Data Modelling is designing the structure of the database.

Normalization is a set of rules which we need to follow when storing data in database to make the data more relevant, clean and easy to change.

Normalization makes data

* Data consistency
* Easy to retrieve and change
* Increase quality of data

**1NF**

1. Only one of each and each column

Don't mix up many information in one column

Eg. 1 person-> many interests

1. Need unique identification of data

|  |  |  |
| --- | --- | --- |
| Name | Class | ContactInfo |
| John | Mat100 | N 1st street, San Jose, 95031 |
| Mary | Mat100 | Saratoga Road, Fremont, 94071 |
| Vijay | Sci221 | Arques Ave, Sunnyvale, 94086 |
| Muks | Sci221 | Vicente dr, Sunnyvale, 94086 |

Consider student data like above

1. We need to split contactInfo column into address, city, zip code so there will be only 1 attribute for each column
2. We need to have StudentID as primary key for unique identification of each student.