Table Structure

All the tables and attributes required for marking attendance

**Table Name Attributes**

users user\_id, first\_name, last\_name, account\_type, email\_id, password

teachers teacher\_id, teacher\_code

students student\_id, year, semester, branch

batch\_info batch\_id, batch\_code, year, semester

batch\_record batch\_id, serial\_no, student\_id

subject\_info subject\_id, subject\_code, subject\_name

class\_info class\_id, batch\_id, subject\_id, teacher\_id, class\_type

class\_record class\_id, student\_id

atd\_info atd\_id, class\_id, count, log\_date

atd\_log atd\_id, student\_id, status

Normalisation

**1. users**

* Actual
* **user\_id**
* first\_name (not FFD on primary key only on **user\_id**)
* last\_name (not FFD on primary key only on **user\_id**)
* **account\_type**
* email\_id (not FFD on primary key only on **user\_id**)
* password (FFD on primary key)
* 1NF (1) + 2NF + 3NF
* user\_id
* account\_type
* password
* 1NF (2) + 2NF + 3NF
* user\_id
* first\_name
* last\_name
* email\_id

**2. student\_info**

* Actual + 1NF + 2NF
* student\_id
* year (determined by **student\_id**)
* semester (determined by **year** and thus **student\_id**)
* branch
* 3NF (1)
* student\_id
* branch
* 3NF (2)
* year
* semester

**2. batch\_info**

* Actual + 1NF + 2NF
* batch\_id
* batch\_code
* year (determined by **batch\_id**)
* semester (determined by **year** and thus **batch\_id**)
* 3NF (1)
* batch\_id
* batch\_code
* 3NF (2)
* year
* semester

**NOTE –** All other tables are already in their 3rd normalised forms.