**SVKM’s NMIMS**

**Mukesh Patel School of Technology Management & Engineering (Mumbai Campus)**

**Computer Engineering Department (B Tech CSE/CSBS Sem IV/BTI Sem VIII/MBA.Tech-IV)**

**Database Management System**

**Project Report**

|  |  |  |
| --- | --- | --- |
| Program |  | |
| Semester |  | |
| Name of the Project: |  | |
|  | | |
| Details of Project Members |  |  |
| Batch | Roll No. | Name |
|  |  |  |
|  |  |  |
|  |  |  |
| Date of Submission: | | |

**Contribution of each project Members:**

|  |  |  |
| --- | --- | --- |
| Roll No. | Name: | Contribution |
|  |  |  |
|  |  |  |

**Note:**

1. Create a readme file if you have multiple files
2. All files must be properly named (Example:R004\_DBMSProject)
3. Submit all relevant files of your work ( Report, all SQL files, Any other files)
4. **Plagiarism is highly discouraged (Your report will be checked for plagiarism)**

**Rubrics for the Project evaluation:**

|  |  |
| --- | --- |
| First phase of evaluation:  Innovative Ideas (5 Marks)  Design and Partial implementation (5 Marks) | 7 marks (3M for EER, 4M for 15 tables, 10 rows in each , DDL command implemented , should include all constraints , all types of attributes, ISA and disjoint should be present) |
| Final phase of evaluation  Implementation, presentation and viva, Self-Learning and Learning Beyond classroom | 8 marks (Complex queries, nested queries, aggreagate,implementation, normalised database) |

**Project Report**

**Selected Topic**

**by**

**Student 1, Roll number: xx**

**Student 2, Roll number: xx**

**Student 3, Roll number: xx**

**Course: DBMS**

**AY: 2024-25**

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**I. Storyline**

This section should describe the requirements for the chosen database topic. Form a storyline and describe in detail.

**II. Components of Database Design**

Describe all entities along with their attributes here. Also, mention the primary keys for each entity.

Describe all relationships among various entities. Also, specify the cardinality and participation for all relationships.

**III. Entity Relationship Diagram**

Draw the ER diagram here. An example is shown:

You can also use software for drawing ER diagram

**IV. Relational Model**

Convert the ER diagram to the relational model using the concepts learned in the class.

List the various tables obtained.

**V. Normalization**

Perform normalization (1NF, 2NF, 3NF, BCNF) as applicable for the entire database.

**VI. SQL Queries**

Using a DBMS software (SQLite3 or MySQL or any other of your choice):

* Create the tables
* Populate the tables (insert some meaningful data, at least 10 tuples for each relation)
* Run SQL queries (minimum 20) covering **all concepts** learned in the class

This section should contain the question, SQL code, and the output snapshot for each query.

**VI. Project demonstration**

* Tools/software/ libraries used
* Screenshot and Description of the Demonstration of project ( If GUI is made)

**VII. Self -Learning beyond classroom**

:

* What new aspects did you learn on your own ? You have to mention learning beyond the classroom

**VIII. Learning from the Project**

Include learning from the project:

* How this project helped you?

**IX. Challenges Faced**

**X. Conclusion**

* What are the key takeaways from the project?