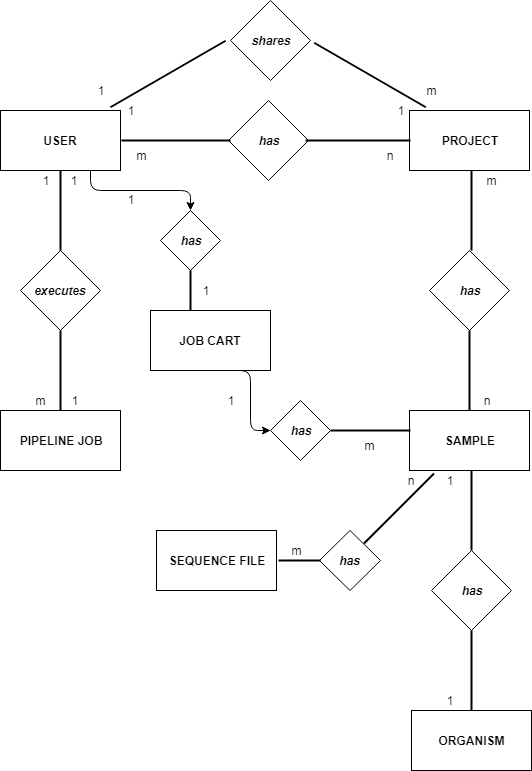
**PGDB : Database Design Document**

**Assumptions**

* An **Organism** associates with only 1 sample.
* A **Sample** associates with only 1 organism.
* A **Project** can have many samples.
* A **Sample** can belong to one/many projects.
* A project can have many users.
* A single **User** can belong to one/many projects.
* A user can execute many **Pipeline Jobs**.
* A pipeline job can be executed by a user.
* At a given time user can have only 1 **Job Cart**.
* A job cart can have many samples.
* A user can **Share** many projects.
* A given project can be shared only by a single user.
* A sample can have many **Sequence Files**.
* A sequence file can be belong to many samples.

**ER Diagram**

****

**Table Structure**

Database: pgdb

MySQL credentials: user name: pgdb / password: pgdb\_0517

TABLE NAME: **organisms**

DESCRIPTION: *Stores organism related data*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
|  | name | VARCHAR |

TABLE NAME: **projects**

DESCRIPTION: *Stores project related data*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
|  | name | VARCHAR |
|  | description | VARCHAR |

TABLE NAME: **samples**

DESCRIPTION: *Stores sample related data*

|  |  |  |
| --- | --- | --- |
| **PK** | id | VARCHAR (7) |
|  | name | VARCHAR |
| FK | organism\_id | VARCHAR |
|  | create\_date | DATETIME |

TABLE NAME: **users**

DESCRIPTION: *Stores user related data*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
|  | name | VARCHAR |
|  | email | VARCHAR |
|  | user\_name | VARCHAR |
|  | encrypted\_password | BLOB |
|  | salt | BLOB |
|  | is\_admin | BOOLEAN |
|  | dummy\_password | VARCHAR |
|  | is\_pw\_reset | BOOLEAN |

TABLE NAME: **sequence\_files**

DESCRIPTION: *Stores uploaded fastq file related data*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
|  | file\_path | VARCHAR |
|  | create\_date | DATETIME |

TABLE NAME: **user\_projects**

DESCRIPTION: *Records relationship between users and projects*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
| FK | user\_id | INT (6) |
| FK | project\_id | INT (6) |

TABLE NAME: **project\_samples**

DESCRIPTION: *Records relationship between projects and samples*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
| FK | project\_id | INT (6) |
| FK | sample\_id | VARCHAR (7) |

TABLE NAME: **sample\_sequence\_files**

DESCRIPTION: *Records relationship between samples and sequence files*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
| FK | sample\_id | VARCHAR (7) |
| FK | sequence\_file\_id | INT (6) |

TABLE NAME: **shared\_user\_projects**

DESCRIPTION: *Records project sharing data with the project owner and the shared user*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
| FK | shared\_project\_id | INT (6) |
| FK | project\_owner\_id | INT (6) |
| FK | shared\_user\_id | INT (6) |

TABLE NAME: **jobs\_cart**

DESCRIPTION: *Stores cart item data*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
| FK | sample\_id | VARCHAR (7) |
| FK | user\_id | INT (6) |
|  | project\_name | VARCHAR |

TABLE NAME: **pipeline\_jobs**

DESCRIPTION: *Stores data related to pipeline execution*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
| FK | user\_id | INT (6) |
|  | name | VARCHAR |
|  | type | VARCHAR |
|  | file\_name | VARCHAR |
|  | file\_path | VARCHAR |
|  | input\_path | VARCHAR |
|  | output\_path | VARCHAR |
|  | status | VARCHAR |
|  | created\_date | DATETIME |

Table Name: **pipeline\_jobs\_history**

DESCRIPTION: *Stores records deleted from the pipeline\_jobs table*

|  |  |  |
| --- | --- | --- |
| **PK** | id | INT (6) |
|  | name | VARCHAR |
|  | type | VARCHAR |
|  | created\_date | DATETIME |