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

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

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

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

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

-- app\_use(app\_id, (session\_id))

-- staff(staff\_id, first\_name, last\_name, dob, role)

-- recharge(recharge\_id, amount, recharge\_time, staff\_id, username)

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

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

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

-- 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 | Yes | Date of birth |
| membership | CHAR(1) | No | 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’ is free, ‘1’ is busy. Must be either ‘0’ or ‘1’ |

-- 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 |
| logout\_time | timestamp | No | The end time of a session |
| error | VARCHAR(150) | No | Session’s errors |
| 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(app\_id,name, (session\_id))

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| app\_id | SERIAL(1) | Yes | App identification code. PRIMARYKEY |
| name | VARCHAR(40) | Yes | Name of the app |
| session\_id | INT | Yes | Session when the app is used. It’s a FOREIGN KEY references to session\_id of session relation |

-- app\_use(app\_id, (session\_id))

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

-- staff(staff\_id, first\_name, last\_name, dob, role)

|  |  |  |  |
| --- | --- | --- | --- |
| 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 |
| role | VARCHAR(20) | Yes | Role of the staff |

-- recharge(recharge\_id, amount, recharge\_time, staff\_id, username)

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | type | NOT NULL | Description |
| recharge\_id | SERIAL | Yes | Recharge identification code, PRIMARY KEY |
| recharge\_time | timestamp | Yes | Time when recharge |
| amount | Int | Yes | Amount of money add |
| username | VARCHAR(20) | Yes | Account recharge into |
| staff\_id | VARCHAR(20) | Yes | Staff who does the recharge |

-- fix(computer\_id, staff\_id, fix\_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 |
| fix\_date | DATE | No | Date finished fixing |
| cost | INT | Yes | Fixing cost |
| error | VARCHAR(50) | No | Cause of error |

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

|  |  |  |  |
| --- | --- | --- | --- |
| 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. (age restrict). Must be either ‘0’ or ‘1’ |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | Type | NOT NULL | Description |
| service\_id | SERIAL(1) | Yes | Service identification code. It’s a FOREIGN KEY references to service\_id of session relation |
| ticket\_id | VARCHAR(20) | Yes | Ticket identification code. It’s a FOREIGN KEY references to session\_id of session relation |
| quantity | INT | Yes | Price |