

Date	17 November 2022
Team ID	PNT2022TMID53036
Project Name	Project - Inventory Management System For Retailers

Ibm cloud and Docker Login in CMD :

```

C:\Windows\System32\cmd.exe

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>ibmcloud login
API endpoint: https://cloud.ibm.com
Region: eu-gb

Email> aravindan19023@cse.ssn.edu.in
Password>
Authenticating...
OK

Targeted account Aravindan S's Account (ea1e0298ca5442cd869ea3f748e6cf43)

API endpoint: https://cloud.ibm.com
Region: eu-gb
User: aravindan19023@cse.ssn.edu.in
Account: Aravindan S's Account (ea1e0298ca5442cd869ea3f748e6cf43)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.
OK

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>

```

Creating Namespace in ibm cloud:

Push the image into Namespace Repository and images:

```

C:\Windows\System32\cmd.exe

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.
OK

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>ibmcloud cr namespace-add sprint4
No resource group is targeted. Therefore, the default resource group for the account ( Default ) is targeted.
Adding namespace 'sprint4' in resource group 'Default' for account Aravindan S's Account in registry icr.io...
Successfully added namespace 'sprint4'
OK

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>docker tag sprint3 icr.io/sprint4/sprint4-repo

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>docker push icr.io/sprint4/sprint4-repo
Using default tag: latest
The push refers to repository [icr.io/sprint4/sprint4-repo]
04dc302fe006: Pushed
716c6b4c3190: Pushed
952b0d25f857: Pushed
98334b4c7ec9: Pushed
9fda40ddc568: Pushed
428e1f341db7: Pushed

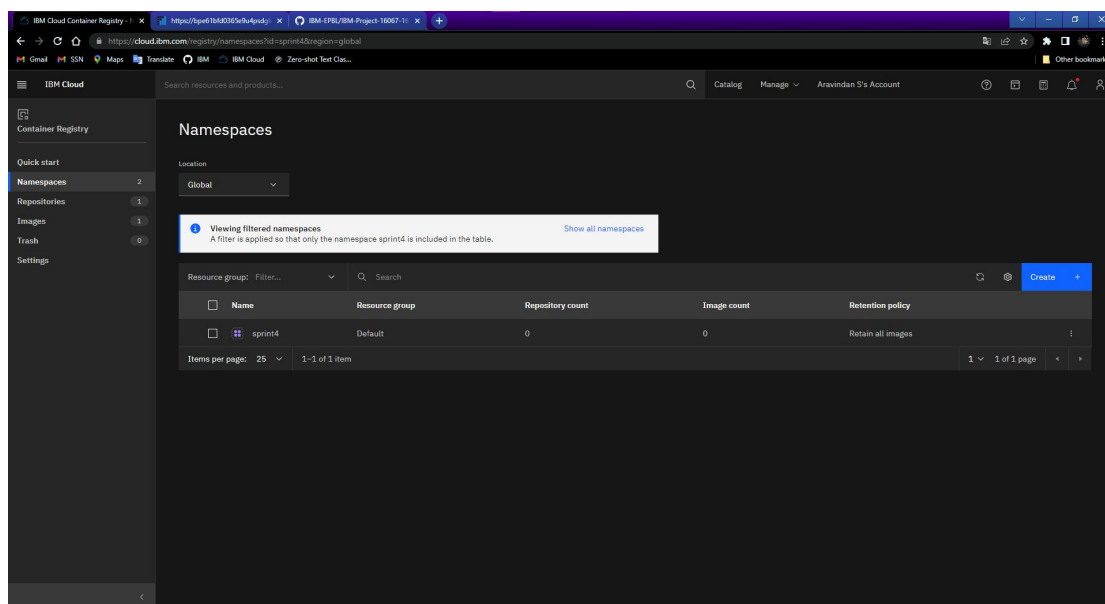
```

```
C:\Windows\System32\cmd.exe

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>docker tag sprint3 icr.io/sprint4/sprint4-repo
C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>docker push icr.io/sprint4/sprint4-repo
Using default tag: latest
The push refers to repository [icr.io/sprint4/sprint4-repo]
04dc302fe006: Pushed
716c6b4c3190: Pushed
952b0d25f857: Pushed
98334b4c7ec9: Pushed
9fda40ddc568: Pushed
428e1f341db7: Pushed
9ea8d200cd5d: Pushed
13b045a1dfd2: Pushed
2fbabeba902e: Pushed
ee509ed6e976: Pushed
9177197c67d0: Pushed
7dbadf2b0bd8: Pushed
e7597c345c2e: Pushed
latest: digest: sha256:1e43a190912606e88d0463f55008eafd4fd54a9b109b9b1f83828dfbd3e2848d size: 3054

C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>
```

Ibm cloud Namespace:



IBM Cloud Container Registry

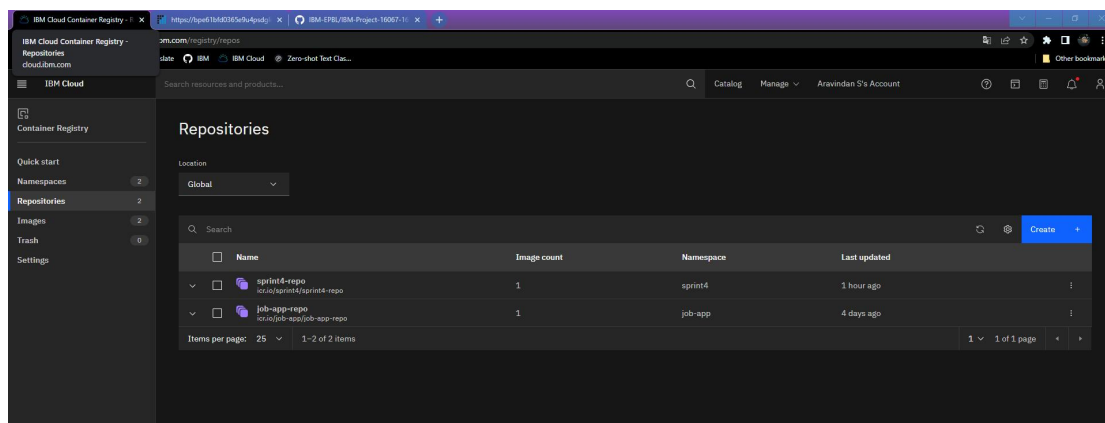
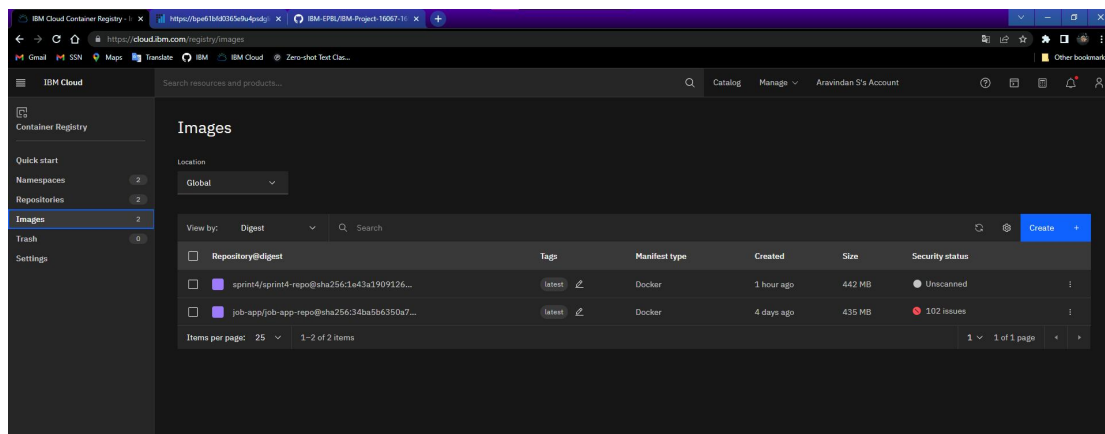
Namespaces

Location: Global

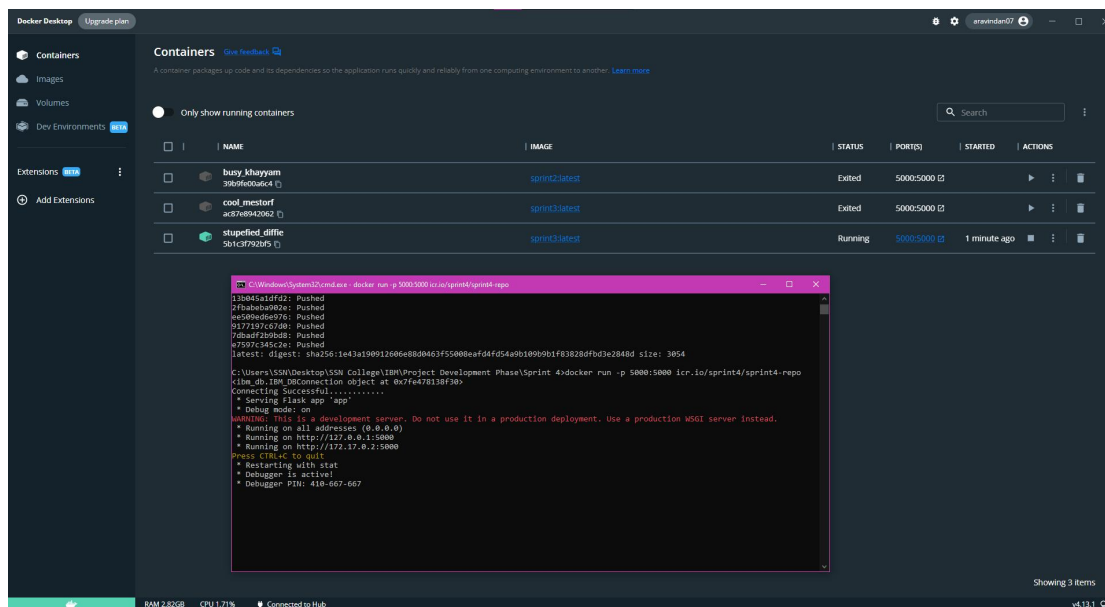
Viewing filtered namespaces
A filter is applied so that only the namespace sprint4 is included in the table.

Name	Resource group	Repository count	Image count	Retention policy
sprint4	Default	0	0	Retain all images

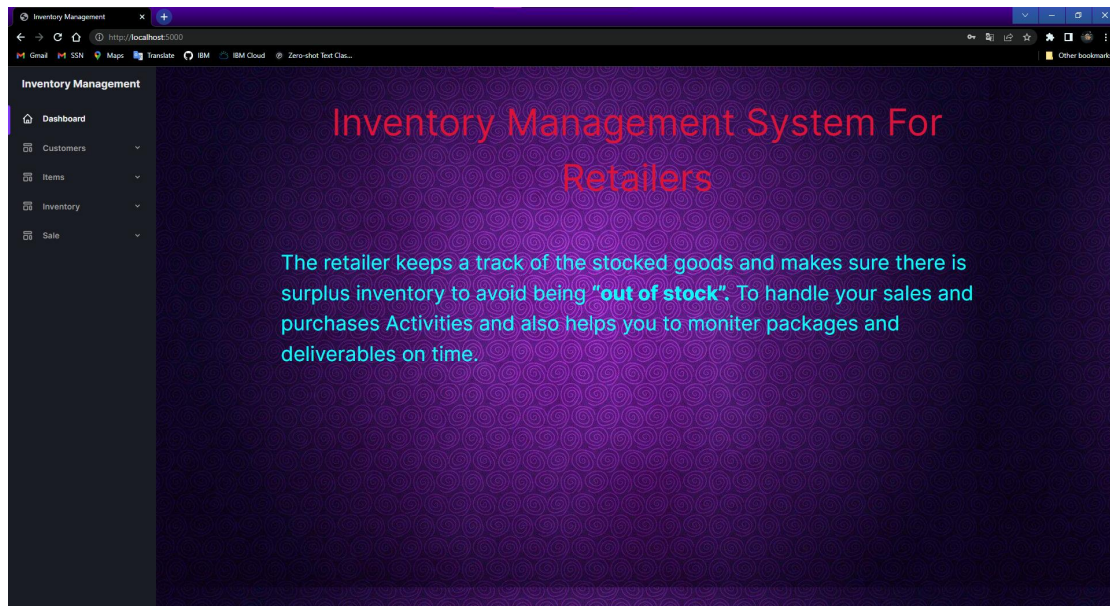
Items per page: 25 1-1 of 1 item



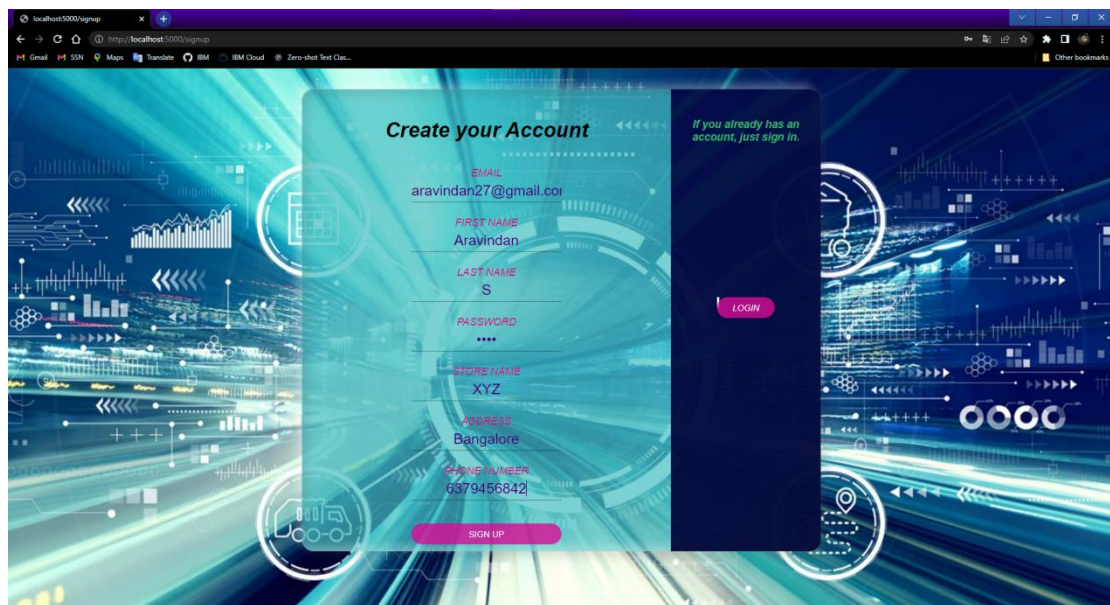
Run the Namespace in Docker:



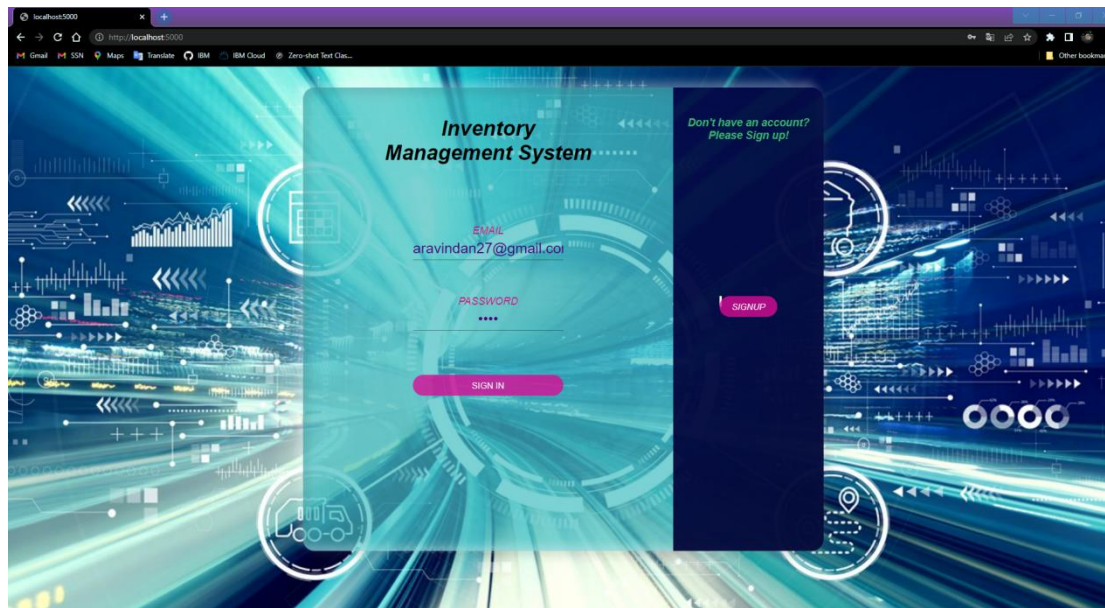
Cover Page:



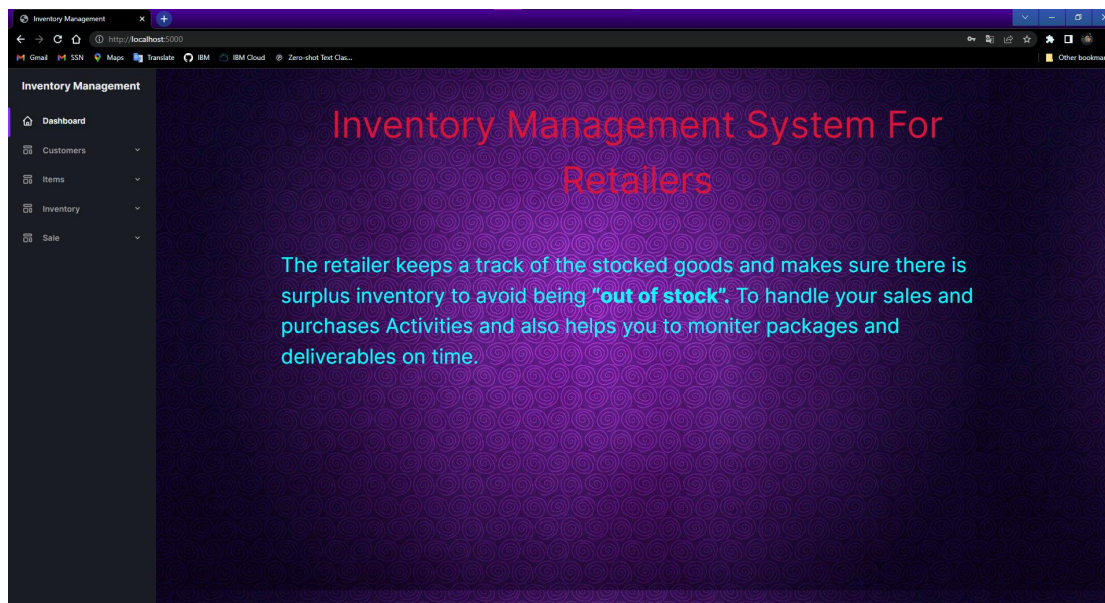
Signup Page:



Login Page:



Dashboard:



Add Customer:

Inventory Management - Forms

http://localhost:5000/add_customer

Inventory Management

- Dashboard
- Customers
- Items

Add Customer Details

Customer Name
Vignesh

Customer ID(Phone number)
2

Submit

Storing In Database:

IBM Db2 on Cloud

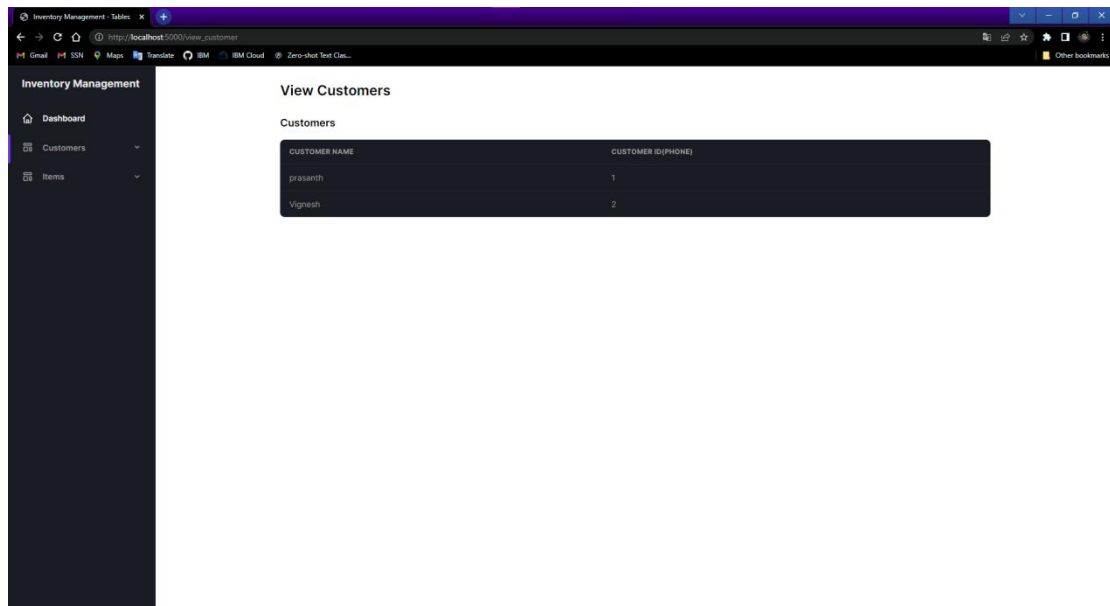
Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

MMV18931.CUSTOMER Back

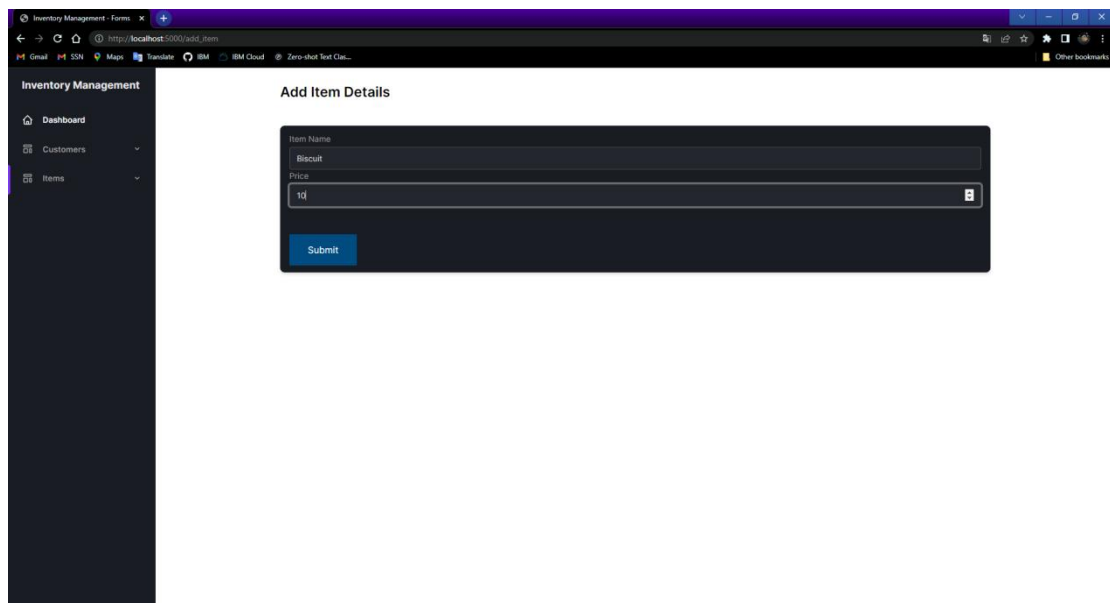
Export to CSV

CUSTOMER_ID	RETAILER_ID	CUSTOMER_NAME
1	1	prasanth
2	2	Vignesh

View Customers:



Add Items:



Store In Database:

The screenshot shows the IBM Db2 on Cloud console interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected, and the table 'MMV18931.ITEMS' is displayed. A 'Back' button is in the top right corner. Below the table name, there is an 'Export to CSV' button. The table data is as follows:

ITEM_ID	RETAILER_ID	ITEM_NAME	PRICE	LEFT_OUT
2	1	chocolate	10	5
3	1	chocolate	10	0
4	1	apple	25	5
5	2	Biscuit	10	0

View Items:

The screenshot shows a web application interface for 'Inventory Management'. On the left is a sidebar with a 'Dashboard' link and a dropdown menu containing 'Customers' and 'Items'. The 'Items' dropdown is selected, leading to the 'View Items' page. The page displays a table with the following data:

ITEM ID	ITEM NAME	PRICE	LEFT OUT
2	chocolate	10	5
3	chocolate	10	0
4	apple	25	5
5	Biscuit	10	0

Add Inventory:

The screenshot shows a web browser window with the URL `http://localhost:5000/add_inventory`. The page title is "Add Inventory Details". On the left, there is a sidebar menu for "Inventory Management" with options: Dashboard, Customers, Items, Inventory (selected), Add Inventory, View Inventory, and Sale. The main content area contains a form with the following fields:

- Item Name: Biscuit
- Quantity: 10
- Stock Date: 27-11-2022

A blue "Submit" button is located at the bottom of the form.

Store Into Database:

The screenshot shows the IBM Db2 on Cloud console. The table name is "MMV18931.INVENTORY". The table structure and data are as follows:

ITEM_ID	QUANTITY	STOCK_DATE
2	5	2022-11-16
4	10	2022-11-17
5	10	2022-11-27

View Inventory:

The screenshot shows a web browser window with the URL `http://localhost:5000/view_inventory`. The page has a dark sidebar on the left with the title 'Inventory Management' and a menu containing 'Dashboard', 'Customers', 'Items', 'Inventory' (highlighted), and 'Sale'. The main content area is titled 'View Inventory' and contains a form with three fields: 'Item Name' (a dropdown menu showing 'chocolate'), 'Start Date' (a date input field with the placeholder 'dd-mm-yyyy'), and 'End Date' (a date input field with the placeholder 'dd-mm-yyyy'). Below the form is a table titled 'Inventory' with the following data:

ITEM NAME	QUANTITY	DATE
Biscuit	10	2022-11-27

Add Sale:

The screenshot shows a web browser window with the URL `http://localhost:5000/add_sale`. The page has a dark sidebar on the left with the title 'Inventory Management' and a menu containing 'Dashboard', 'Customers', 'Items', 'Inventory', and 'Sale' (highlighted). Below the 'Sale' menu item are two buttons: 'Add Sale' and 'View Sale'. The main content area is titled 'Add Sale' and contains a form with three fields: 'Customer' (a dropdown menu showing 'Vignesh'), 'Item Name' (a dropdown menu), and 'Quantity' (a text input field). Below the 'Quantity' field is a blue button labeled 'Add More'. Below the form is a table titled 'Table' with the following data:

ITEM NAME	PRICE	QUANTITY	TOTAL
Biscuit	10	4	40

Below the table, the text 'Amount to be PAID :' is displayed above a yellow button labeled '40'. At the bottom of the form is a large blue button labeled 'Submit'.

Store into Database:

The screenshot shows the IBM Db2 on Cloud console interface. At the top, there is a navigation bar with the IBM logo and a search bar. Below the navigation bar, there is a red error message: "Error: Please check network connectivity then try again." with a "Show logs" link. The main content area displays the table "MMV18931.SALE". On the right side of the table, there are two buttons: "Back" and "Export to CSV". The table has three columns: "SALE_ID", "SALE_DATE", and "CUSTOMER_ID". The data rows are as follows:

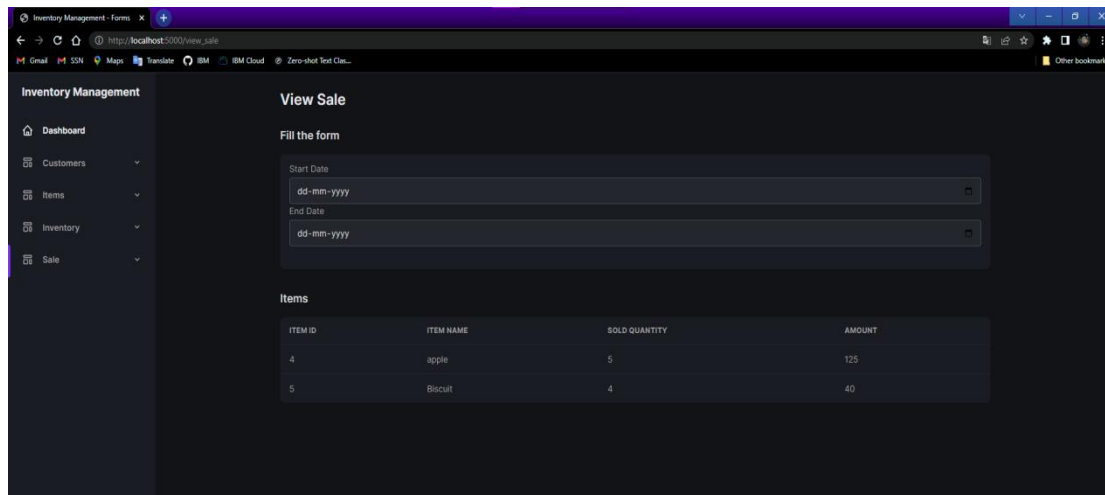
SALE_ID	SALE_DATE	CUSTOMER_ID
1	2022-11-17	1
2	2022-11-17	1
3	2022-11-17	2

The screenshot shows the IBM Db2 on Cloud console interface. At the top, there is a navigation bar with the IBM logo and a search bar. Below the navigation bar, there is a red error message: "Error: Please check network connectivity then try again." with a "Show logs" link. The main content area displays the table "MMV18931.SALE_ITEMS". On the right side of the table, there are two buttons: "Back" and "Export to CSV". The table has three columns: "SALE_ID", "QUANTITY", and "ITEM_ID". The data rows are as follows:

SALE_ID	QUANTITY	ITEM_ID
1	2	4
1	3	4
3	4	5

View sale:

The screenshot shows the "Inventory Management - Forms" application. The left sidebar contains a navigation menu with the following items: "Dashboard", "Customers", "Items", "Inventory", and "Sale". The main content area is titled "View Sale" and contains a "Fill the form" section. This section has two date input fields: "Start Date" with the value "14-11-2022" and "End Date" with the value "20-11-2022". Below these fields is a green "Filter" button. Under the "Filter" button, there is a section titled "Items" which contains a table with four columns: "ITEM ID", "ITEM NAME", "SOLD QUANTITY", and "AMOUNT".



Downloading the Kubernetes cluster in CMD:

```
C:\Windows\System32\cmd.exe
C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>ibmcloud ks cluster config --cluster cdot3phf0gdgi4i976gg
The configuration for cdot3phf0gdgi4i976gg was downloaded successfully.
Added context for cdot3phf0gdgi4i976gg to the current kubeconfig file.
You can now execute 'kubectl' commands against your cluster. For example, run 'kubectl get nodes'.
If you are accessing the cluster for the first time, 'kubectl' commands might fail for a few seconds while RBAC synchronizes.
```

Creating the deployment in the Kubernetes:

Running the Kubectl in web server:

```
C:\Windows\System32\cmd.exe - kubectl port-forward deploy/webserver1 5000:5000
C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>kubectl create deploy webserver1 --image=icr.io/sprint4/sprint4-repo
deployment.apps/webserver1 created
C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>kubectl get nodes
NAME                STATUS    ROLES    AGE   VERSION
10.144.214.211      Ready    <none>   3d10h v1.24.7+IKS
C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>kubectl port forward deploy/webser1 5000:5000
error: unknown command "port" for "kubectl"
Did you mean this?
  port-forward
C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>kubectl port-forward deploy/webserver1 5000:5000
Error from server (NotFound): deployments.apps "webser1" not found
C:\Users\SSN\Desktop\SSN College\IBM\Project Development Phase\Sprint 4>kubectl port-forward deploy/webserver1 5000:5000
Forwarding from 127.0.0.1:5000 -> 5000
Forwarding from [::1]:5000 -> 5000
```

