**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 (`user\_role\_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`));