**4.3 Database Design**

**User**

Primary Key: user­\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| user\_id | Number | 5 | User’s Id |
| user\_name | Text | 50 | User’s Email |
| user\_password | Text | 8 | User’s password |
| confirm\_password | Text | 8 | Re-entered User’s password |
| fname | Text | 30 | User First Name |
| lname | Text | 30 | User Last Name |
| user\_type | Text | 20 | User’s Type |
| status | Text | 10 | User’s Status |
| company | Text | 100 | Client’s Company |
| Record Size | 261 | | |

**Project**

Primary Key: project\_id

Foreign Key: client\_id, pm\_id, plan\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| project\_id | Number | 5 | Project Id |
| project\_name | Text | 50 | Project Name |
| description | Text | 300 | Project Description |
| project\_start\_date | Date | 10 | Project Starting Date |
| project\_end\_date | Date | 10 | Project End Date |
| project\_status | Text | 30 | Project Status |
| client\_id | Number | 5 | Client’s Id |
| pm\_id | Number | 5 | Project Manger’s Id |
| plan\_id | Number | 5 | Project Plan Id |
| Record Size | 420 | | |

**Employee**

Primary Keys: employee\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| employee\_id | Number | 5 | Employee Id |
| emp\_fname | Text | 30 | Employee First Name |
| emp\_lname | Text | 30 | Employee Last Name |
| job\_title | Text | 30 | Employee Job Title |
| emp\_level | Text | 10 | Employee Job Level |
| emp\_status | Text | 10 | Employee Status |
| emp\_availability | Text | 10 | Employee Availability |
| emp\_note | Text | 100 | Employee Special Note |
| Record Size | 225 | | |

**Employee\_Allocation**

Primary Key: project\_id, employee\_id

Foreign Key: project\_id, employee\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| project\_id | Number | 5 | Project Id |
| employee\_id | Number | 5 | Employee Id |
| emp\_allocation  \_start\_date | Date | 10 | The start date for assigning employees to the project. |
| emp\_allocation  \_end\_date | Date | 10 | The end date for assigning employees to the project. |
| Record Size | 30 | | |

**Employee\_Request**

Primary Keys: emp\_req\_id

Foreign Keys: user\_id, project\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| emp\_req\_id | Number | 5 | Employee Request Id |
| employee\_role | Text | 10 | Role of Employee |
| emp\_count | Number | 5 | Employee Count |
| user\_request\_status | Text | 30 | User Request Status |
| emp\_request\_status | Text | 30 | Employee Request Status |
| user\_id | Number | 5 | User’s Id |
| project\_id | Number | 5 | Project Id |
| Record Size | 90 | | |

**Material**

Primary Key: mat\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| mat\_id | Number | 5 | Material Id |
| mat\_name | Text | 50 | Material Name |
| mat\_type | Text | 30 | Type of Material |
| mat\_quantity | Number | 5 | Material Quantity |
| mat\_unit | Test | 10 | Unit of Material |
| Record Size | 100 | | |

**Material\_Allocation**

Primary key: allocation\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| allocation\_id | Number | 5 | Material Allocation Id |
| allocation\_description | Text | 30 | Material Allocation Description |
| Record Size | 35 | | |

**Project\_Material\_Allocation**

Primary Keys: project\_id, mat\_id, allocation\_id

Foreign Keys: project\_id, mat\_id, allocation\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| project\_id | Number | 5 | Project Id |
| mat\_id | Number | 5 | Material Id |
| allocation\_id | Number | 5 | Material Allocation Id |
| material\_allocation  \_quantity | Number | 5 | Material Allocation Quantity |
| allocation\_date | Date | 10 | Allocation Date |
| allocation\_status1 | Text | 30 | Allocation Status |
| Record Size | 60 | | |

**Material\_Updation**

Primary Key: mat\_updation\_id

Foreign Key: mat\_id, user\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| mat\_updation\_id | Number | 5 | Material Updating Id |
| mat\_status | Text | 30 | Material Status |
| mat\_update\_date | Date | 10 | Material Updating Date |
| mat\_update\_quantity | Number | 5 | Material Updating Quantity |
| mat\_id | Number | 5 | Material Id |
| user\_id | Number | 5 | User Id |
| Record Size | 60 | | |

**Material\_Request**

Primary Keys: mat\_request\_id

Foreign Key: user\_id, project\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| mat\_request\_id | Number | 5 | Material Request Id |
| mat\_req\_name | Text | 50 | Requested Material Name |
| Other\_name | Text | 10 | New Material Name |
| mat\_count | Number | 5 | Requested Material Count |
| user\_mat\_request\_status | Text | 10 | User Request Status |
| mat\_request\_status | Text | 10 | Material Request Status |
| user\_id | Number | 5 | User Id |
| project\_id | Number | 5 | Project Id |
| Record Size | 100 | | |

**Plan**

Primary Key: plan\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| plan\_id | Number | 5 | Plan Id |
| plan\_name | Text | 30 | Plan Name |
| plan\_description | Text | 100 | Plan Description |
| Record Size | 135 | | |

**Main\_Task**

Primary Key: task\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| task\_id | Number | 5 | Main Task Id |
| task\_name | Text | 50 | Main Task Name |
| task\_description | Text | 100 | Main Task Description |
| Record Size | 155 | | |

**Image**

Primary Key: image\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| image\_id | Number | 5 | Image Id |
| image\_path | Text | 150 | Image Path |
| Record Size | 155 | | |

**Plan\_Task\_Image**

Primary Key: plan\_id, task\_id, image\_id

Foreign Key: plan\_id. task\_id, image\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| plan\_id | Number | 5 | Plan Id |
| task\_id | Number | 5 | Main Task Id |
| image\_id | Number | 5 | Image Id |
| task\_status | Text | 20 | Main Task Status |
| Record Size | 35 | | |

**Sub\_Task**

Primary Key: subtask\_id

Foreign Key: task\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| subtask\_id | Number | 5 | Sub Task Id |
| subtask\_name | Text | 50 | Sub Task Name |
| sub\_description | Text | 100 | Sub Task Description |
| task\_id | Number | 5 | Main Task Id |
| Record Size | 160 | | |

**Plan\_SubTask**

Primary Key: plan\_id, subtask\_id

Foreign Key: plan\_id, subtask\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| plan\_id | Number | 5 | Plan Id |
| subtask\_id | Number | 5 | Sub Task Id |
| sub\_task\_status | Text | 20 | Sub Task Status |
| Record Size | 30 | | |

**Feedback**

Primary Key: feedback\_id

Foreign Keys: user\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| feedback\_id | Number | 5 | Feedback Id |
| feedback\_comment | Text | 50 | Feedback Comment |
| Feedback\_date | Date | 10 | Feedback Date |
| user\_id | Number | 5 | User Id |
| Record Size | 70 | | |

**User\_Mobile**

Primary Keys: user\_id, mobile

Foreign Key: user\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Field Names | Data type | Data Size | Description |
| user\_id | Text | 5 | User’s Username |
| mobile | Number | 10 | User’s Mobile Number |
| Record Size | 15 | | |