

## Database Tables

### Table 01 - user

```
CREATE TABLE `bank`.`user` (  
  `user_id` INT NOT NULL,  
  `user_name` VARCHAR(100) NOT NULL,  
  `paw_salt` VARCHAR(100) NOT NULL,  
  `paw_hash` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`user_id`));
```

### Table 02 - session

```
CREATE TABLE `bank`.`session` (  
  `session_id` INT NOT NULL,  
  `user_id` INT NOT NULL,  
  `logout_time` DATETIME NOT NULL,  
  PRIMARY KEY (`session_id`),  
  FOREIGN KEY (`user_id`) REFERENCES `bank`.`user` (`user_id`) ;
```

### Table 03 - roles

```
CREATE TABLE `bank`.`roles` (  
  `role_id` INT NOT NULL,  
  `role_name` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`role_id`));
```

**Table 04 - user\_role**

```
CREATE TABLE `bank`.`user_role` (  
  `user_role_id` INT NOT NULL,  
  `user_id` INT NOT NULL,  
  `role_id` INT NOT NULL,  
  PRIMARY KEY (`user_role_id`),  
  FOREIGN KEY (`user_id`) REFERENCES `bank`.`user` (`user_id`),  
  FOREIGN KEY (`role_id`) REFERENCES `bank`.`roles` (`role_id`) ;
```

**Table 05 - permission**

```
CREATE TABLE `bank`.`permission` (  
  `permission_id` INT NOT NULL,  
  `permission_name` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`permission_id`));
```

**Table 06 - role\_permission**

```
CREATE TABLE `bank`.`role_permission` (  
  `role_permission_id` INT NOT NULL,  
  `role_id` INT NOT NULL,  
  `permission_id` INT NOT NULL,  
  PRIMARY KEY (`role_permission_id`),  
  FOREIGN KEY (`role_id`) REFERENCES `bank`.`roles` (`role_id`),  
  FOREIGN KEY (`permission_id`) REFERENCES `bank`.`permission`  
  (`permission_id`) ;
```

**Table 07 - activity\_log**

```
CREATE TABLE `bank`.`activity_log` (  
  `activity_log_id` INT NOT NULL,  
  `user_id` INT NOT NULL,  
  `activity_type_id` INT NOT NULL,  
  PRIMARY KEY (`activity_log_id`),  
  FOREIGN KEY (`user_id`) REFERENCES `bank`.`user` (`user_id`),  
  FOREIGN KEY (`activity_type_id`) REFERENCES `bank`.`activity_type`  
  (`activity_type_id`) ;
```

**Table 08 - activity\_type**

```
CREATE TABLE `bank`.`activity_type` (  
  `activity_type_id` INT NOT NULL,  
  `activity_type_name` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`activity_type_id`));
```

**Table 09 - close\_request**

```
CREATE TABLE `bank`.`close_request` (  
  `close_request_id` INT NOT NULL,  
  `user_id` INT NOT NULL,  
  `account_id` INT NOT NULL,  
  `description` VARCHAR(100) NOT NULL,  
  `requested_date` DATETIME NOT NULL,  
  `request_status` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`close_request_id`),  
  FOREIGN KEY (`user_id`) REFERENCES `bank`.`user` (`user_id`),  
  FOREIGN KEY (`account_id`) REFERENCES `bank`.`accounts`  
  (`account_id`) ;
```

**Table 10 - accounts**

```
CREATE TABLE `bank`.`accounts` (  
  `account_id` INT NOT NULL,  
  `account_number` VARCHAR(100) NOT NULL,  
  `account_type_id` INT NOT NULL,  
  `user_id` INT NOT NULL,  
  `balance` DOUBLE NOT NULL,  
  `account_status` VARCHAR(45) NOT NULL,  
  `started_date` DATETIME NOT NULL,  
  PRIMARY KEY (`account_id`),  
  FOREIGN KEY (`user_id`) REFERENCES `bank`.`user` (`user_id`),  
  FOREIGN KEY (`account_type_id`) REFERENCES  
  `bank`.`account_type` (`account_type_id`) ;
```

**Table 11 - account\_type**

```
CREATE TABLE `bank`.`account_type` (  
  `account_type_id` INT NOT NULL,  
  `account_type_name` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`account_type_id`));
```

**Table 12 - transaction**

```
CREATE TABLE `bank`.`transaction` (  
  `transaction_id` INT NOT NULL,  
  `transaction_type_id` INT NOT NULL,  
  `user_id` INT NOT NULL,  
  `account_id` INT NOT NULL,  
  `reference` VARCHAR(100) NOT NULL,  
  `transaction_amount` DOUBLE NOT NULL,  
  `transaction_charges` DOUBLE NOT NULL,  
  `after_balance` DOUBLE NOT NULL,  
  `date` DATETIME NOT NULL,  
  PRIMARY KEY (`transaction_id`),  
  FOREIGN KEY (`transaction_type_id`) REFERENCES  
  `bank`.`transaction_type` (`transaction_type_id`),  
  FOREIGN KEY (`user_id`) REFERENCES `bank`.`user` (`user_id`),  
  FOREIGN KEY (`account_id`) REFERENCES `bank`.`accounts`  
  (`account_id`) ;
```

**Table 13 - transaction\_type**

```
CREATE TABLE `bank`.`transaction_type` (  
  `transaction_type_id` INT NOT NULL,  
  `transaction_type_name` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`transaction_type_id`));
```