BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, PILANI CAMPUS
Database Design and Applications (CSIZG518/SSZG518)
ASSIGNMENT-1
2nd Semester 2019-20

Total marks: 10
Deadline: 15th April 2020, 23:59 Hours

1. Think of a web-based software application (with a central database), that you think will be useful to many people
2. Write a brief **description of the application**
   – Who will be the users?
   – What are the benefits of this application?
   – List of functions & features of the application
   – How many users will use it simultaneously?
3. Draw **ER diagram** for the application
4. Convert ER model to **relational model**
5. **Normalize** the Relational model to at least 3NF.
6. Write **SQL queries** to fulfil the end user needs
7. **Design indices** to enhance the performance of queries and justify your choice of indices

Marking Scheme:
Total marks: 10
The assignment will be evaluated on the correctness of all entries. ER diagram must have at least 7 entities with cardinality properly written. Justification of all the components is expected. All the components must be correct and complete. A penalty of **two marks** for any incomplete component will be enforced.

Submission mode: single file Word/pdf on elearn portal against the assignment 1 link.
handwritten notes, well scanned are also welcome provided put in word or pdf as a single file.

Submission Dead Time (hard): 15th April 2020, 23:59 Hours
1 marks penalty for every single day delay.

Honour Code:
Plagiarism will lead to 0 marks for both the participants. No justification will be entertained.

For any queries: contact   amit.dua@pilani.bits-pilani.ac.in

Instructor in-Charge