

IndustryAssist

Manage your day-to-day tasks performed at the industry

Category - Web Application

Group Members -

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Overview

It is a web application which fulfills the day-to-day requirement of Manufacturing Industries. This application aims at providing an efficient interface to the industry for managing their product inventory based on each item sold/produced and help their marketing team with a simple and friendly way to create orders.

- ❖ The Inventory will be updated according to daily production, sales, consumption of raw materials. the inventory
- ❖ The new ordering system will allow salespeople to create orders using the software, the created orders that need to be dispatched will be reflected at the admin side.

The Web Application provides two Interfaces :

- ❖ Admin -
 - The owner or manager of the manufacturing Industry
 - Is able to login to the interface after jwt based authentication.
 - Is able to add / remove / update items from the inventory
 - Is able to approve the employees and manage them
 - Is able to view and take action on the placed orders.
 - Is able to view feedback and payment collected by the employee.
- ❖ Employee -
 - The employee of the sales team of the industry
 - Is able to register and login the interface after jwt based authentication
 - Is able to add new customer to the company
 - Is able to view the product availability
 - Is able to place orders for the customers
 - Is able to give feedback to company

Software development Model used : **Waterfall Model**

Testing

For the testing purpose we have used the **Unit testing** methodology as our web application has several independent modules based on the functional requirements.

API's Unit testing :

We have used NodeJS and ExpressJS for writing backend API's. In order to perform unit testing on the API's we have used *Mocha* - a javascript framework for Node.js which allows Asynchronous testing and Chai - an assertion library to assert the actual output with the accepted output.

We have written test files for testing the API's. Here we will explain the structure of one of our test file written for testing :

```
let mongoose = require("mongoose");
const Address = require("../models/Address");
const Customer = require("../models/Customer");
const City = require("../models/City");

//Require the dev-dependencies
let chai = require("chai");
let chaiHttp = require("chai-http");
let server = require("../server");
let should = chai.should();

chai.use(chaiHttp);
```

First we will start with importing database models that are been used in the current API's

Now, we will use `describe(string,callback)` for writing our test cases for the API. Inside the callback , at first we will use `before()` function to empty our database collection before every test case.

```
//Our parent block
describe("Cusmoter", () => {
  before((done) => {
    //Before each test we empty the database
    Customer.remove({}, (err) => {});
    Address.remove({}, (err) => {});
    City.remove({}, (err) => {
      done();
    });
  });
});
```

```
// Test the customer GET route -----
describe("/GET customer", () => {
  //get all the customers
  it("it should GET all the customers", (done) => {
    chai
      .request(server)
      .get("/api/customer")
      .end((err, res) => {
        res.should.have.status(200);
        res.body.should.be.a("array");
        res.body.length.should.be.eql(0);
        done();
      });
  });
});
```

Now , Inside the callback we will start to write the test case for the API. This photo shows the testing for a get customer route. Here we first make and request to the API and then check the returned output with the expected output.

Similarly , we wrote the other test cases for our API's.

Below are the Test result for our backend API's :

```
✓ it should DELETE a stock given the id (500ms)
✓ it should not DELETE as stock with id is not present in the database (172ms)

Supplier
/GET supplier
✓ it should GET all the suppliers (170ms)
/POST supplier
✓ it should POST a supplier (674ms)
/PUT supplier/:id
✓ Edit function of supplier is being checked (920ms)
/DELETE supplier/:id
✓ Delete function of supplier is being checked (513ms)

55 passing (29s)
```

Manual testing :

Upon the implementation of our Web App, it was the time for testing it for all the intended requirements.

Below are the test cases for various functionalities of our application :

Register And Login functionality for both Admin and Employee :

Note : Only Approved Employees can Login to the Application (part of requirements)

TestCase 1 : (SignUp)

Input : Proper Details are filled in the form while Sign up (Register)



IndustryAssist Register Login

Sign Up

Create Your Account

Test

Employee

8394894845

Admin

testemp@test.com

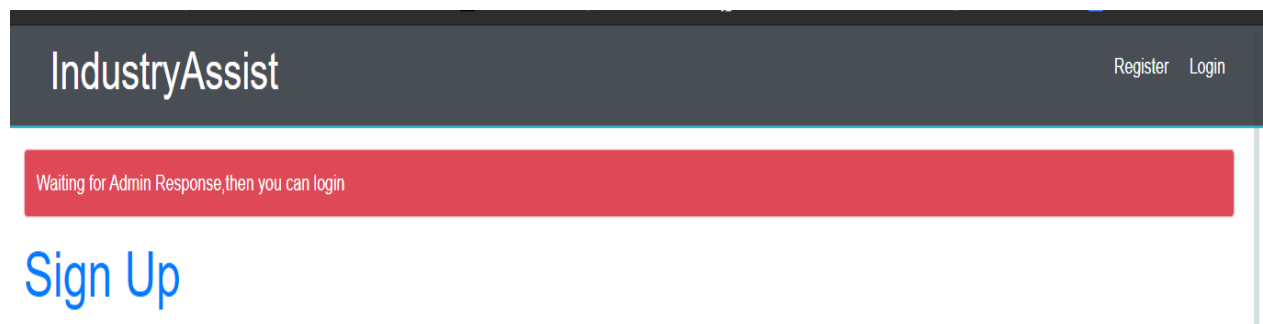
.....

.....

Register

Already have an account? [Sign In](#)

Output :



IndustryAssist Register Login

Waiting for Admin Response, then you can login

Sign Up

Status : Passed

TestCase 2 : (SignUp)

Input : In the Sign up form password and confirm password field doesn't match.

Expected Output : Password Mismatch (i.e password and confirm password should be same)

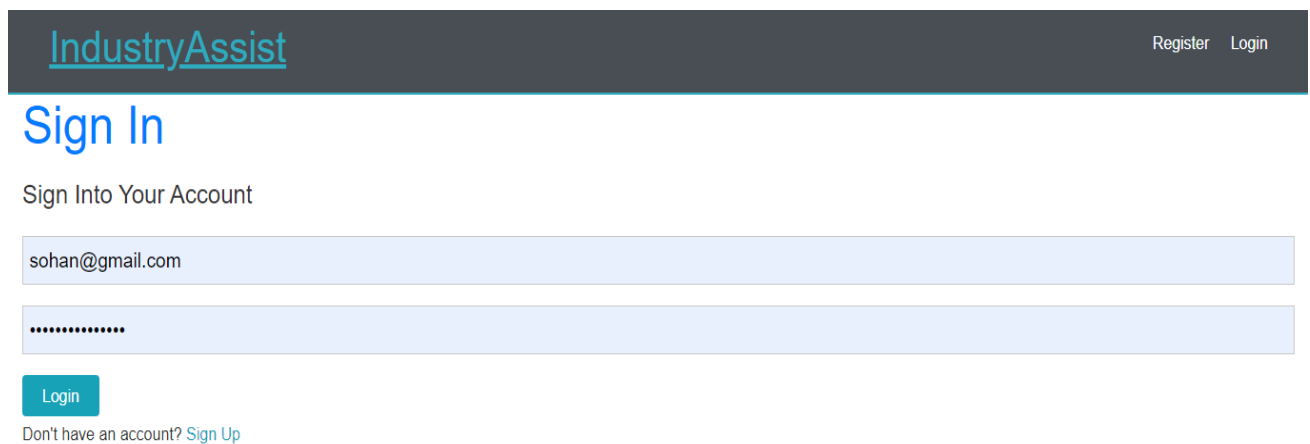
Output :



Status : Passed

TestCase 3 : (Login)

Input : { Correct Email Id , correct Password }



Expected Output : Successful login! (i.e redirect to dashboard based on the role)

Output :

The screenshot shows the 'IndustryAssist' dashboard. At the top, there's a header with the logo and 'Dashboard Logout' links. A sidebar on the left contains a navigation menu with items like 'Welcome Sohan', 'Products', 'Employees', 'Customers', 'Stocks' (highlighted), 'Orders', 'Sales', 'Production', 'Suppliers', and 'Raw Materials'. The main content area features a green banner for 'Successful Login !'. Below this is a 'Dashboard' section with a 'Today' card showing 'Sales: 1' and 'To Dispatch: 0', each with a 'View' link. A 'Stock Alert' table lists products like 'Agricure' and 'Counter' with their packing, quantity, and last updated date. To the right, a 'Pending Orders' table shows orders with columns for Customer, Order Date, Status (all 'Pending'), and Employee (all 'Rishabh Batti'). A 'New Employees' section is partially visible at the bottom right.

Status : Passed

TestCase 4 : (Login)

Input : { correct Email Id , incorrect Password } or { Incorrect Email Id , correct Password }
or { incorrect Email Id , incorrect Password }

Expected Output : Invalid credentials i.e Login failed

Output :

Invalid Credentials

Sign In

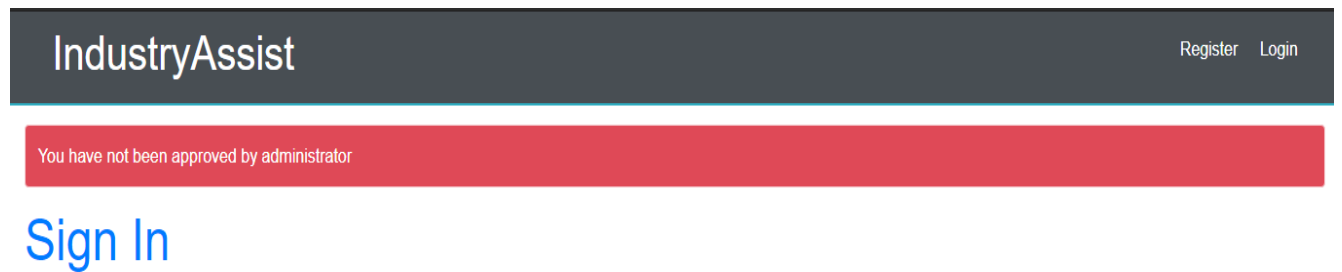
Status : Passed

TestCase 5 : (Login)

Input : Employee enters correct Email Id and Password but is not yet approved by admin.

Expected Output : Login Failed. (you are not approved by admin)

Output :



Status : Passed

ADMIN INTERFACE

1. Approve new registered employee:

TestCase 1.1 :

Input : Click on Tick or Cross corresponding to the employee row.

New Employees		See All
Name	Position	Action
yash raj	Admin	→ <input checked="" type="checkbox"/> <input type="checkbox"/> ←
sohan1 lal	Employee	<input checked="" type="checkbox"/> <input type="checkbox"/>
ramesh thakur	Employee	<input checked="" type="checkbox"/> <input type="checkbox"/>

Expected Output : If tick is chosen the else approved else rejected

Output : (Based on the action taken (in this cases employee is approved))

New Employees		See All
Employee Approved		
Name	Position	Action
sohan1 lal	Employee	<input checked="" type="checkbox"/> <input type="checkbox"/>
ramesh thakur	Employee	<input checked="" type="checkbox"/> <input type="checkbox"/>

Status : Passed

2. Add / Update Products :

TestCase 2.1 : (ADD Product)

Input :

Add Product

Product Name

Manco

Product Description

Mancozeb 75% WP

Category

Fungicide

Add Product

Cancel

Expected Output : Product Should be Successfully Added.

Output :

Product added successfully

Products

Product Name	Description	Category	Actions	
Abba	Abamectin	Insecticide	Edit	Delete
Counter	Terbufos	Insecticide	Edit	Delete
Agricure	Carbonic acid and potassium salt	Fungicide	Edit	Delete
Manco	Mancozeb 75% WP	Fungicide	Edit	Delete

Status : Passed

TestCase 2.2 (EDIT Product) :

Input:

Products

Manco	Mancozeb 75% WP	Fungicide	<div>EditDelete</div>
<div>Product Name</div> <div>Manco</div> <div>Product Description</div> <div>Edited : Mancozeb 75% WP</div> <div>Category</div> <div>Fungicide</div> <div>Edit Product</div>			

Expected Output : Product should be successfully updated.

Output :

Product updated successfully

Products

Product Name	Description	Category	Actions	
Abba	Abamectin	Insecticide	Edit	Delete
Counter	Terbufos	Insecticide	Edit	Delete
Agricure	Carbonic acid and potassium salt	Fungicide	Edit	Delete
Manco	Edited : Mancozeb 75% WP	Fungicide	Edit	Delete

Status : Passed

3. Add / Update Supplier :

TestCase 3.1 : (ADD Supplier)

Input :

Add Supplier

Supplier Name

Ramesh Tiwari

Email

Ramesh@gmail.com

Mobile No.

9876543445

Address

ME-037-350, VILL-Sojawalpur,

Landmark

Near Stadium

Pincode

611245

City

Pune

Add Supplier

Cancel

Expected Output : Supplier should be successfully Added.

Output :

New supplier added

Suppliers

Name	Mobile No.	Email	City	Actions
Ramesh Tiwari	9876543445	Ramesh@gmail.com	Pune	Edit Delete

Add Supplier

Status : Passed

TestCase 3.2 : (EDIT Supplier)

Input :

Suppliers

Ramesh Sharma	
Email	Mobile No.
Ramesh123@gmail.com	9876543445
Address	
ME-037-350, VILL-Sojawalpur,	
Landmark	
Near Stadium	
Pincode	City
611245	Pune
<button>Edit Supplier</button>	<button>Cancel</button>

Expected Output : Supplier should be successfully updated.

Output :

supplier edited successfully

Suppliers

Name	Mobile No.	Email	City	Actions
Ramesh Sharma	9876543445	Ramesh123@gmail.com	Pune	<button>Edit</button> <button>Delete</button>
Srinath Srivastav	7903059504	sriNath@gmail.com	Bhopal	<button>Edit</button> <button>Delete</button>
Kirthana C. Vemula	9678453345	Kcvemula@gmail.com	west Uttam-nagar	<button>Edit</button> <button>Delete</button>

Status : Passed

4. Add / Update Raw material :

TestCase 4.1 : (ADD Raw-Material)

Input :

Add Raw Material

Raw Material Name

Ethylenediamine

Quantity

35

Unit

kg

Supplier Name

Srinath Srivastav

Add Raw Material

Cancel

Expected Output : Raw material should be successfully added.

Output :

New Raw materials added

Raw Materials

Name	Quantity	Recieving Date	Supplier	Actions
Ethylenediamine	35 kg	2021-04-20	Srinath Srivastav	Edit Delete

Add RawMaterial

Status : Passed

TestCase 4.2 : (EDIT Raw-Materials)

Input :

Raw Materials

Raw Material Name

Ethylenediamine-234

Quantity

37

Unit

kg

Supplier Name

Srinath Srivastav

Edit Raw Material

Expected Output : Raw material should be successfully updated.

Output :

Raw materials edited succesfully

Raw Materials

Name	Quantity	Receiving Date	Supplier	Actions	
Ethylenediamine-234	37 kg	2021-04-20	Srinath Srivastav	Edit	Delete
Carbon disulfide	47 kg	2021-04-20	Kirthana C. Vemula	Edit	Delete

Status : Passed

5. Add / Update Stock :

TestCase 5.1 : (ADD Stock)

Input :

Add Stock

Select Product

Manco

Select Packing

1

Quantity

77

Price

250

Add Stock

Cancel

Expected Output : Stock should be successfully added.

Output :

New stock added

Stocks

Product Name	Packing	Quantity	Price	Last Update	Actions
Manco	1 kg	77	250	2021-04-20	Edit Delete

Add Stock

Status : Passed

TestCase 5.2 : (EDIT Stock)

Input :

Stocks

Select Product

Agricure

Select Packing

5

Quantity

45

Price

140

Edit Stock

Expected Output : Stock should be successfully updated.

Output :

Stocks edited succesfully

Stocks

Product Name	Packing	Quantity	Price	Last Update	Actions	
Agricure	5 ltr	45	140	2021-04-20	Edit	Delete

Status : Passed

6. Confirm and Dispatch Placed Order :

TestCase 6.1 : (confirm order)

Input : On click on Confirm button present corresponding to the order.

Orders

All

Pending

Confirmed

Dispatched

Name	Order Date	Dispatch Date	Status	Action	#
Test User3	2021-04-20	Not Dispatched	Pending	Confirm ←	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User3	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View

Expected Output : Order status should be changed to confirmed..

Output : (order is now confirmed and waiting to be dispatched)

Order Confirmed !

Orders

All

Pending

Confirmed

Dispatched

Name	Order Date	Dispatch Date	Status	Action	#
Test User3	2021-04-20	Not Dispatched	Confirmed	<div>Dispatch No</div> <div>Go</div>	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User3	2021-04-20	Not Dispatched	Pending	Confirm	View

Status : Passed

TestCase 6.2 : (Dispatch order)

Input : On filling the dispatch number , click on go to dispatch the order

Orders

All

Pending

Confirmed

Dispatched

Name	Order Date	Dispatch Date	Status	Action	#
Test User3	2021-04-20	Not Dispatched	Confirmed	<div>Dispatch No</div> <div>Go</div> <div></div>	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User3	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View

Expected Output : Order status should be change to dispatched.

Output : (order is now dispatched and dispatched number can be seen)

Order Dispatched with dispatch num: 86745 !

Orders

All

Pending

Confirmed

Dispatched

Name	Order Date	Dispatch Date	Status	Action	#
Test User3	2021-04-20	2021-04-20	Dispatched	86745	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User1edit	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User3	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View

Status : Passed

View Sales details

IndustryAssist

Dashboard Logout

Welcome Sohan

Products

Employees

Customers

Stocks

Orders

Sales

Production

Suppliers

Raw Materials

Sales

Total Orders
14
View

Confirmed Orders
3
View

Dispatched Orders
4
View

Sales History

#	Product	Size	Quantity sold
#	Agricure	5 ltr	10 ltr
#	Manco	1 kg	23 kg
#	Counter	5 ltr	6 ltr

To be Dispatched

#	Product	Size	Quantity sold
#	Manco	1 kg	10 kg
#	Manco	500 g	7 kg
#	Agricure	500 g	6 kg

View Sales and Production details

IndustryAssist

Dashboard Logout

Welcome Sohan

Products

Employees

Customers

Stocks

Orders

Sales

Production

Suppliers

Raw Materials

Production Details

Product	Packaging	Production	Date
Counter	5 ltr	154 Ltr	2021-04-20
Manco	1 kg	63 Kg	2021-04-20
Agricure	5 ltr	10 Ltr	2021-04-20

From
dd-mm-yyyy

To
dd-mm-yyyy

Search Reset

View Customers details

IndustryAssist

Dashboard Logout

Welcome Rishabh

Dashboard

Products

Customers


Stocks

Orders

Payments

Feedbacks

Test User1edit



Test User1edit

9887367344

Indore

Rishabh Batti

Past Orders

Order Date	Status	Dispatch Date	
2021-04-20	Dispatched	2021-04-20	v
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Pending	Not Dispatched	v

Past Payments

Date	Amount
2021-04-18	50000
2021-04-15	25000

View Employee details :

IndustryAssist

Dashboard Logout

Welcome Rishabh

Dashboard

Products

Customers


Stocks

Orders

Payments

Feedbacks

Profile



Rishabh Batti

rishabh@gmail.com

344546565

Past Orders

Order Date	Status	Dispatch Date	
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Dispatched	2021-04-20	v

Payments

Date	Amount	Customer Name
2021-04-18	Rs. 50000	Test User1edit
2021-04-15	Rs. 25000	Test User1edit

EMPLOYEE INTERFACE

1. Add / Update customer :

TestCase 1.1 : (Add new customer)

Input :

Add Customer

First Name

Last Name

Test

User2

Mobile Number

2334354587

Address

222 - A , xxc colony

Landmark

near dskdspl

City

Pincode

Guwahati

781015

Submit

Cancel

Expected Output : Customer Should be Successfully Added.

Output :

New Customer added

Customers

Name	Contact	City	Actions
Test User1	8347237823	Indore	<div>Edit</div> <div>Delete</div>
Test User2	2334354587	Guwahati	<div>Edit</div> <div>Delete</div>

Add Customer

Status : Passed

TestCase 1.2 : (Update/edit customer details)

After clicking on the Edit button form with customer's details will open , which you can edit and click submit.

After edit Click : (previously stored customer details)

First Name	Last Name
<input type="text" value="Test"/>	<input type="text" value="User1"/>
Mobile Number	
<input type="text" value="9887367344"/>	
Address	
<input type="text" value="1353 - A , xyz colony"/>	
Landmark	
<input type="text" value="near lorem ipsum"/>	
City	Pincode
<input type="text" value="Indore"/>	<input type="text" value="452009"/>
<input type="submit" value="Submit"/>	<input type="button" value="Cancel"/>

Upon Updating the desired fields :

First Name	Last Name
<input type="text" value="Test"/>	<input type="text" value="User1edit"/>
Mobile Number	
<input type="text" value="9887367344"/>	
Address	
<input type="text" value="1353 - A , xyz colony"/>	
Landmark	
<input type="text" value="near lorem ipsum"/>	
City	Pincode
<input type="text" value="Indore"/>	<input type="text" value="452009"/>
<input type="submit" value="Submit"/>	<input type="button" value="Cancel"/>

Output :

Customer profile edited successfully

Customers

Name	Contact	City	Actions	
Test User1edit	9887367344	Indore	Edit	Delete
Test User2	2334354587	Guwahati	Edit	Delete
Test User3	7873487343	Ujjain	Edit	Delete

Status : Passed

2. Place a new Order for a customer:

TestCase 2.1 :

Input :

Create Order

Product	Packing	Quantity
Abba	5 ltr	10
Agricure	5 ltr	10

Product

Packing

Quantity

Add Item

Select Customer

Add order

Cancel

Expected Output : Order Should be Successfully Placed.

Output : (on clicking Add order)

Order added successfully

Orders

All Pending Confirmed Dispatched

Name	Order Date	Dispatch Date	Status	Action	#
→ Test User3	2021-04-20	Not Dispatched	Pending	Confirm	View
Test User2	2021-04-20	Not Dispatched	Pending	Confirm	View

Create Order

Status : Passed

3. Add collected Payment detail:

TestCase 3.1 :

Input :

Add Payment

Customer

Test User1

Date

15-04-2021

Amount

25000

Submit

Cancel

Expected Output : Payment entry Should be Successfully Added.

Output :

Payment added

Payments

Customer Name	Date	Amount	Actions	
Test User1	2021-04-15	Rs. 25000	Edit	Delete

Add Payment

Status : Passed

4. Give feedback to the company :

TestCase 4 :

Input :

Add Feedback

Subject

Testing

Feedback

Testing succesfull

Submit

Cancel

Expected Output : Feedback Should be Successfully posted.

Output :

Feedback added succesfully

Feedbacks

Employee Name	Subject	#	Actions	
Rishabh Batti	Testing	View	Edit	Delete

Add Feedback

Status : Passed

View his/her Profile

IndustryAssist

Dashboard Logout

Welcome Rishabh

Dashboard

Products

Customers


Stocks

Orders

Payments

Feedbacks

Profile



Rishabh Batti

rishabh@gmail.com

344546565

Past Orders

Order Date	Status	Dispatch Date	
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Dispatched	2021-04-20	v
2021-04-20	Pending	Not Dispatched	v

Payments

Date	Amount	Customer Name
2021-04-18	Rs. 50000	Test User1edit
2021-04-15	Rs. 25000	Test User1edit

View customer's Profile

IndustryAssist

Dashboard Logout

Welcome Rishabh

Dashboard

Products

Customers


Stocks

Orders

Payments

Feedbacks

Test User1edit



Test User1edit

9887367344

Indore

Rishabh Batti

Past Orders

Order Date	Status	Dispatch Date	
2021-04-20	Dispatched	2021-04-20	v
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Pending	Not Dispatched	v
2021-04-20	Pending	Not Dispatched	v

Past Payments

Date	Amount
2021-04-18	50000
2021-04-15	25000

