

IOU Database:

Work Log 10/28/24 10:30PM

Created mySql database for BBA:

```
CREATE DATABASE bba_db;
```

```
bba_db;
```

Created iou database table

```
CREATE TABLE IOU (  
    iou_id INT AUTO_INCREMENT PRIMARY KEY,  
    lender_id INT,  
    borrower_id INT,  
    amount DECIMAL(10, 2) NOT NULL,  
    status ENUM('pending', 'paid') DEFAULT 'pending',  
    due_date DATE,  
    FOREIGN KEY (lender_id) REFERENCES Users(user_id),  
    FOREIGN KEY (borrower_id) REFERENCES Users(user_id)  
);
```

Added a database connection to Java Code:

```
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.PreparedStatement;  
import java.sql.SQLException;  
.....  
public class DatabaseConnection {  
    private static final String URL = "jdbc:mysql://localhost:3306/iou_db";  
    private static final String USER = "your_username";  
    private static final String PASSWORD = "your_password";  
    public static Connection getConnection() throws SQLException {  
        return DriverManager.getConnection(URL, USER, PASSWORD);  
    }  
}
```

Created a username and pw for the database with certain privileges and verified

```
CREATE USER 'publicUser'@'localhost' IDENTIFIED BY 'BasicBank0327';
```

```
GRANT SELECT, INSERT, UPDATE, DELETE ON new_database_name.* TO
```

```
'publicUser'@'localhost';
```

```
FLUSH PRIVILEGES;
```

```
SHOW GRANTS FOR 'publicUser'@'localhost';
```

Note: had to go back into settings with navigator-users-publicUser-manually change privileges for bba_db only

Created a bbaDatabase file to connect to the database

User Login UI:

Work log 10/29/2024 7:45

Created a User login UI called UserGUI.java

Added a User database table to mysql

```
CREATE TABLE Users (  
  user_id INT AUTO_INCREMENT PRIMARY KEY,  
  username VARCHAR(50) NOT NULL,  
  email VARCHAR(100),  
  balance DECIMAL(10, 2) DEFAULT 0.00  
);
```

Used Auto Increment:

```
ALTER TABLE users AUTO_INCREMENT = 1;
```

Attempting to connect to database through code

Created a User Registration file

10/30/2024

Created a readme to add a .jar file to connect to the database

Connected to database through testing and username is registering and login is successful

Updated Github code

Created a readme for use when attempting to piece together the current state of things