**Conceptual schema**

cat\_id

cat\_name

**USER**

**POST**

creates

**CATEGORY**

POST\_CATOGERY

user\_password

user\_id

user\_email

user\_name

user\_gender

user\_dob

post\_id

user\_id

post\_datetime

post\_desc

post\_img

Cat\_id

**have**

**ha****ve**

**Business Rules:**

* A user can create many posts but a post can be created by a single user
* A post can have only one category but a category can be included in many post.

**Relational Schema:**

USER

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| user\_id | user\_name | user\_email | user\_pass | user\_dob | user\_gender |

POST

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| post\_id | post\_title | post\_desc | post\_image | user\_id | cat\_id |

CATEGORY

|  |  |
| --- | --- |
| cat\_id | cat\_name |

**Normalization**

The above relational schema is in 1NF form.

As there is no composite keys in above table so no 2nF form can be made.

3nF:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| user\_id | user\_name | user\_email | user\_pass | user\_dob | user\_gender |

As there exist transitive dependency between user\_email and user\_pass hence:

USER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| user\_id | user\_name | user\_email | user\_dob | user\_gender |

ACCOUNT

|  |  |
| --- | --- |
| account\_email | account\_password |