

Team Contribution Document – Final Project

Course: PROG2111 - Relational Databases

Date: - 10/12/2025

Group Name: 5 (Navjot Singh, Mehakpreet Singh)

Team Member Contributions

1. Navjot Singh Bhullar

Student ID: 8981023

Contributions:

- **Phase 1: Project Idea & Use Case**
 - Selected the project use case/scenario
 - Created GitHub repository and ensured all members had access
- **Phase 2: Data Modeling & ER Diagram**
 - Identified key entities, attributes, and relationships
 - Developed the Entity-Relationship Diagram (ERD)
 - Designed the initial database structure and relationships
- **Phase 5: Programmatic Access & CRUD Operations**
 - Collaborated with Mehakpreet Singh on C# program development
 - Implemented CRUD operations for specific entities
 - Assisted with error handling and transaction control implementation
 - Contributed to testing and debugging of C# programs

2. Mehakpreet Singh

Student ID: 9022582

Contributions:

- **Phase 3: Normalization**
 - Normalized the database to 3rd Normal Form (3NF)
 - Created normalization documentation showing the process from 1NF to 3NF
 - Identified and eliminated redundant data
 - Ensured data dependencies were logically organized
- **Phase 4: DDL Statements**
 - Wrote SQL DDL statements based on the ERD
 - Created complete database schema with all tables
 - Implemented primary keys, foreign keys, and integrity constraints

- Developed SQL script for database creation
- Ensured DDL statements matched the normalized design
- **Phase 5: Programmatic Access & CRUD Operations**
 - Collaborated with Navjot Singh on C# program development
 - Implemented CRUD operations for specific entities
 - Set up MySQL database connection using ADO.NET
 - Developed data access layer components
 - Implemented parameterized queries and security measures