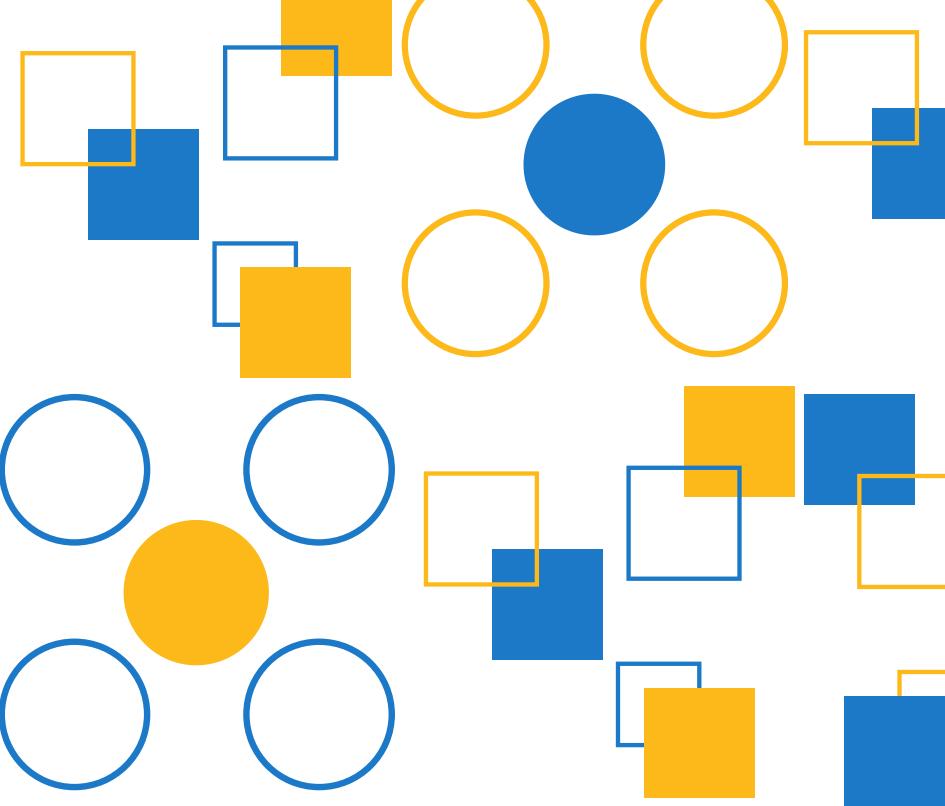




# SYSTEM MANUAL (V 1.0)

UPDATED: APRIL 5, 2025

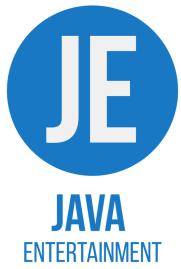




# OVERVIEW

The Java Entertainment Equipment Rental System is a simple and easy-to-use program that helps the team at Java Entertainment manage their event equipment rentals. It allows staff to keep track of all the equipment in the company's inventory, schedule items for different events and make sure nothing is double-booked. This helps avoid confusion and keeps everything organized during busy seasons like Jamaican Spring Break.

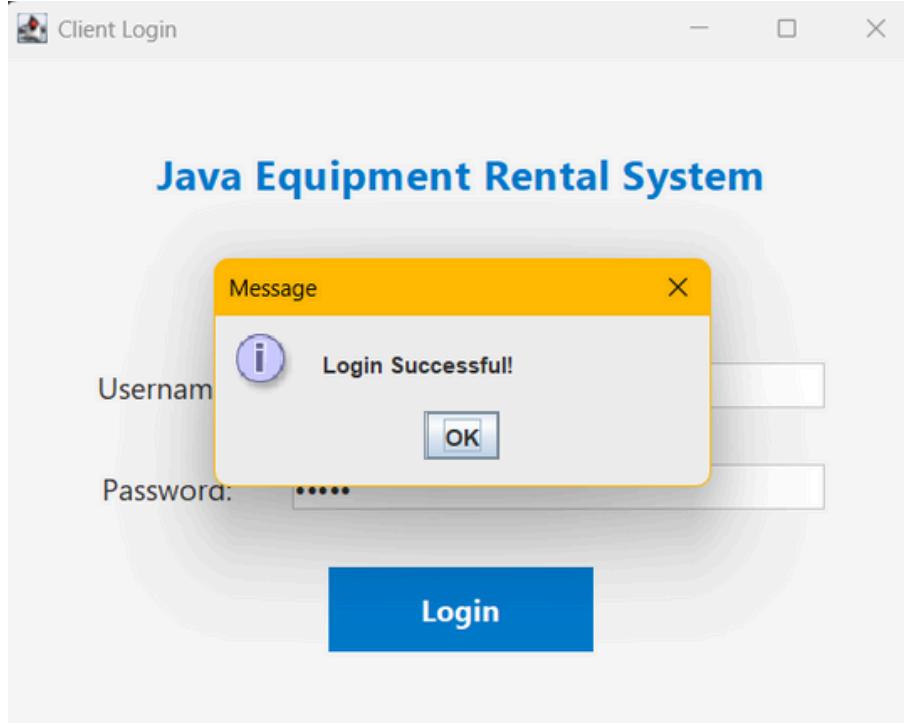
With this system, users can add new equipment, check what's available, create bookings for upcoming events, generate receipts or quotations for customers and generate invoice reports. The system is designed to make daily tasks faster and more efficient, so the team can focus on delivering great service to their clients.



# APPLICATION USER INTERFACE

The application used by administrative and inventory staff.

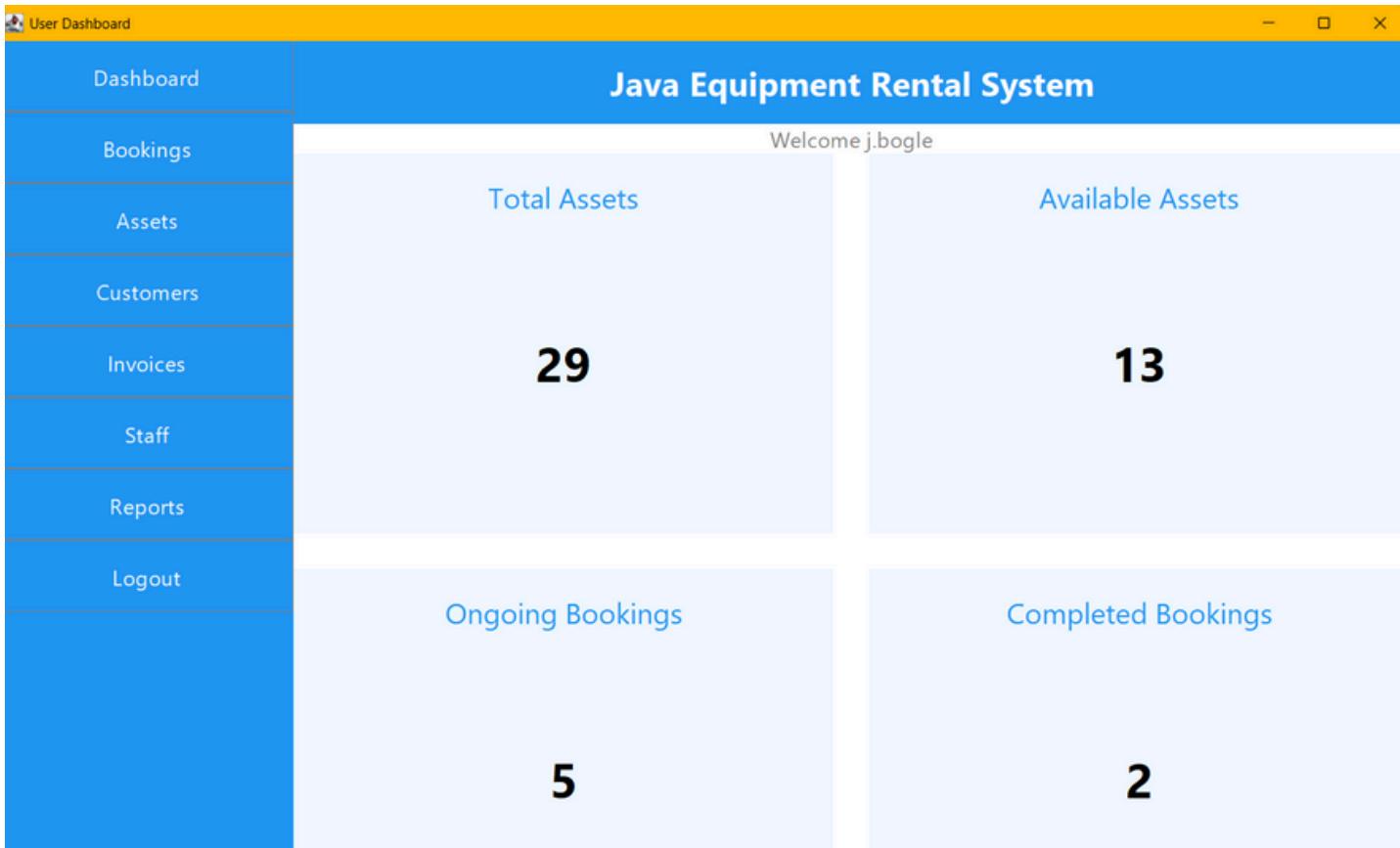
## Login Confirmation



After entering your username and password, click the Login button. If the credentials are correct, a message will pop up saying "**Login Successful!**" to confirm that you've been granted access to the system. If the credentials are incorrect, a message will pop up saying "**Invalid credentials, try again.**"



## Dashboard



The **Dashboard** provides a quick overview of key system metrics. At a glance, users can see the total number of assets in inventory, the number of available assets, the number of ongoing bookings, and the number of completed bookings. Navigation to other sections of the application is conveniently located on the left-hand side menu.

## Assets Screen

User Dashboard

| Dashboard | Asset ... | <input type="radio"/> | New Asset | Delete Asset  | <input checked="" type="radio"/> Available | <input type="radio"/> Booked | <input type="text"/> | Search |
|-----------|-----------|-----------------------|-----------|---------------|--|------------------------------|----------------------|--------|
| Bookings  | Asset ID  | Name                  | Category  | Price Per Day | Serial Number                              | Status                       |                      |        |
|           | 1         | LED Light             | LIGHTING  | 150.0         | SN001                                      | BOOKED                       |                      |        |
|           | 2         | Sound Mixer           | SOUND     | 2500.0        | SN002                                      | BOOKED                       |                      |        |
|           | 3         | Power Generator       | POWER     | 400.0         | SN003                                      | BOOKED                       |                      |        |
| Assets    | 4         | Stage Platform        | STAGING   | 300.0         | SN004                                      | BOOKED                       |                      |        |
|           | 5         | Spotlight             | LIGHTING  | 120.0         | SN005                                      | BOOKED                       |                      |        |
|           | 6         | Speaker System        | SOUND     | 500.0         | SN006                                      | BOOKED                       |                      |        |
| Customers | 7         | Backup Power          | POWER     | 350.0         | SN007                                      | BOOKED                       |                      |        |
|           | 8         | Riser                 | STAGING   | 200.0         | SN008                                      | BOOKED                       |                      |        |
|           | 9         | Floodlight            | LIGHTING  | 180.0         | SN009                                      | BOOKED                       |                      |        |
| Invoices  | 10        | Mixing Console        | SOUND     | 450.0         | SN010                                      | AVAILABLE                    |                      |        |
|           | 11        | Portable Generator    | POWER     | 550.0         | SN011                                      | AVAILABLE                    |                      |        |
|           | 12        | LED Screen            | STAGING   | 700.0         | SN012                                      | AVAILABLE                    |                      |        |
|           | 13        | Lighting Controller   | LIGHTING  | 220.0         | SN013                                      | AVAILABLE                    |                      |        |
| Staff     | 14        | Subwoofer             | SOUND     | 350.0         | SN014                                      | AVAILABLE                    |                      |        |
|           | 15        | Electrical Panel      | POWER     | 300.0         | SN015                                      | AVAILABLE                    |                      |        |
|           | 16        | Stage Backdrop        | STAGING   | 400.0         | SN016                                      | AVAILABLE                    |                      |        |
|           | 17        | Floodlight Array      | LIGHTING  | 250.0         | SN017                                      | AVAILABLE                    |                      |        |
| Reports   | 18        | Microphone Set        | SOUND     | 150.0         | SN018                                      | AVAILABLE                    |                      |        |
|           | 19        | Power Inverter        | POWER     | 450.0         | SN019                                      | AVAILABLE                    |                      |        |
|           | 20        | Staging Ramp          | STAGING   | 180.0         | SN020                                      | BOOKED                       |                      |        |
|           | 21        | Track Lighting        | LIGHTING  | 130.0         | SN021                                      | BOOKED                       |                      |        |
| Logout    | 22        | Sound Bar             | SOUND     | 200.0         | SN022                                      | BOOKED                       |                      |        |
|           | 23        | Power Cable Set       | POWER     | 75.0          | SN023                                      | BOOKED                       |                      |        |
|           | 24        | Stage Curtain         | STAGING   | 300.0         | SN024                                      | BOOKED                       |                      |        |
|           | 25        | HMI Light             | LIGHTING  | 280.0         | SN025                                      | BOOKED                       |                      |        |
|           | 26        | Subwoofer Array       | SOUND     | 600.0         | SN026                                      | BOOKED                       |                      |        |
|           | 27        | Generator Set         | POWER     | 700.0         | SN027                                      | AVAILABLE                    |                      |        |
|           | 28        | Modular Stage         | STAGING   | 500.0         | SN028                                      | AVAILABLE                    |                      |        |
|           | 29        | LED Wall              | LIGHTING  | 850.0         | SN029                                      | AVAILABLE                    |                      |        |

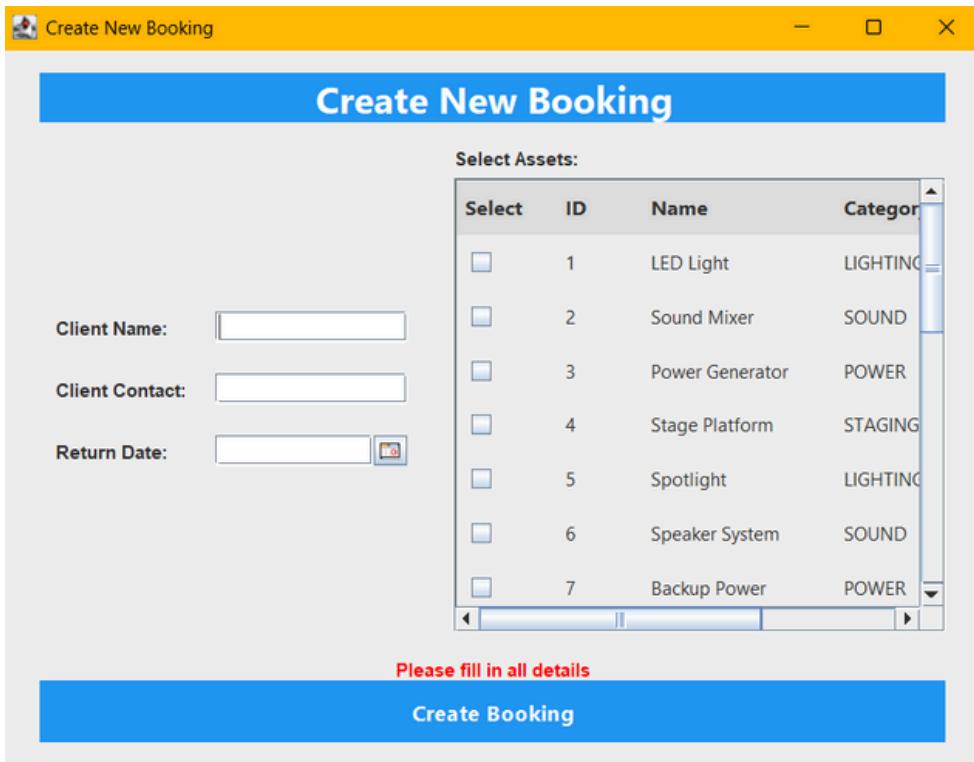
The **Asset screen** displays a comprehensive list of all equipment available in the system. Users can view key details such as Asset ID, Name, Category, Price Per Day, Serial Number and current Status (Available or Booked). The screen also provides functionality to **create 'New Assets'**, **'Delete Assets'** and filter assets by their 'Available' or 'Booked' status. This allows for efficient management and tracking of all rental equipment.

## Bookings Screen

| Dashboard |           | Booking Management |                       |             |                     |                     |         |                |             |                                      |                               |                                 |
|-----------|-----------|--------------------|-----------------------|-------------|---------------------|---------------------|---------|----------------|-------------|--------------------------------------|-------------------------------|---------------------------------|
| Bookings  |           | Booking Overview   |                       | New Booking |                     | Close Booking       |         | Delete Booking |             | <input checked="" type="radio"/> All | <input type="radio"/> Ongoing | <input type="radio"/> Completed |
|           |           | Booking ID         | Client Name           | Staff       | Booking Date        | Return Date         | Status  | Delinquent     | No. Of Days |                                      |                               |                                 |
|           | Assets    | 3                  | George Washington     | jb          | 2025-04-06 19:07:25 | 2025-04-09 00:00:00 | CLOSED  | No             | 2           |                                      |                               |                                 |
|           | Customers | 4                  | BENJAMIN FRANKL...    | jb          | 2025-04-06 19:08:05 | 2025-04-16 19:08:01 | ONGOING | No             | 9           |                                      |                               |                                 |
|           |           | 5                  | Hugh Shearer          | jb          | 2025-04-06 19:09:06 | 2025-04-19 19:08:59 | CLOSED  | No             | 12          |                                      |                               |                                 |
|           |           | 6                  | Nanny of The Maroo... | jb          | 2025-04-06 19:10:06 | 2025-04-17 00:00:00 | ONGOING | No             | 10          |                                      |                               |                                 |
|           |           | 7                  | Michael Manley        | jb          | 2025-04-06 19:12:11 | 2025-04-10 19:12:07 | ONGOING | No             | 3           |                                      |                               |                                 |
|           |           | 8                  | Sam Sharpe            | jb          | 2025-04-06 19:12:47 | 2025-04-09 19:12:39 | ONGOING | No             | 2           |                                      |                               |                                 |
|           |           | 9                  | Judas Iscariot        | jb          | 2025-04-09 01:38:26 | 2025-04-11 00:00:00 | ONGOING | No             | 1           |                                      |                               |                                 |
|           | Invoices  |                    |                       |             |                     |                     |         |                |             |                                      |                               |                                 |
|           | Staff     |                    |                       |             |                     |                     |         |                |             |                                      |                               |                                 |
|           | Reports   |                    |                       |             |                     |                     |         |                |             |                                      |                               |                                 |
|           | Logout    |                    |                       |             |                     |                     |         |                |             |                                      |                               |                                 |

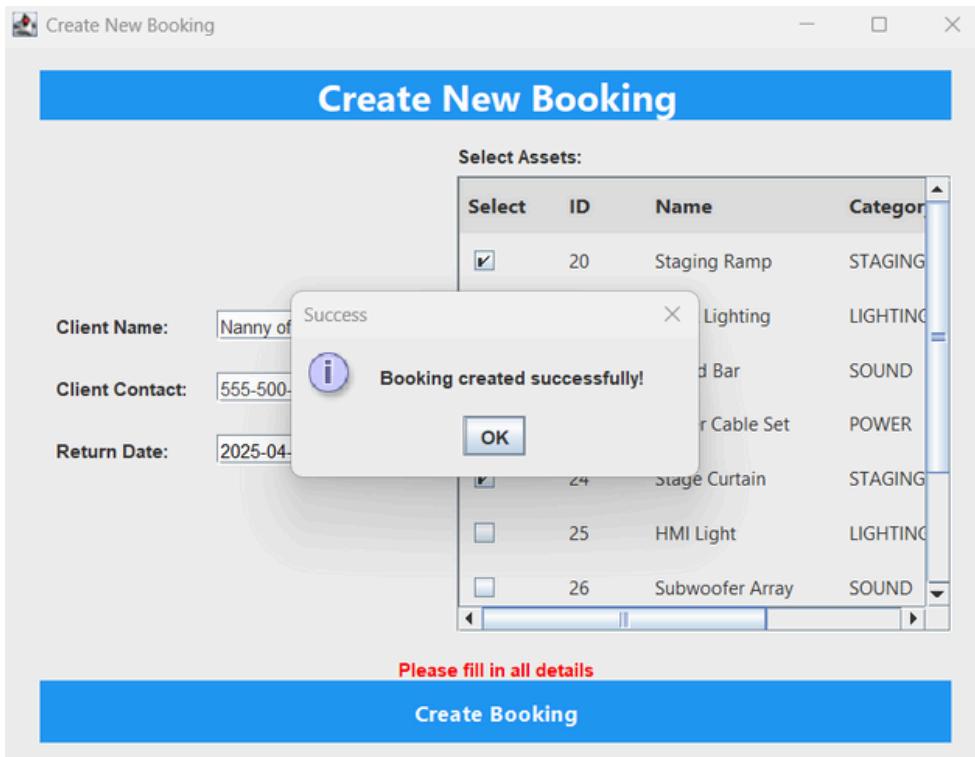
The **Bookings screen** provides a centralized view of all rental bookings. Users can see essential booking details like Booking ID, Client Name, Assigned Staff, Booking Date, Return Date, Status (e.g., Ongoing, Closed), Delinquent status and the Number of Days for the rental. The screen offers functionality to **create 'New Bookings'**, **'Close Bookings'**, and **'Delete Bookings'**. Users can also filter bookings to view 'All' or only 'Ongoing' bookings, facilitating efficient management of rental schedules.

- **Creating a New Booking**



Users access the **Create New Booking screen** by selecting the 'New Booking' option from the Bookings screen. This screen allows users to easily initiate a new rental booking. Users are required to input the 'Client Name', 'Client Contact', and 'Return Date'. Crucially, this screen provides a list of available assets, allowing users to select the specific equipment needed for the booking. A checkbox interface facilitates easy selection of multiple assets. The system also includes a validation message ('Please fill in all details') to ensure all required information is entered before creating the booking. Once all details are complete, clicking the 'Create Booking' button finalizes the booking process.

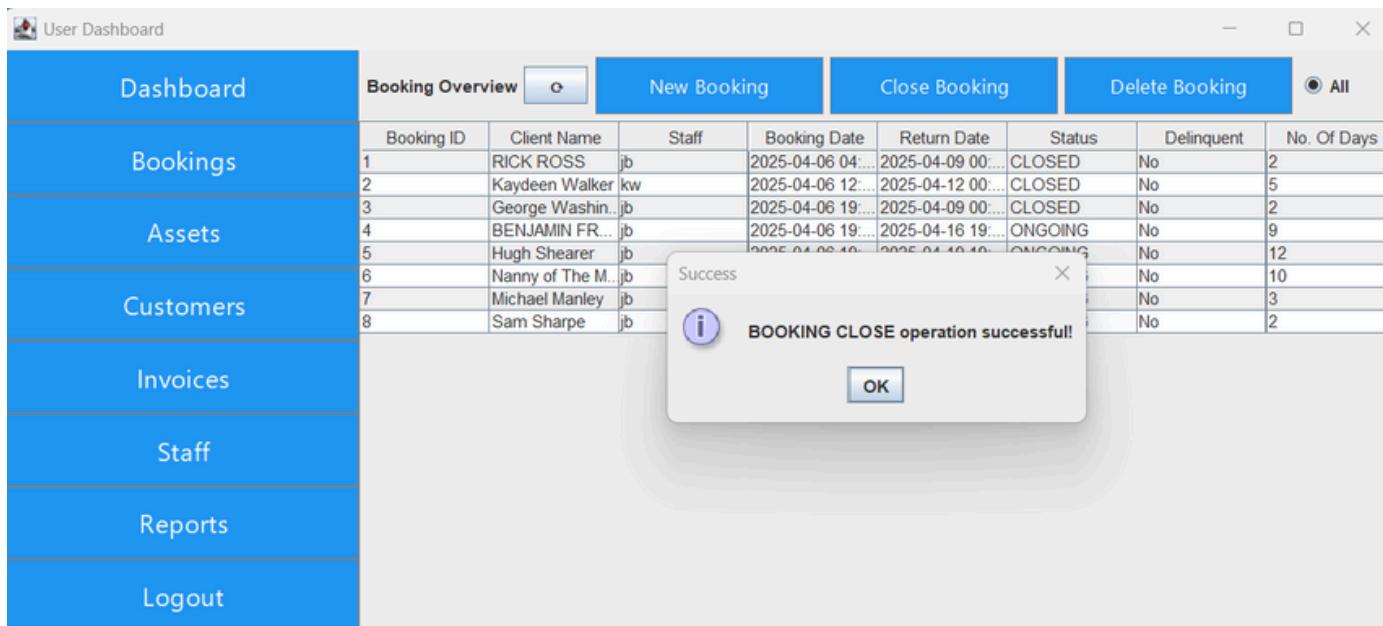
- **Saving a New Booking**



After successfully saving a new booking, a 'Booking created successfully!' message appears with an information icon. Click 'OK' to confirm and return to the bookings list.

- **Closing a Booking**

To **close a booking**, go to the Booking Screen and select the Booking ID of the booking you wish to close. Once selected, click on the 'Close Booking' button. This will mark the booking as completed and remove it from the list of active bookings. Upon successful closure, a confirmation message 'BOOKING CLOSE operation successful!' will be displayed. Click 'OK' to acknowledge and return to the Bookings screen.



- **Deleting a Booking**

To **delete a booking**, navigate to the Booking Screen and select the Booking ID of the booking you wish to remove. Once selected, click the 'Delete Booking' button. A confirmation prompt will appear: 'Are you sure you want to delete booking #[Booking ID]?'. Confirm the deletion by clicking 'Yes', or cancel by clicking 'No'. Please note that only bookings with a 'Closed' status can be deleted.

User Dashboard

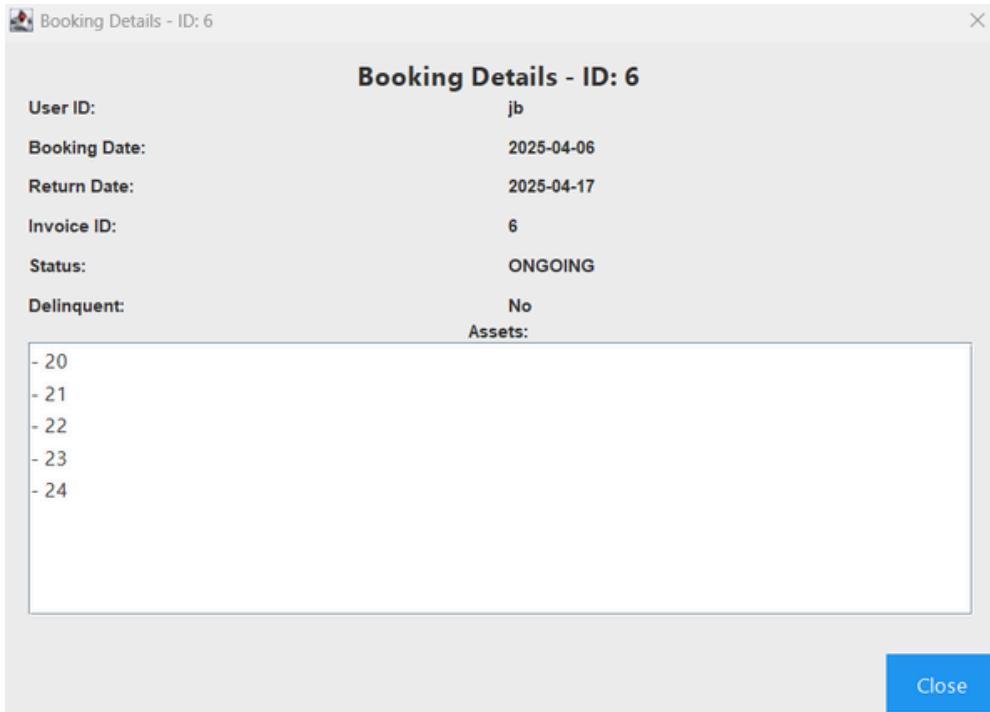
| Dashboard |  | Booking Overview |                   | New Booking |                     | Close Booking       |         | Delete Booking |             | <input checked="" type="radio"/> All |
|-----------|--|------------------|-------------------|-------------|---------------------|---------------------|---------|----------------|-------------|--------------------------------------|
|           |  | Booking ID       | Client Name       | Staff       | Booking Date        | Return Date         | Status  | Delinquent     | No. Of Days |                                      |
| Bookings  |  | 1                | RICK ROSS         | jb          | 2025-04-06 04:00:00 | 2025-04-09 00:00:00 | CLOSED  | No             | 2           |                                      |
| Assets    |  | 2                | Kaydeen Walker    | kw          | 2025-04-06 12:00:00 | 2025-04-12 00:00:00 | CLOSED  | No             | 5           |                                      |
| Customers |  | 3                | George Washin...  | jb          | 2025-04-06 19:00:00 | 2025-04-09 00:00:00 | CLOSED  | No             | 2           |                                      |
| Invoices  |  | 4                | BENJAMIN FR...    | jb          | 2025-04-06 19:00:00 | 2025-04-16 19:00:00 | ONGOING | No             | 9           |                                      |
| Staff     |  | 5                | Hugh Shearer      | jb          | 2025-04-06 10:00:00 | 2025-04-10 10:00:00 | ONGOING | No             | 12          |                                      |
| Reports   |  | 6                | Nanny of The M... | jb          |                     |                     |         | No             | 10          |                                      |
| Logout    |  | 7                | Michael Manley    | jb          |                     |                     |         | No             | 3           |                                      |
|           |  | 8                | Sam Sharpe        | jb          |                     |                     |         | No             | 2           |                                      |

Confirm Action
 

? Are you sure you want to delete booking #1?
 

Yes
No

- **Booking Details**



The **Booking Details screen** provides a comprehensive overview of a specific booking. To access this screen, users double-click on the desired Booking ID within the Bookings list. The screen displays essential booking information, including the User ID, Booking Date, Return Date, Invoice ID, Status (e.g., ONGOING), and Delinquent status. Crucially, it also shows a list of Assets included in the booking. This detailed view allows for a thorough review of all aspects of a rental agreement. Clicking the 'Close' button returns the user to the Bookings screen.



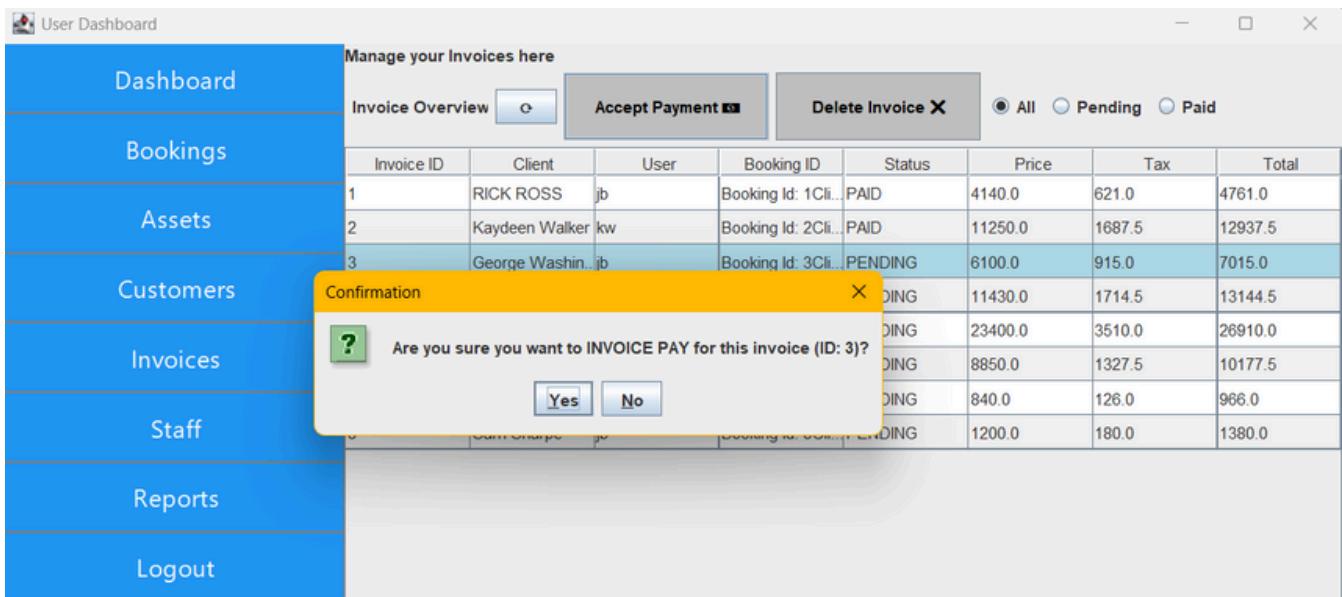
## Invoice Screen

| Dashboard | Invoice Management |                       |                |                        |         |         |        |         |
|-----------|--------------------|-----------------------|----------------|------------------------|---------|---------|--------|---------|
| Bookings  | Invoice Overview   |                       | Accept Payment | Delete Invoice         | Filter  |         |        |         |
| Assets    | Invoice ID         | Client                | User           | Booking ID             | Status  | Price   | Tax    | Total   |
|           | 3                  | George Washington     | jb             | Booking Id: 3Client N. | PAID    | 6100.0  | 915.0  | 7015.0  |
| Customers | 4                  | BENJAMIN FRANKL...    | jb             | Booking Id: 4Client N. | PAID    | 11430.0 | 1714.5 | 13144.5 |
|           | 5                  | Hugh Shearer          | jb             | Booking Id: 5Client N. | PENDING | 23400.0 | 3510.0 | 26910.0 |
| Invoices  | 6                  | Nanny of The Maroo... | jb             | Booking Id: 6Client N. | PENDING | 8850.0  | 1327.5 | 10177.5 |
|           | 7                  | Michael Manley        | jb             | Booking Id: 7Client N. | PENDING | 840.0   | 126.0  | 966.0   |
| Staff     | 8                  | Sam Sharpe            | jb             | Booking Id: 8Client N. | PENDING | 1200.0  | 180.0  | 1380.0  |
|           | 9                  | Judas Iscariot        | jb             | Booking Id: 9Client N. | PENDING | 3430.0  | 514.5  | 3944.5  |
| Reports   |                    |                       |                |                        |         |         |        |         |
| Logout    |                    |                       |                |                        |         |         |        |         |

The **Invoice screen** allows users to manage and track invoices. Key details such as Invoice ID, Client Name, User, Booking ID, Status (Pending or Paid), Price, Tax, and Total are displayed. Users can **'Accept Payment'** for pending invoices, **'Delete'** invoices, and filter invoices by 'All', 'Pending', or 'Paid' status. This screen provides a centralized location for managing billing and payment information.

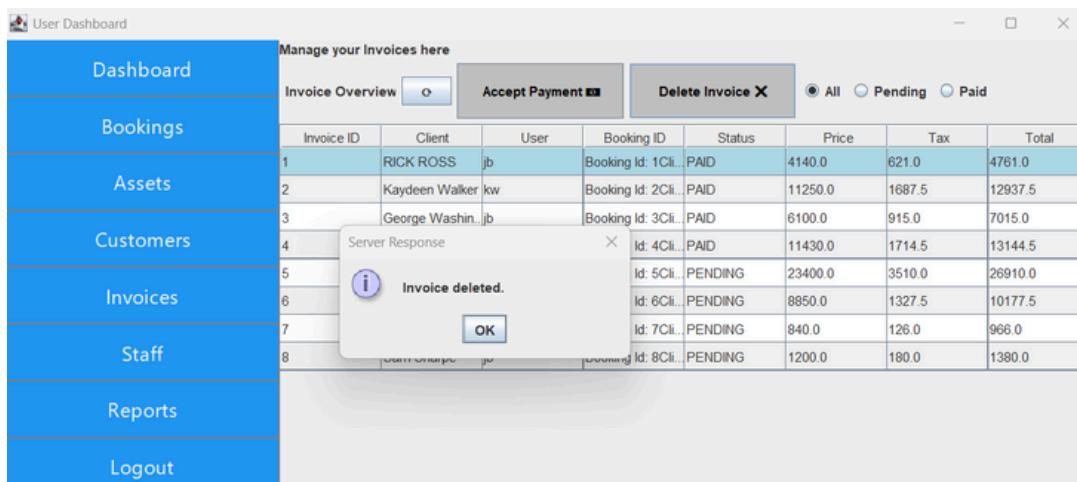
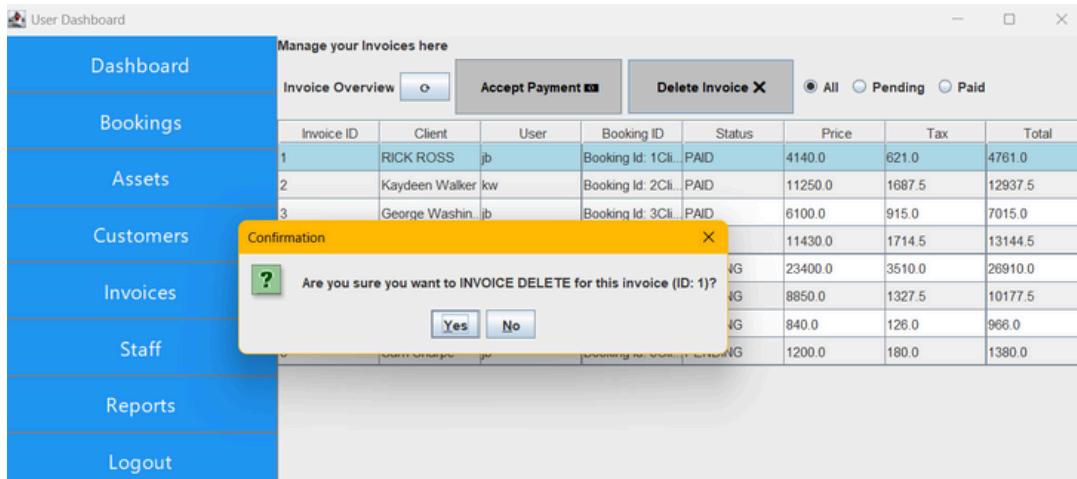
- **Accepting a Payment**

To **accept payment** for an invoice, navigate to the Invoice screen and select the desired Invoice ID. Clicking the 'Accept Payment' button will then prompt the user with a confirmation message: 'Are you sure you want to INVOICE PAY for this invoice (ID: [Invoice ID])?'. Selecting 'Yes' will mark the invoice as 'Paid' within the system. Selecting 'No' will cancel the payment process and return the user to the Invoice screen.

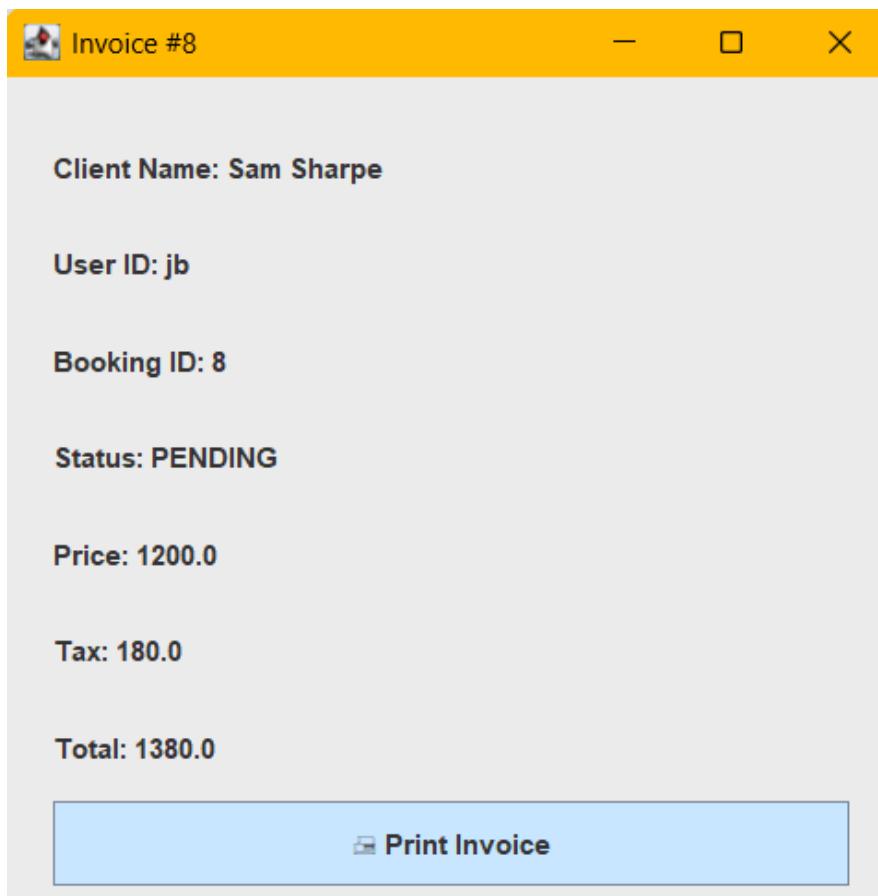


- **Deleting an Invoice**

To **delete an invoice**, select the Invoice ID, then click 'Delete Invoice'. A confirmation prompt appears: 'Are you sure...?'. Confirm with 'Yes' to delete, or 'No' to cancel. Upon successful deletion, an 'Invoice deleted.' message is displayed. Only invoices marked as 'Paid' can be deleted.

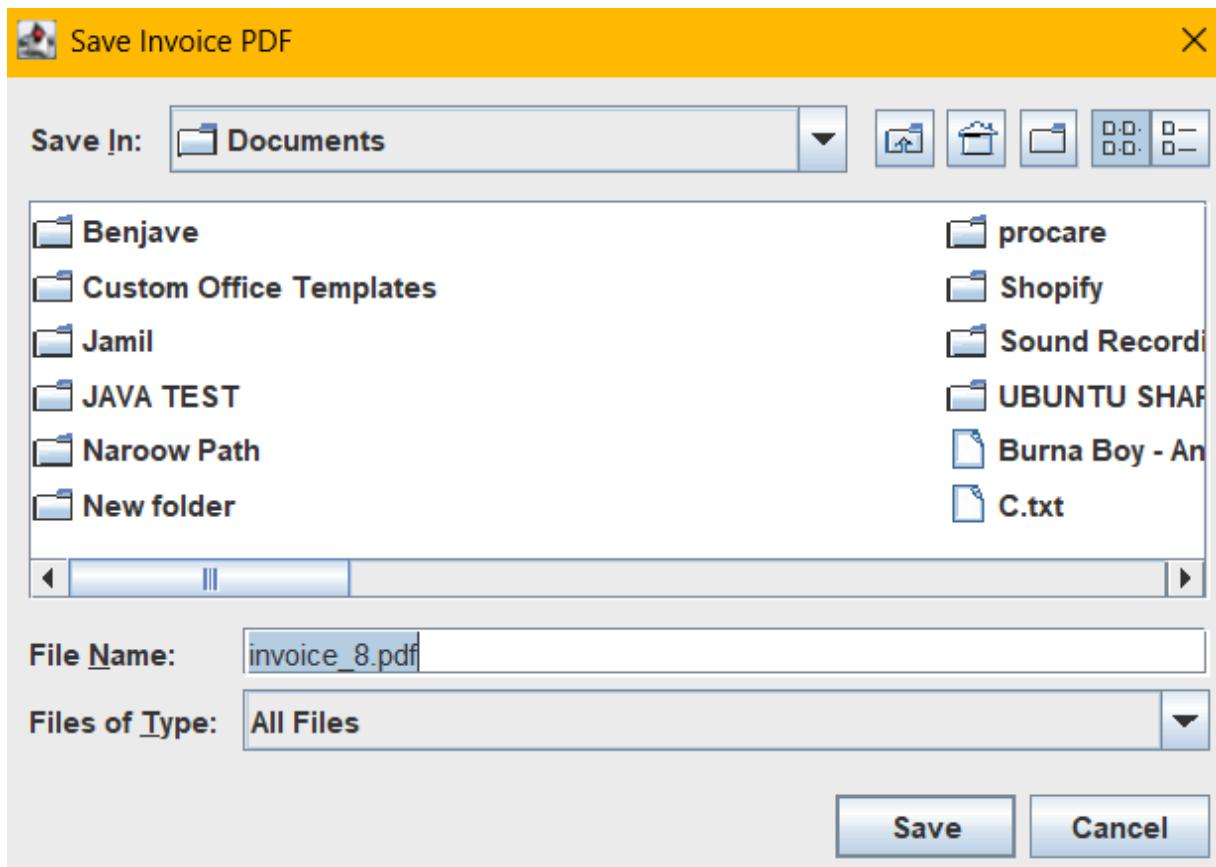


- **Invoice Details**



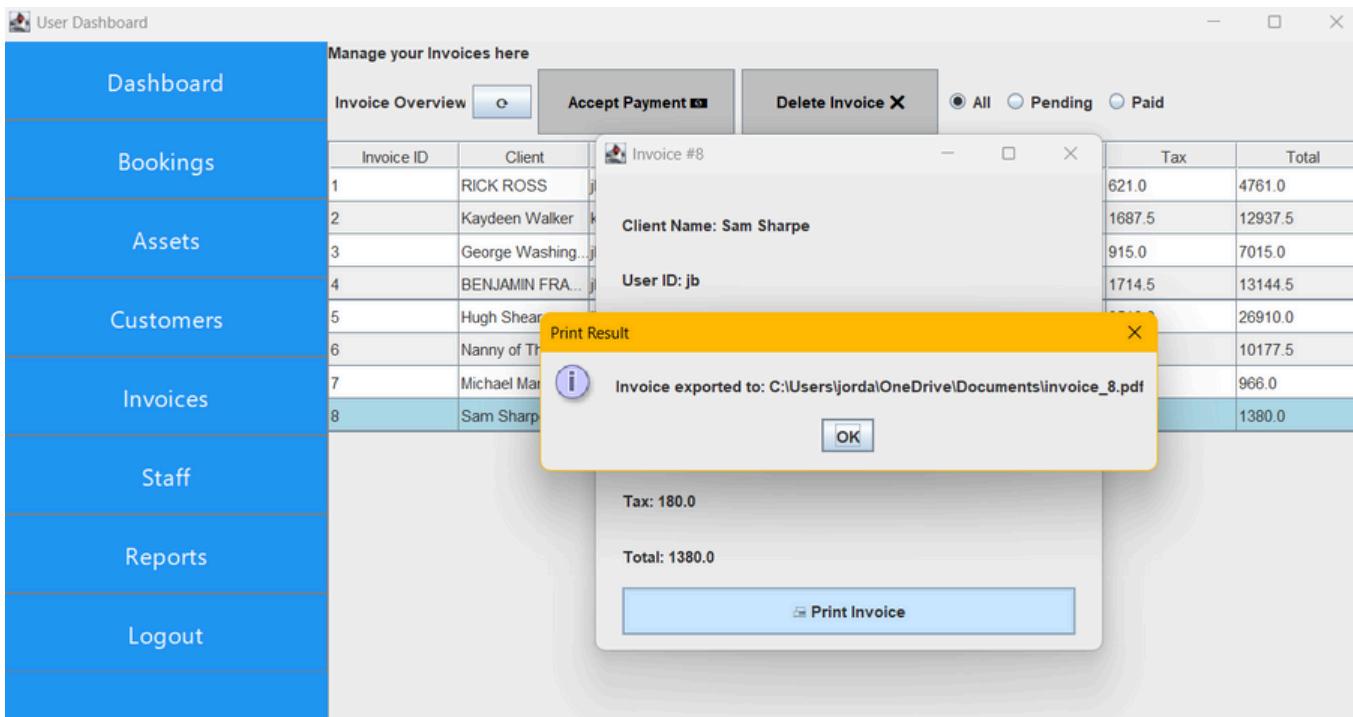
The **Invoice Details screen** provides a detailed view of a specific invoice. To access this screen, users double-click on the desired Invoice ID within the Invoices list. The screen displays key invoice information, including the Client Name, User ID, Booking ID, Status (e.g., PENDING), Price, Tax, and Total amount. This screen allows for a thorough review of all billing information related to a specific booking. Users can also print the invoice by clicking the 'Print Invoice' button, which will allow them to save the invoice to their system as a PDF document.

- **PDF Destination Picker**



Clicking 'Print Invoice' opens the **Save Invoice PDF dialog**, allowing users to save the invoice as a PDF. Users select the destination folder from the 'Save In' dropdown and specify the filename in the 'File Name' field (defaults to 'invoice\_[Invoice ID].pdf'). Clicking 'Save' confirms and saves the PDF, while 'Cancel' closes the dialog without saving.

- Successfully Exported



After successfully saving the invoice as a PDF, a confirmation message appears, as shown in the screenshot. This 'Print Result' dialog displays the message 'Invoice exported to: [File Path]', indicating the exact location where the PDF was saved. This confirms that the export process was completed successfully. Clicking the 'OK' button closes the dialog and returns the user to the Invoice Details screen. This confirmation ensures users are aware of the file location and that the PDF was created as intended.



- **Invoice Generated**

**Invoice #8**

Client Name: Sam Sharpe  
Booking ID: 8  
User ID: jb  
Status: PENDING  
Created On: 2025-04-06 19:12:47.506

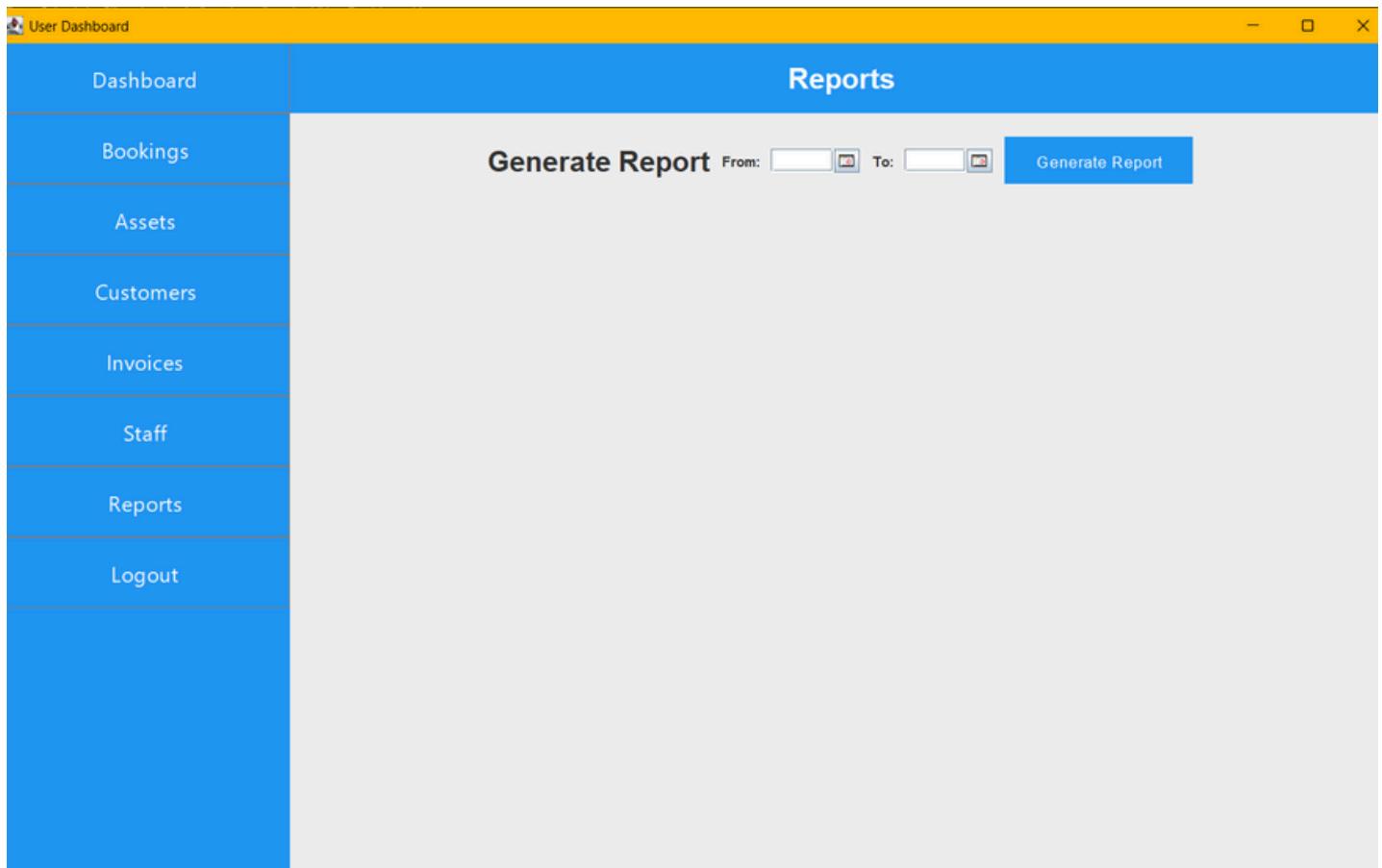
Price: \$1200.0  
Tax: \$180.0  
Total: \$1380.0  
Payment Date: Pending

Booking Details:

| Field          | Value                   |
|----------------|-------------------------|
| Booking ID     | 8                       |
| Client Name    | Sam Sharpe              |
| Client Contact | 566-855-5050            |
| User ID        | jb                      |
| Booking Date   | 2025-04-06 19:12:47.461 |
| Return Date    | 2025-04-09 19:12:39.382 |
| Status         | ONGOING                 |
| Late Return    | No                      |
| Assets         | Subwoofer Array         |

This is the **generated invoice**. It shows billing details (Invoice #, Client, Booking info, amounts) and booking details (dates, assets) in a table. It's for client records.

## Reports Screen



The **Reports page** acts as a central location for generating reports. At a glance, users can initiate the report generation process by specifying a desired Date Range using the "From" and "To" date selectors. Once a date range is selected, clicking the Generate Report button will trigger the system to compile and display the relevant data.



- Report Generated

### Invoice Summary Report

Period: 2025-04-01 to 2025-04-30

Summary:

Total Invoices: 9

Paid Invoices: 4

Total Amount Paid: \$57247.00

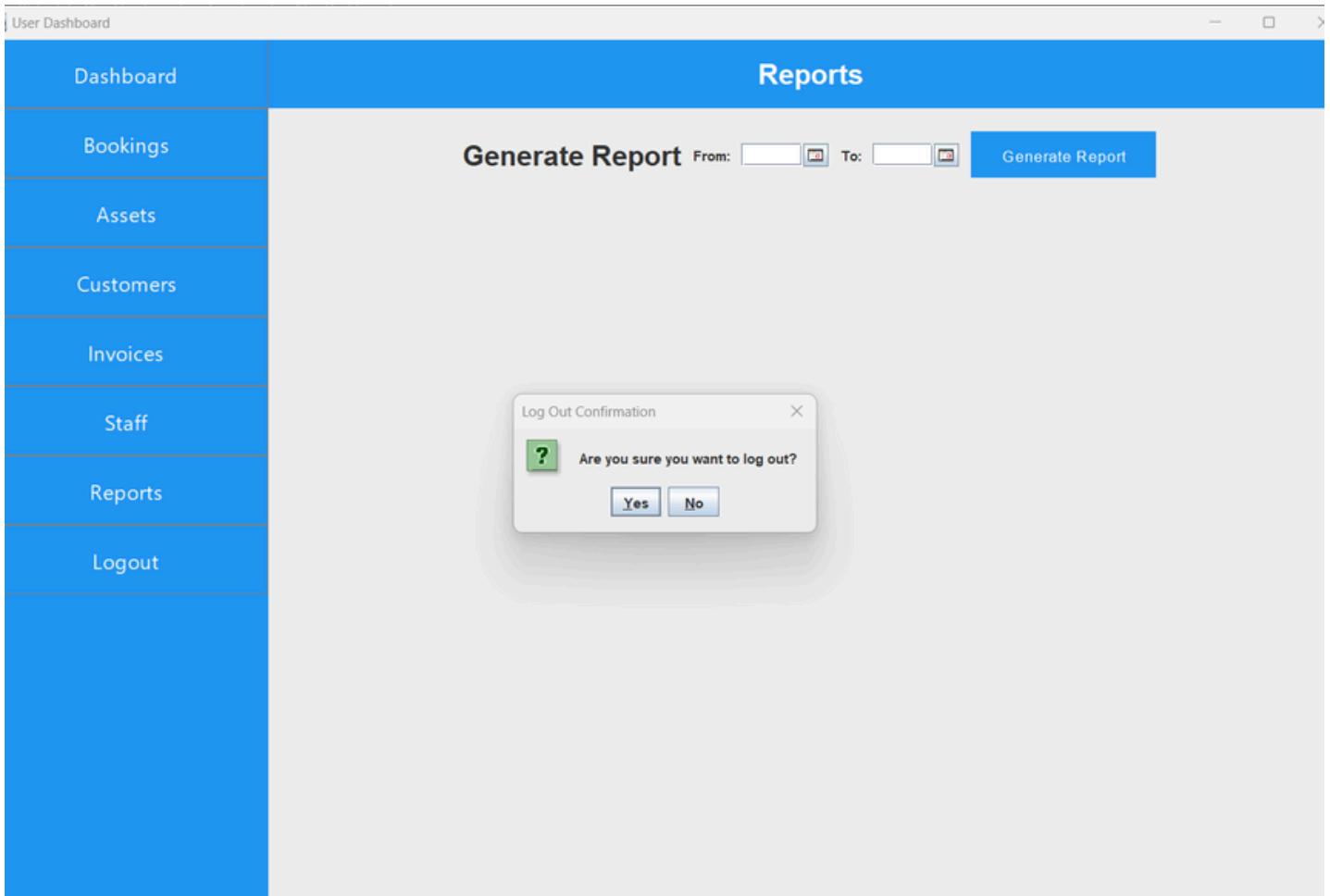
Unpaid/Quote Invoices: 5

Total Unpaid Amount: \$68045.50

| Invoice ID | Client Name          | Created On | Status  | Total (\$) |
|------------|----------------------|------------|---------|------------|
| 3          | George Washington    | 2025-04-06 | PAID    | 7015.00    |
| 4          | BENJAMIN FRANKLIN    | 2025-04-06 | PAID    | 13144.50   |
| 5          | Hugh Shearer         | 2025-04-06 | PAID    | 26910.00   |
| 6          | Nanny of The Maroons | 2025-04-06 | PAID    | 10177.50   |
| 7          | Michael Manley       | 2025-04-06 | PENDING | 966.00     |
| 8          | Sam Sharpe           | 2025-04-06 | PENDING | 1380.00    |
| 9          | Judas Iscariot       | 2025-04-09 | PENDING | 3944.50    |
| 10         | Dwayne Carter        | 2025-04-09 | PENDING | 1955.00    |
| 11         | Andrew Holness       | 2025-04-09 | PENDING | 59800.00   |

This **report** offers a snapshot of your invoicing for the chosen period. It starts with a summary showing the total invoices, paid invoices and amount and unpaid invoices and amount. The following table details each invoice with its ID, client, creation date, payment status (PAID or PENDING), and total value, providing a clear view of your billing status.

## Logout



The screenshot shows the Java Entertainment User Dashboard. On the left is a vertical sidebar with the following menu items: Dashboard, Bookings, Assets, Customers, Invoices, Staff, Reports, and Logout. The Reports item is currently selected, as indicated by its bolded text. The main content area is titled "Reports" and contains a "Generate Report" button with dropdown menus for "From" and "To". A modal dialog box titled "Log Out Confirmation" is displayed in the center, asking "Are you sure you want to log out?" with "Yes" and "No" buttons. The top of the screen has a standard window title bar with "User Dashboard" and standard window control buttons.

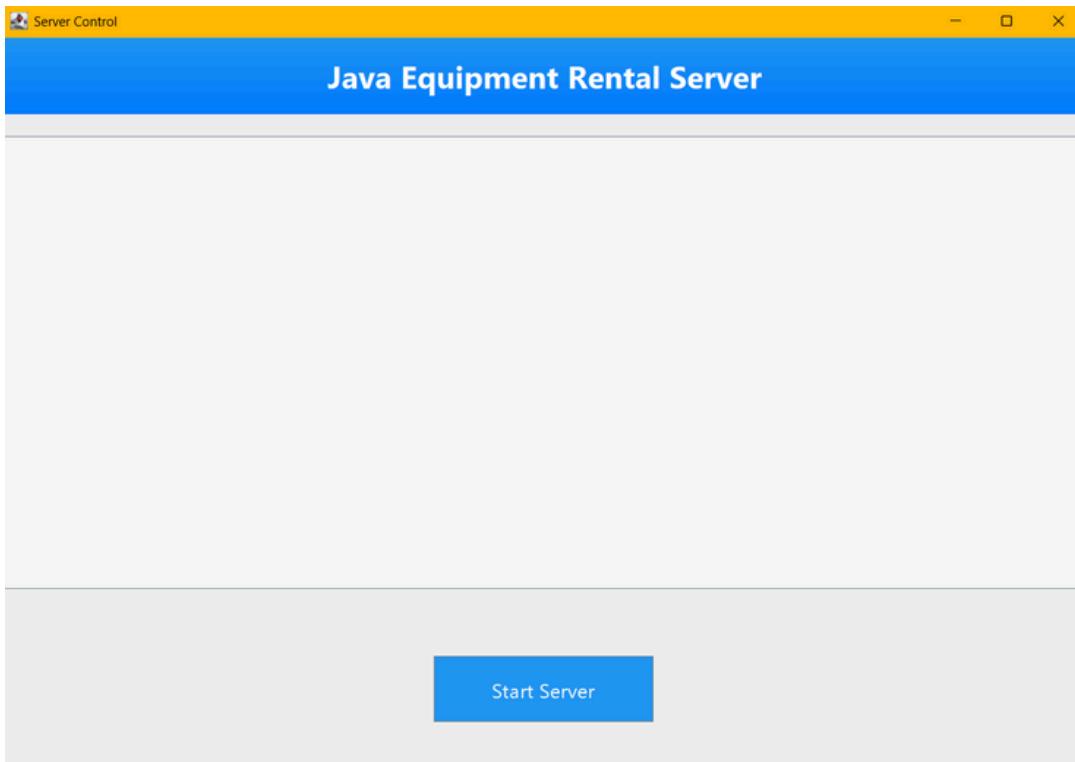
The **Logout button** is located on the left-hand side menu, typically at the bottom. Clicking this button initiates the process of securely logging you out of the Java Entertainment System.



# SERVER SIDE INTERFACE

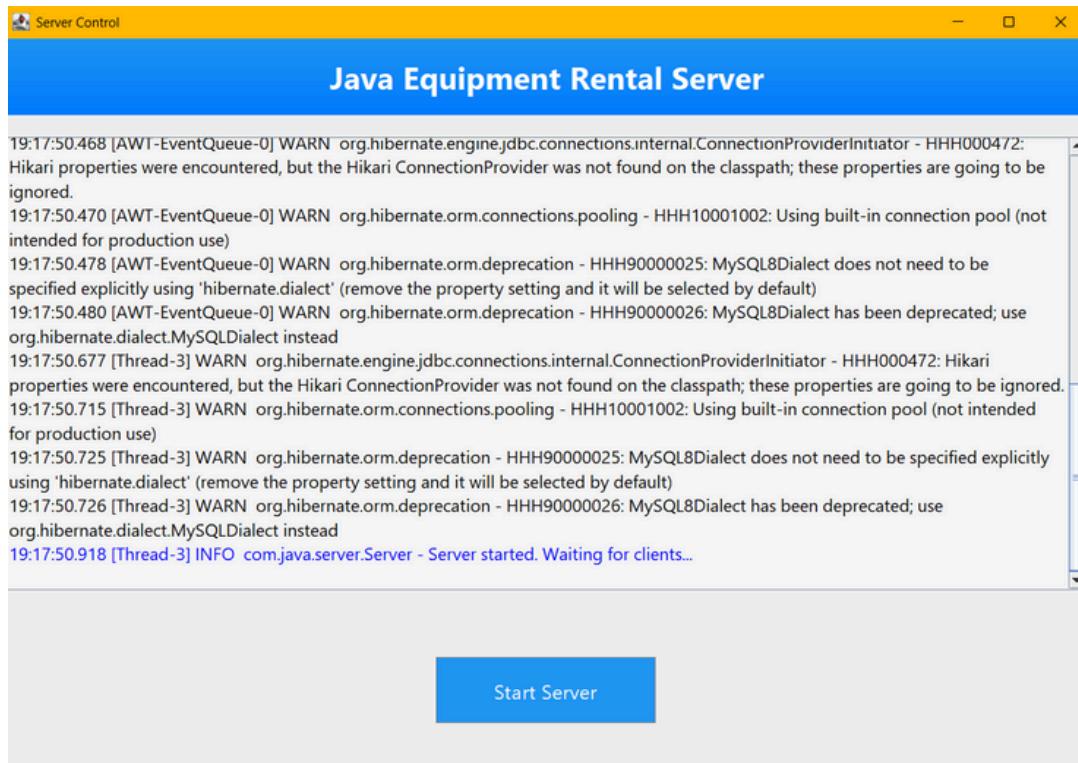
The application for IT Staff to proactively monitor servers and efficiently resolve any problems.

## Start Server



The Server Control screen starts the Java Rental Server via the 'Start Server' button. The central area displays server status and logs.

## Server Control Panel



This **Server Control panel** displays the status and activity of the Java Equipment Rental Server. After clicking 'Start Server', the panel populates with log messages, including warnings, informational messages, and connection details. The final message, 'Server started. Waiting for clients...', indicates that the server is running and ready to accept connections. This panel allows IT staff to monitor server operations and diagnose any issues that may arise. The 'Start Server' button remains visible, but is now inactive, indicating the server is running.

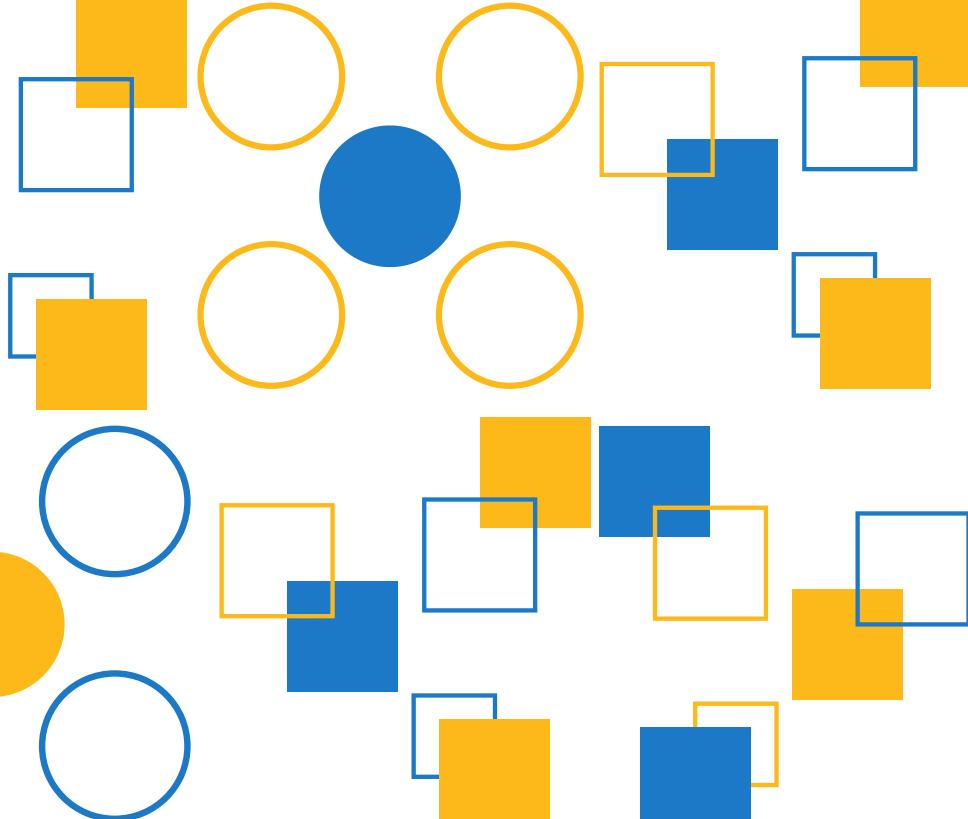
# SERVER SIDE LOGS

To ensure security, facilitate auditing and aid in troubleshooting, the server maintains a running log file.

The log file can be found at **properties/app.log**.

```
1 2025-04-06 01:36:45 [main] INFO com.java.hibernate.AssetManager - Building session factory...
2 2025-04-06 01:36:45 [main] WARN org.hibernate.engine.jdbc.connections.internal.ConnectionProviderInitiatc
3 2025-04-06 01:36:45 [main] WARN org.hibernate.orm.connections.pooling - HHH10001002: Using built-in conne
4 2025-04-06 01:36:46 [main] WARN org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator - HHH0003
5 java.lang.IllegalStateException: Cannot get a connection as the driver manager is not properly initialized
6     at org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl.getConnection(Dr
7     at org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator$ConnectionProviderJdbcConnectionAcc
8     at org.hibernate.resource.transaction.backend.jdbc.internal.JdbcIsolationDelegate.delegateWork(JdbcIs
9     at org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator.getJdbcEnvironmentUsingJdbcMetadata
10    at org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator.initiateService(JdbcEnvironmentInit
11    at org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator.initiateService(JdbcEnvironmentInit
12    at org.hibernate.boot.registry.internal.StandardServiceRegistryImpl.initiateService(StandardServiceReg
13    at org.hibernate.service.internal.AbstractServiceRegistryImpl.createService(AbstractServiceRegistryImp
14    at org.hibernate.service.internal.AbstractServiceRegistryImpl.initializeService(AbstractServiceRegistr
15    at org.hibernate.service.internal.AbstractServiceRegistryImpl.getService(AbstractServiceRegistryImpl.j
16    at org.hibernate.engine.jdbc.internal.JdbcServicesImpl.configure(JdbcServicesImpl.java:52) [hibernate-
17    at org.hibernate.boot.registry.internal.StandardServiceRegistryImpl.configureService(StandardServiceRe
18    at org.hibernate.service.internal.AbstractServiceRegistryImpl.initializeService(AbstractServiceRegistr
19    at org.hibernate.service.internal.AbstractServiceRegistryImpl.getService(AbstractServiceRegistryImpl.j
20    at org.hibernate.engine.jdbc.connections.internal.BasicConnectionCreator.convertSqlException(BasicConn
```

This section displays the server's operational logs. These logs provide information on server activity, warnings and errors. They are primarily used for troubleshooting and monitoring server health. Errors, like the 'Cannot get a connection' message shown, indicate critical issues requiring IT staff attention. Warnings suggest potential configuration improvements. Informational messages show standard server operation.



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