

SRS Documentation

Notown Record Management System

Prepared by,

DEBOPRIYO GHOSH	Roll: 35
-----------------	----------

SAIKAT JANA	Roll: 50
-------------	----------

MOUSUMI MONDAL	Roll: 40
----------------	----------

SARADINDU RANA	Roll: 28
----------------	----------

B.Tech., Sem - V, Group- 1

Dated: 07/04/2021

Contents

1. Data Requirement
2. Assumptions
3. Entity - Relationship Diagram
4. Relationships
5. Relational Schema
6. Normalization of Relational Schema

Draw the ER diagram; Design the relational schema with minimum redundancy.

Notown Records has decided to store information about musicians who perform on its albums (as well as other company data) in a database. The company has wisely chosen to hire you as a database designer (at your usual consulting fee of \$2,500/day).

Each musician that records at Notown has an SSN, a name, an address, and a phone number. Poorly paid musicians often share the same address, and no address has more than one phone.

Each instrument that is used in songs recorded at Notown has a name (e.g., guitar, synthesizer, flute) and a musical key (e.g., C, B-flat, E-flat).

Each album that is recorded on the Notown label has a title, a copyright date, a format (e.g., CD or MC), and an album identifier.

Each song recorded at Notown has a title and an author.

Each musician may play several instruments, and a given instrument may be played by several musicians.

Each album has a number of songs on it, but no song may appear on more than one album.

Each song is performed by one or more musicians, and a musician may perform a number of songs.

Each album has exactly one musician who acts as its producer. A musician may produce several albums, of course.

1.Data Requirement

- **Songs:** Every song has a unique title. Each song is written by specific author.
- **Albums:** Every album has an unique id and respective album name. Eachone has specific format (e.g. CD or MC) and date of copyright.
- **Musicians:** Every musician has an unique Ssn number and their respective name .
- **Instruments:** Each instrument is identified by an unique name (e.g. guiter, synthesizer, flute) and its musical key (e.g. C,B-flat ,E-flat).
- **Addresses:** Each address of musicians identified by a contact phone number. Each one has full address.

2. Assumption

- 1) An album may contain multiple songs. But the recorded albums has atleast one song.
- 2) A musician may or may not perform songs . Musician may produce one or more albums.
- 3) A musician can play one or more instruments.
- 4) A musician lives only in one address identified by it's phone number.
- 5) In one address there may be more than one poorly paid musicians.
- 6) An instrument can be played by one or more than one customer.
- 7) Every album has only one producer.
- 8) A song can be performed by one or more than one musician.

3. Entity Relationship Diagram

A. Diagram