIMOUR AHMED	2	4
28	FA17-BCS-091	TAYYAB NASEEM MINHAS	2	3
29	FA17-BCS-092	UJALA SULTAN	2	2
30	FA17-BCS-093	UMER SAEED	2	1
31	FA17-BCS-095	USAMA BILAL	1	1
32	FA17-BCS-096	UZAIR QAMAR	1	2
33	FA17-BCS-097	UZAIR SAEED KHAN	1	3
34	FA17-BCS-098	WAHB UR REHMAN	1	4
35	FA17-BCS-099	ZAIN ALI	1	5
36	FA17-BCS-100	ZAIN UL ABDIN	1	6
37	FA17-BCS-101	TALHA WASEEM SATTI	1	7
38	FA17-BCS-103	SYED SAAD ULLAH SHAH	1	8

#	Reg #	Student Name	Module	Feature Point
39	SP17-BCS-022	ISHA IQBAL	1	9
40	SP17-BCS-062	USMAN ALI	1	10
41	SP17-BCS-080	USMAN TARIQ QURESHI	2	1
42	SP17-BCS-089	MUHAMMAD JUNAID IQBAL	4	2