-- users(user\_id, first\_name, last\_name, dob, membership)

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| User\_id | VARCHAR(20) | Yes | User identification code. PRIMARY KEY |
| First\_name | VARCHAR(20) | Yes | First name |
| Last\_name | VARCHAR(20) | Yes | Last name |
| Dob | DATE | No | Date of birth |
| Gender | CHAR(1) | No | Sex, must be either ‘F’ or ‘M’ |
| Membership | CHAR(1) | Yes | Membership of guess, must be either ‘Y’ or ‘N’ |

-- account(username, password, balance, (user\_id))

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| Username | VARCHAR(20) | Yes | User account’s username. PRIMARY KEY |
| Password | VARCHAR(20) | Yes | User account’s password |
| Balance | INT | Yes | The money each account has |
| User\_id | VARCHAR(20) | Yes | User identification code. FOREIGN KEY references to user\_id of user relation |

-- computer(computer\_id, condition, (username))

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| Computer\_id | SERIAL(1) | Yes | Computer identification code, must be from in the range of 1-50. PRIMARY KEY |
| Condition | CHAR(1) | Yes | Computer’s usage conditon. ‘0’ means free, ‘1’ means busy must be either ‘0’ or ‘1’ |
| Usename | VARCHAR(20) | No | User who uses the computer. It’s a FOREIGN KEY references to username of account relation |
| error | CHAR(1) | Yes | Must be either ‘0’ or ‘1’. Indicate is there an error in the session |

-- session(session\_id, login\_time, end\_time, error, (username),(computer\_id))

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| Session\_id | INT | Yes | Session identification code. PRIMARY KEY |
| Login\_time | timestamp | Yes | The begin time of a session |
| End\_time | timestamp | No | The end time of a session |
| Username | VARCHAR(20) | Yes | The user who starts the session. It’s a FOREIGN KEY references to username of account relation |
| Computer\_id | INT | Yes | The id of the logged-in computer. It’s a FOREIGN KEY references to computer\_id of computer relation |

-- app\_install(name, app\_id,(session\_id))

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| App\_name | VARCHAR(20) | Yes | Downloaded app name. PRIMARY KEY |
| App\_id | SERIAL(1) | Yes | App identification code. |
| Session\_id | INT | Yes | Session when the app is downloaded. It’s a FOREIGN KEY references to session\_id of session relation |

-- staff(staff\_id, first\_name, last\_name, dob, gender, email, tele)

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| Staff\_id | VARCHAR(10) | Yes | Staff identification code.PRIMARY KEY |
| First\_name | VARCHAR(20) | Yes | First name |
| Last\_name | VARCHAR(20) | Yes | Last name |
| Dob | DATE | Yes | Date of birth |
| Gender | CHAR(1) | No | Sex, must be either ‘F’ or ‘M’ |
| Email | VARCHAR(30) | No | Staff’s contact email |
| Tele | CHAR(13) | No | Staff’s phone number |

-- fix(computer\_id, staff\_id, date, error\_id, cost)

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | type | NOT NULL | Description |
| Computer\_id | SERIAL(1) | Yes | Computer identification code PRIMARY KEY |
| Staff\_id | VARCHAR(10) | Yes | Staff identification code. PRIMARY KEY |
| Error\_id | SERIAL(1) | Yes | Error identification code. PRIMARY KEY |
| Error | VARCHAR(50) | No | Cause of error |
| Date | DATE | No | Date finished fixing |
| Cost | INT | Yes | Fixing cost |

--service(service\_id, name, price)

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| Service\_id | SERIAL(1) | Yes | Service identification code PRIMARY KEY |
| Name | VARCHAR(20) | Yes | Service name |
| Price | INT | Yes | Price |
| Restrict | CHAR(1) | Yes | Service at restriction. Must be either ‘0’ or ‘1’ |