TechInnovators Inc.
Equipment Tracking System
2024

User Manuals and Guides:
End User Documentation

ORACLE APEX APPLICATION(ADMIN)

TechInnovators Inc. Equipment
Tracking System

4227160@MYUWC.AC.ZA

Remember username

Sign In

Navigation Bar:
- Home
- Equipment Management
- Equipment Management – U...
- Employee Booking
- Equipment Summary
- Booking Calender
- Booking Summary
- Equipment Control
- Equipment Location
- Equipment Value

TechInnovators Inc. Equipment Tracking System

Welcome to the Inventory Tracking System!

Overview of each feature:

Equipment Management

- Allows administrators to add and update equipment information.

Employee Booking

- Enables administrators to manage equipment checkouts for employees.

Equipment Summary

- Provides administrators with a comprehensive equipment report summary.

Booking Calendar

Booking Summary

- Offers a detailed report of all equipment bookings made.

Equipment Control

- Monitors equipment inventory, including quantities, low stock items, out-of-stock items, and unreturned equipment.

Equipment Location

- Tracks and displays the location of equipment within warehouses.

Equipment Value

- Shows usage statistics for each piece of equipment.
- Calculates equipment depreciation cost.
- Highlights the top 5 most expensive pieces of equipment.

Home Page
- Overview of features
- Navigation Bar

STEP 2:

ADD / UPDATE NEW EQUIPMENT

Add new equipment

Update existing equipment

View Equipment Summary

Updated Quantity

Book out equipment to employees

View booking calendar

View summary of all bookings

STEP 3:

BOOK OUT
EQUIPMENT TO
EMPLOYEES
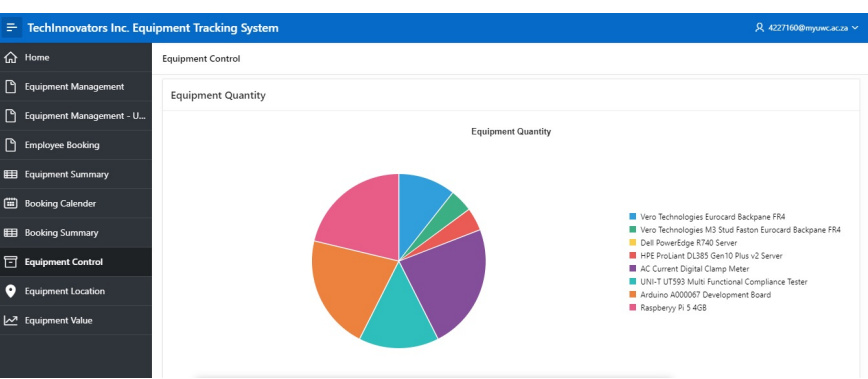
CONTROL EQUIPMENT

- View of Equipment Quantity
- No stock and low stock views
- Equipment not returned

Sidebar Navigation:
- ⌂ Home
- 📄 Equipment Management
- 📄 Equipment Management - U...
- 📄 Employee Booking
- ▦ Equipment Summary
- ▦ Booking Calender
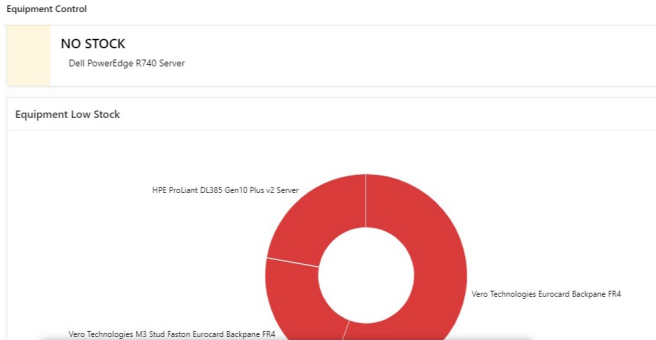- ▦ Booking Summary
- ▦ Equipment Control
- ◉ Equipment Location
- 📈 Equipment Value

Equipment Control

Equipment Quantity

Equipment Quantity

Legend:
- ■ Vero Technologies Eurocard Backpane FR4
- ■ Vero Technologies M3 Stud Faston Eurocard Backpane FR4
- ■ Dell PowerEdge R740 Server
- ■ HPE ProLiant DL385 Gen10 Plus v2 Server
- ■ AC Current Digital Clamp Meter
- ■ UNI-T UT593 Multi Functional Compliance Tester
- ■ Arduino A000067 Development Board
- ■ Raspberyy Pi 5 4GB

Equipment Control

NO STOCK
Dell PowerEdge R740 Server

Equipment Low Stock

HPE ProLiant DL385 Gen10 Plus v2 Server

Vero Technologies Eurocard Backpane FR4

Vero Technologies M3 Stud Faston Eurocard Backpane FR4

Equipment Control

Equipment In Use/Not Returned

Equipment Id ↑≡	Equipment Name	Date Booked	Employee Name	Employee Cell
1	Vero Technologies Eurocard Backpane FR4	5/21/2024	Martha	723851209
3	Dell PowerEdge R740 Server	5/20/2024	Bushra	814075292
4	HPE ProLiant DL385 Gen10 Plus v2 Server	5/22/2024	Tahra	633037745
5	AC Current Digital Clamp Meter	5/19/2024	Martha	723851209
5	AC Current Digital Clamp Meter	5/31/2024	Martha	723851209
6	UNI-T UT593 Multi Functional Compliance Tester	5/21/2024	Tahra	633037745
8	Raspberyy Pi 5 4GB	5/30/2024	Bushra	814075292

1.Inventory Management: Understanding the current quantity of each equipment item helps in efficient inventory management. It allows TechInnovators to plan procurement and replenishment activities effectively, ensuring that they have the necessary equipment available when needed.

2. Resource Allocation: By tracking equipment quantities, organizations can allocate resources appropriately. They can identify which equipment items are in high demand and prioritize their allocation accordingly, optimizing resource utilization.

3.Preventing Stockouts: Knowing when equipment quantities are low or when items are out of stock enables TI to take proactive measures to prevent stockouts. This ensures that operations are not disrupted due to the unavailability of essential equipment.

4.Cost Management: Monitoring equipment quantities helps in controlling costs associated with inventory management. By avoiding overstocking or stockouts, TI can minimize unnecessary expenses related to carrying excess inventory or rush orders to replenish stock.

5.Operational Efficiency: Identifying equipment not returned allows organizations to track the whereabouts of their assets and ensures that they are available for use when needed. This prevents delays in operations caused by missing equipment and reduces the need for emergency replacements, employees cell included to remain in contact with staff who have not returned equipment.

VIEW EQUIPMENT LOCATION

Equipment Location

Location Id ↑≞	Equipment Id	Warehouse Name	Warehouse Room
1	1	Dev_Warehouse	D1
2	2	Dev_Warehouse	D1
3	3	Sys_Warehouse	S1
4	4	Sys_Warehouse	S1
5	5	Test_Warehouse	T1
6	6	Test_Warehouse	T1
7	7	Dev_Warehouse	D2
8	8	Dev_Warehouse	D2

1 - 8

1.Tracking the location of equipment allows TI to keep tabs on their assets. This is especially important for high-value equipment or items that are frequently moved between locations. By knowing where each piece of equipment is at any given time, TI can prevent loss, theft, or misplacement.

2.Operational Efficiency: Knowing the location of equipment streamlines operations. Admin and employees can quickly locate the equipment they need for a particular task, reducing downtime and improving productivity. It also helps in planning and scheduling tasks more effectively, as equipment availability and location are taken into account.

3.Risk Management: Tracking equipment location helps mitigate risks associated with loss or theft. If equipment goes missing, TI can quickly identify its last known location and take appropriate action to recover it. This reduces the financial and operational impact of equipment loss.

- Home
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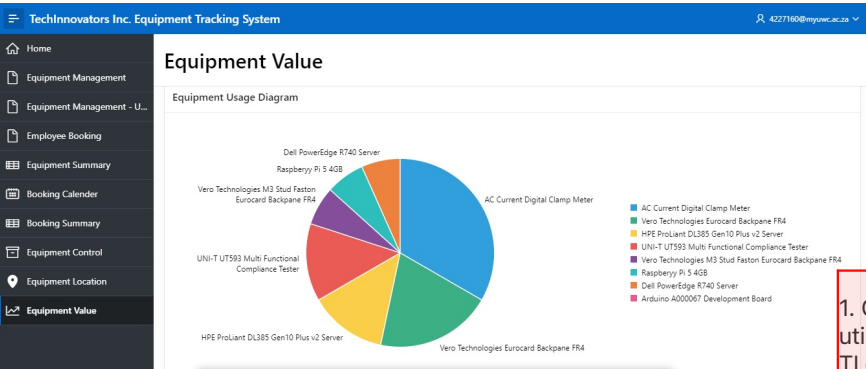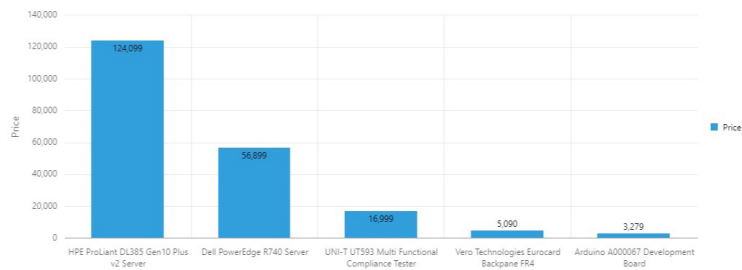- Equipment Value

Equipment Value

Equipment Usage Diagram

Legend:
- AC Current Digital Clamp Meter
- Vero Technologies Eurocard Backpane FR4
- HPE ProLiant DL385 Gen10 Plus v2 Server
- UNI-T UT593 Multi Functional Compliance Tester
- Vero Technologies M3 Stud Faston Eurocard Backpane FR4
- Raspberyy Pi 5 4GB
- Dell PowerEdge R740 Server
- Arduino A000067 Development Board

Equipment Value

Top 5 Expensive Equipment

Bar values:
- HPE ProLiant DL385 Gen10 Plus v2 Server: 124,099
- Dell PowerEdge R740 Server: 56,899
- UNI-T UT593 Multi Functional Compliance Tester: 16,999
- Vero Technologies Eurocard Backpane FR4: 5,090
- Arduino A000067 Development Board: 3,279

Equipment Depreciation

Equipment Id ↑≐	Equipment Name	Equipment Price	Depreciation Amount
1	Vero Technologies Eurocard Backpane FR4	5090	2545
2	Vero Technologies M3 Stud Faston Eurocard Backpane FR4	2157	1078.5
3	Dell PowerEdge R740 Server	56899	28449.5
4	HPE ProLiant DL385 Gen10 Plus v2 Server	124099	62049.5
5	AC Current Digital Clamp Meter	1909	954.5
6	UNI-T UT593 Multi Functional Compliance Tester	16999	8499.5
7	Arduino A000067 Development Board	3279	1639.5
8	Raspberyy Pi 5 4GB	1549	774.5

VIEW EQUIPMENT VALUE

- View Equipment Usage
- View Top 5 Expensive Equipment
- view Equipment Depreciation

1. Optimizing Utilization: Understanding equipment usage helps in optimizing utilization. By tracking how often equipment is used and for what purposes, TI can identify underutilized assets and reallocate them to more productive tasks. This maximizes the return on investment for each piece of equipment.

2. Maintenance Planning: Usage data can inform maintenance schedules and help predict when equipment may require servicing or repairs. By monitoring usage patterns, TI can schedule preventive maintenance activities more effectively, reducing the risk of unexpected downtime due to equipment failure.

3. Cost Management: Identifying the top 5 expensive equipment allows TI to focus their attention and resources on managing these high-value assets effectively. It enables better budget allocation, prioritization of maintenance efforts, and strategic decision-making regarding repair versus replacement.

4. Asset Valuation: Monitoring equipment depreciation provides insights into the financial performance of assets over time. By tracking depreciation rates, TI can accurately assess the current value of their equipment and make informed decisions about asset disposal, replacement, or investment in new equipment.

5. Risk Management: Understanding equipment usage and depreciation helps in identifying potential risks associated with equipment obsolescence or failure. By proactively managing depreciation and monitoring usage patterns, TI can mitigate risks related to equipment downtime, performance issues, or unexpected expenses.

PYTHON APPLICATION (EMPLOYEES)

VIEW EQUIPMENT USAGE
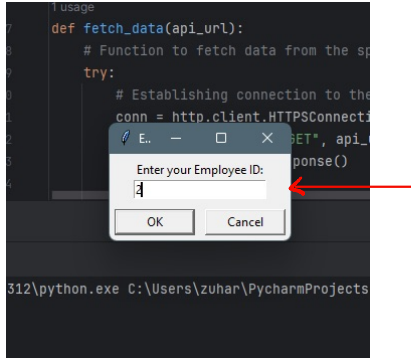
STEP 1:
INSERT EMPLOYEE ID
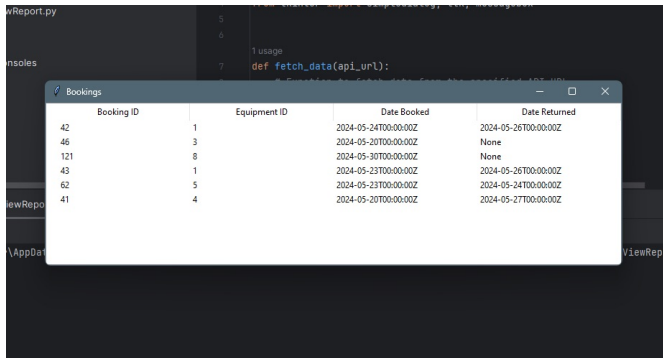
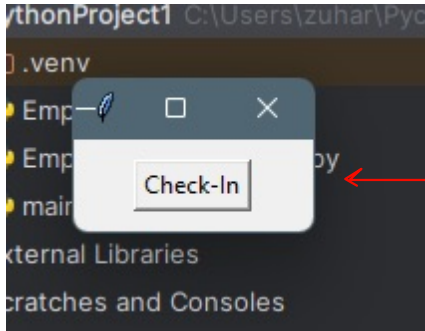View all bookings made

CHECK IN EQUIPMENT

Quantity = 10

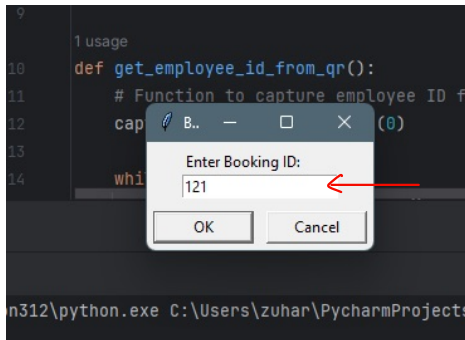| 8	Raspberyy Pi 5 4GB		1549	10	64bit quad-core Arm Cortex A76 Processor 2.4GHz

Equipment table before

22	3	5	5/25/2024	5/26/2024	Martha	AC Current Digital Clamp Meter
121	2	8	5/30/2024		Bushra	Raspberyy Pi 5 4GB

Booking table before

Not returned

STEP 1:
CLICK CHECK IN


```
9
        1 usage
10      def get_employee_id_from_qr():
11          # Function to capture employee ID f
12          cap                          (0)
13
14          whi
```

Enter Booking ID:

121

OK   Cancel

STEP 2:
ENTER BOOKING ID

on312\python.exe C:\Users\zuhar\PycharmProjects
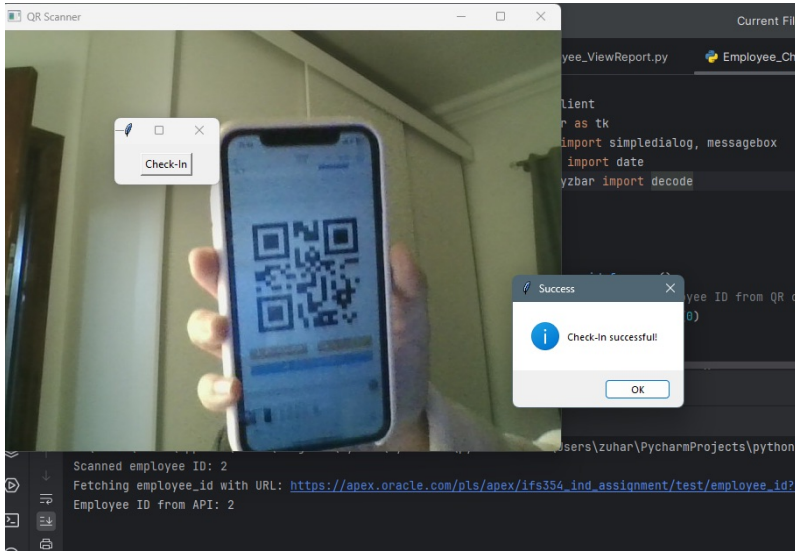
Check in and equipment
quantity update should be
successful
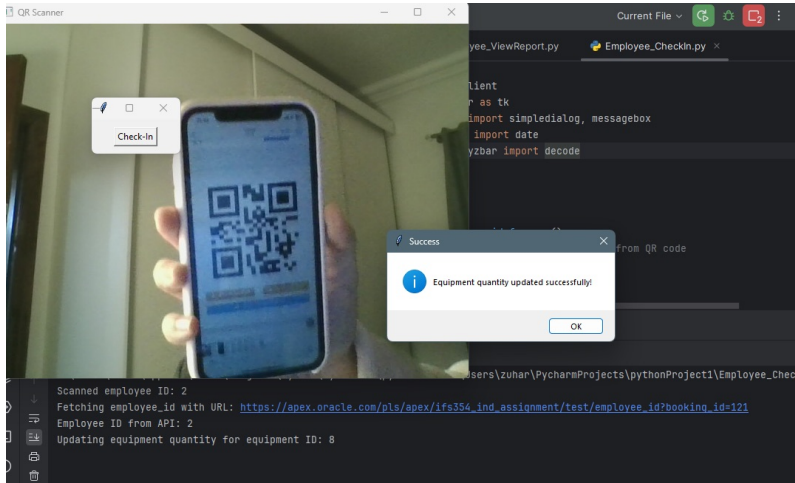
STEP 4:
CHECK DATABASE

Quantity returned to 11

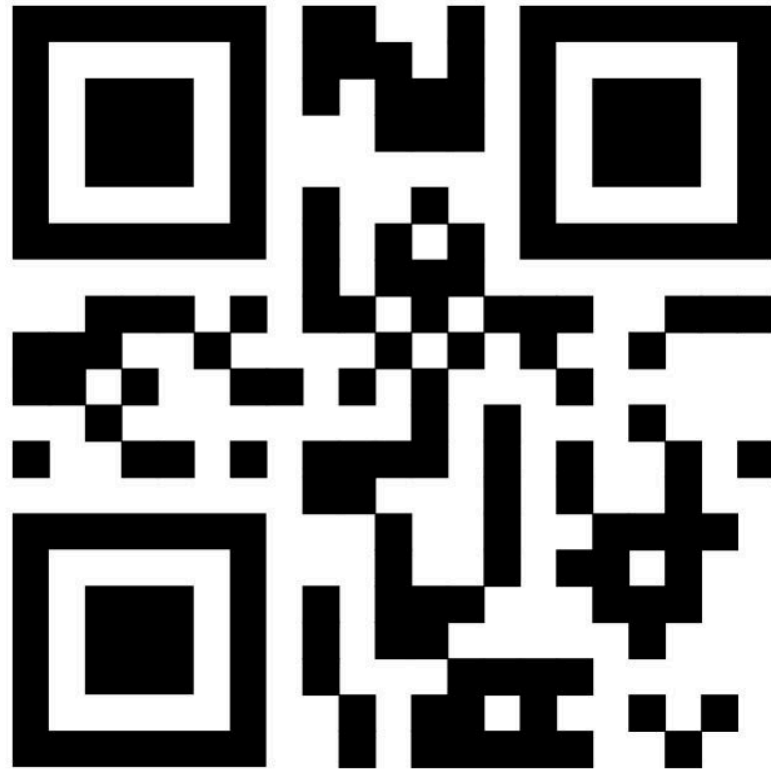| 8	Raspberyy Pi 5 4GB	1549	11	64bit quad-core Arm Cortex A76 Processor 2.4GHz

1 - 8

Equipment table after

Return date : todays date

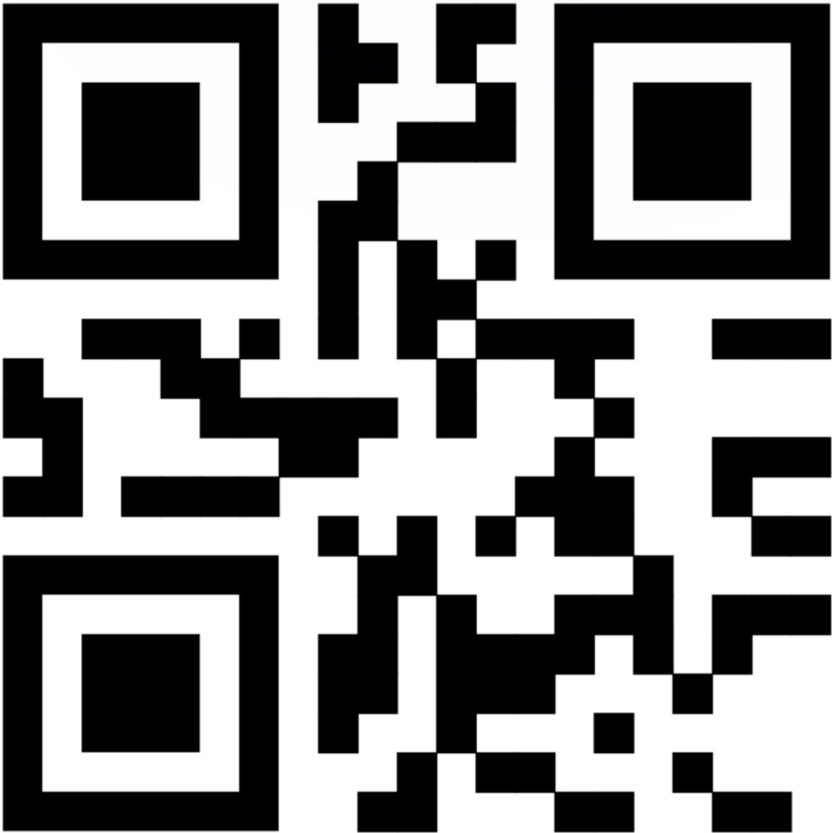| 121	2	8	5/30/2024	5/31/2024	Bushra	Raspberyy Pi 5 4GB

Booking table after

EMPLOYEE ID 1
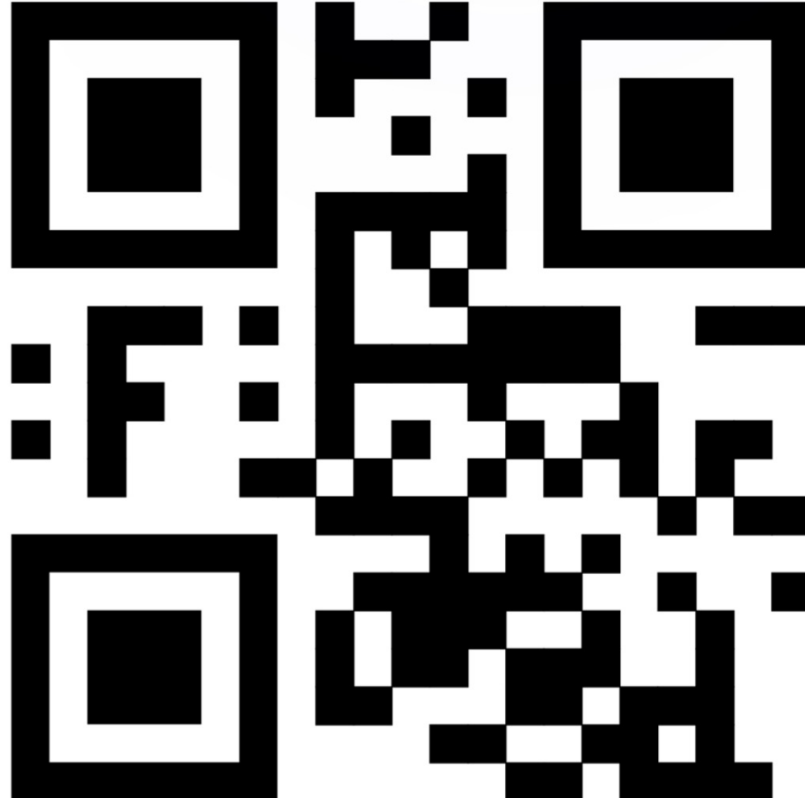
EMPLOYEE ID 2

EMPLOYEE ID 3

EMPLOYEE ID 4