<u>CS380 Database</u> <u>Project Specification</u>

- ✓ The CSC 380 students as a part of their coursework requirement have to complete a project i.e. "Design of any database System" based on the knowledge they have gained from different chapters of their course book as well as from the pre-requisite courses. It includes
 - System's Functional and Non Functional Requirements
 - o ER- Modelling
 - Database Designing
 - o Creating Tables using Oracle 11g (mysql, sqlServer...)
 - Inserting Data in the tables
 - Writing SQL Queries
 - o Implementing the interface
 - Team work
- ✓ The Database Design project work will be done in groups, where each group will have a maximum of 3-4 students.
- ✓ The Database Design project work has been divided into different phases, where the groups have to submit the deliverable of each phase on the assigned dates. Each phase will be led by a group leader, who will be responsible to conduct a meeting to discuss and distribute the tasks and finally compile the work of the team members. The students will be asked questions regarding their submitted work after every phase. The students will receive the grades based on their contribution to each phase, which indicates that there might be a variation in the marks scored by the members working on the same project.
- ✓ The groups should adhere to the submission dates for different phases.
- ✓ The team members within a group should show coordination and team spirit among each other.
- ✓ The team leader will be asked to complete a questionnaire for each phase.

- ✓ The students should produce their own work rather than copying work from the previous projects or any student.
- ✓ The total weightage for the course project is $\underline{15}$ marks.
- ✓ The project will be evaluated based on the Rubrics that will be given to students before the commencement of the course project work.

Note: Submission dates will not be postponed unless there is a valid reason for it.

#	Project Phases	Documents to be submitted	Date of Submission
Pre	Agreement on project & team members	Database Proposal / w names of team members	Week 3
Phase 1 (3 marks)	Describing the Information System to be developed/ ER Modelling • Evaluation criteria: language, clarity of business rules and project objective and goals, complexity of ERD, and team work.	 Description of the Organization ,purpose, objectives and scope of IS Business Rules (Cardinality/relationships) Relationships between the entities, ER Diagrams, min 6 entities Description of each entity Data Requirements 	End of week 9
Phase 2 (3 marks)	Designing Database by mapping ER into relational model Referential integrity Criteria of evaluation: correctness and completeness of the relational model produced, team work, on time submission.	 Relational Model Data Dictionary Specification (in the text form) for search 10 Queries. Specification for insert, delete and modify records. 	End of week
Phase 3 (2 marks)	Creating Tables using Oracle 11g (mysql, sqlServer)	 Tables along-with all the required integrity and column constraints Insert data for at least 5 rows 	End of week
Phase 4 (2 marks)	Meeting the Specification	DML Commands for Update, Delete records	End of week 12

	•	Write basic and advanced SQL Queries, specified in the first phase and show their results	
Phase 5 (3 marks)	•	Interface (GUI)/ connection of the DB	End of week 13
Phase 6 (2 marks)		PRESENTATION of the Project work. (VIVA)	Week 14