2nd Semester 2020-21

CSF 212 (Database Systems)

Home Assignment (Mini Project)

1. **Forming Groups:** This is a group activity. Each group will have 4 students (students are free to form their group). In rare cases (with approval from the IC, on genuine reasons) it can be less than 4. But in no case it will be more than 4, please note this point. Hence you can start forming groups from now. We will float a Google Form on 10th of Feb. One of the group member will submit the form by giving the details of students, before 15th Feb. Each group will have a Faculty member as the mentor and one PhD TA as the co-mentor. Groups can approach their mentors for any advice.

2. **Proposal Submission and Approval**: Each group will come up with its own domain description (need not be a real one) like- library management, payroll, cab-booking, classroom booking by associations, medical center patient info system etc. In rare cases domain may be same but the details/design can't be same if designed independently. Each group will submit the Proposal on or before15th Feb, 2021, through the Google Form (same Google Form through which the group details are provided).
The Proposal will contain the following details:
Section 1: Domain description (text)
Section 2: Constraints (Data level, application level, GUI level etc)
Section 3: Functionality supported (It should be reasonably good/complex)
Section 4: GUI Layout/ Navigation and the purpose (What screens and what for)
Section 5: Technology used (Programming, DBMS, and any other Tools)
Note that this is GUI based Application.
We will go through the proposal and give approval before 15th of Feb. If any deficiency found, we will inform the group to modify and resubmit the proposal.
Once the proposal is approved. You can start the work.

3. **Evaluation:**
Phase-1: (5%; 10 marks) between 15th and 18th of March 2021.
ER Modeling, Relational schema design, identifying constraints, creating tables with constraints, inserting data (if possible).
Phase-2: (10%; 20 marks) between 10th and 18th of April, 2021 (exact dates will be decided after discussing with student representatives)
Populating the database with necessary data, implementing the GUI/functionality w.r.t, retrieving and manipulating data (Forms for inserting data, report generation).
Each evaluation is associated with 40% weightage for viva.

4. **General guidelines:**

Please note that you are developing a comprehensive system with Database at the back-end, and GUI screens supporting the functionality you have defined. Also note that this is a project with more focus on Database System related aspects. While designing tables, go up to 3NF or BCNF depending on the need.

All members of the group must be present during interactions/evaluations.
Do not use the Domain description already discussed in the class or asked in Examinations, or do not use any pre-existing databases available the Internet.
You must use some RDBMS (MySQL, Oracle etc.) only.
And you are free to choose programming language to implement the app.
Some of the available options w.r.t., RDBMS and Programming Language are:
PHP-MySQL; Java-Oracle OR Java-MySQL;   Python-Oracle OR Python-MySQL etc.
This detailing should be mentioned in the proposal itself.
Any act of plagiarism will be taken to the Disciplinary Committee.
You are free to use additional tools if you wish.
Any changes/corrections will be announced in the class as required.
Groups can approach mentors for support.

Timelines:

SNo	Activity	Dates	Remarks
1.	Asst. announcement	04-Feb-2021	CMS
2.	Floating Google form for Group info and Proposal	Start: 10-Feb-2021 End: 15-Feb-2021	Google Classroom
3.	Review of proposal	End: 20-Feb-2021	Feedback through Google form only
4.	Phase-1 Evaluation 5%(10 marks)	Start: 15-Mar-2021 End: 18-Mar-2021	Conducted Faculty\PhD \ME TAs through Google meet. Evaluation slots to be announced later.
5.	Phase-2 Evaluation 10% (20 marks)	Between 10-Apr and 18-Apr, 2021	-do-
6.	Announcing the marks tally for Assignment	Latest by: 22-Apr, 2021	

Prof R Gururaj,
IC, CSF212,
Dt: 04-Feb-2021.