

Infrastructure Development Authority of the Punjab

Name: Fatima Javed
Project: Coffee Machine App

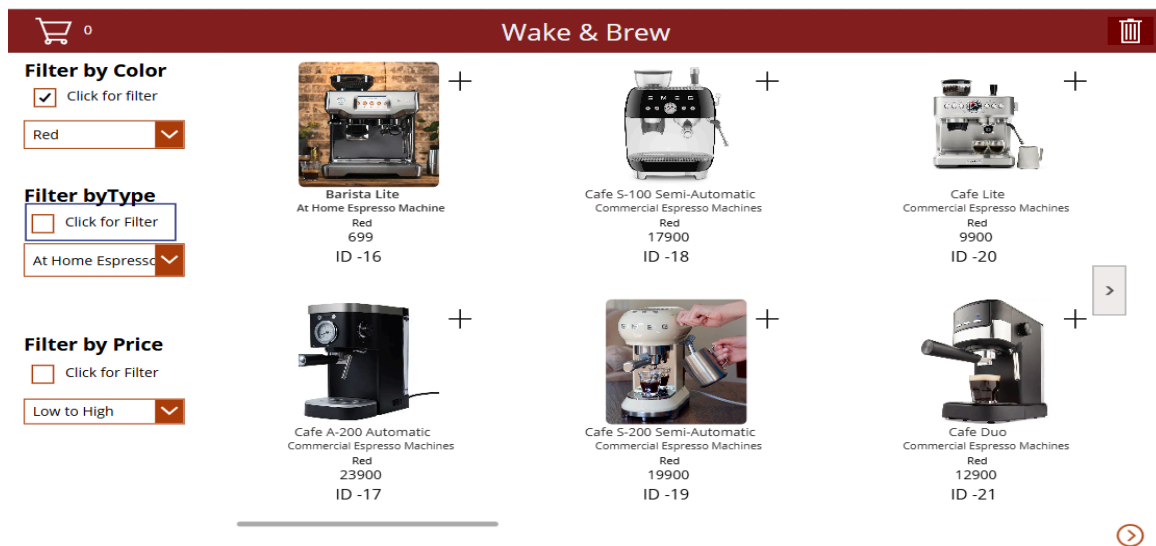
Power Apps

App Overview:

This Power Apps application was developed to manage a coffee machine inventory, enable customers to place orders, and support full CRUD (Create, Read, Update, Delete) operations for machine data. It provides an interactive interface for browsing, filtering, and ordering machines while maintaining real-time stock updates and capturing customer information.

Screen 1: Filter Panel

- Allows users to filter coffee machines by:
 - Type
 - Price Range
 - Primary Color
- Enables dynamic browsing based on selected filters.
- Real-time availability check ensures machines out of stock cannot be ordered.



Screen 2: Machine Gallery

- Displays a list of all available machines with the following details:
 - Name
 - Color
 - Summary
 - Average Espresso

-

- Provides full management of the **Machine** table using forms and logic:
 - **Create:** Add new machines to inventory.
 - **Read:** View machine details.
 - **Update:** Edit existing machine data.
 - **Delete:** Remove machines from inventory.

Add New Machine

ID
19

Primary Color
Red

stocks
0

Week Avg. Cups
1-50

Machine Price
19900

Product Summary
A lower profile invites customer engagement

URL
<https://i.pinimg.com/originals/26/55/5f/26555f9dca0e9c9cc03cfcebb1eb8025>

Week Avg. Espressos
100-200

Machine_Name
Cafe S-200 Semi-Automatic

Special Feature
App Connectivity

Type
Commercial Espresso Machines

Add new ItemDelete ItemSave Changes

<>

Screen 4: Order Checkout

Users can select one or more machines and proceed to order.

- Collects **customer information**:
 - Name
 - Email
- Generates a unique **Order ID** using a timestamp-based method.
- Order data is stored in the **Orders** table.
- Displays a confirmation and simulates payment process.

Order Coffee Machine

Customer_Name

fatima

Customer_Email

fatima@gmail.com

Quantity

3

OrderID


202508011327

Machine_ID

16
18
20

Order Now





Data Source:

- **Excel** (stored in OneDrive or SharePoint)
 - **Machine** Table: Stores machine data like ID, name, price, stock, etc.
 - **Orders** Table: Captures customer orders and related machine IDs.

Key Functionalities & Logic:

- **Dynamic Filtering**: Using dropdowns and sliders for intuitive filtering.
- **Order Validation**: Checks stock before adding to cart.
- **Unique Order ID Generation**: Based on current timestamp (Now() formatted).
- **CRUD Operations**: Efficiently handled using Patch, Remove, and SubmitForm.
- **Variable Usage**: Set() used for global variables like selected machine ID, order ID, and user inputs.
- **Cart System**: Uses Collect() to build carts from selected machines.

Power BI Dashboard

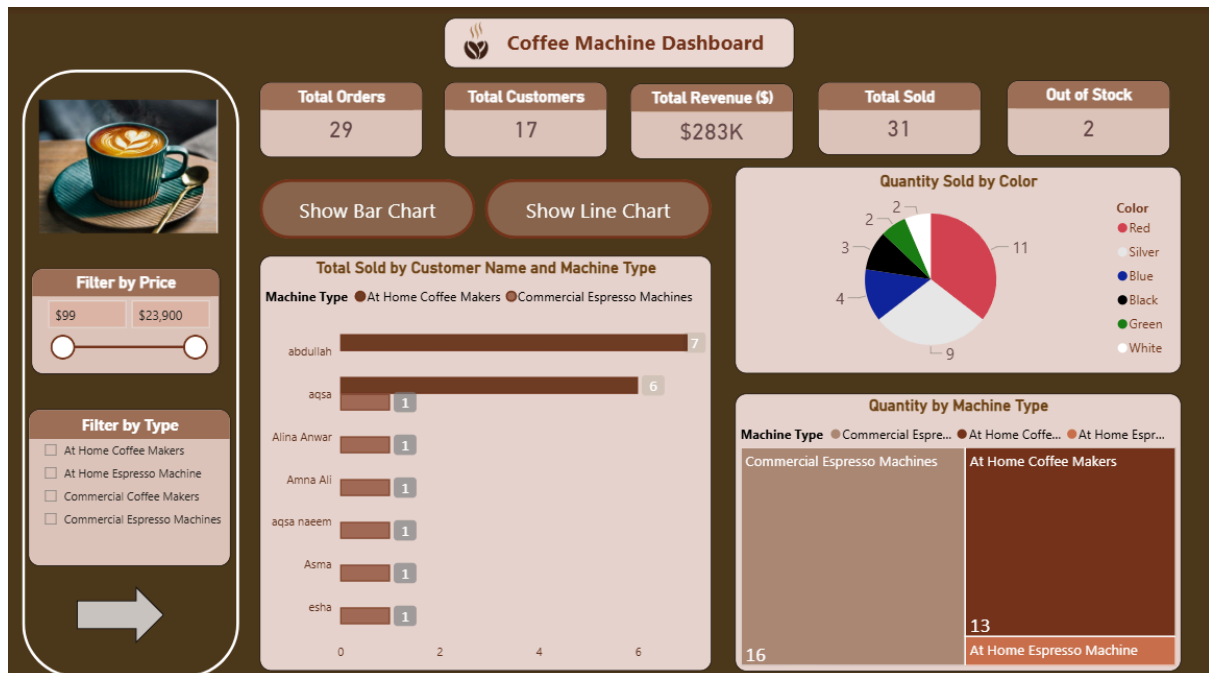
Dashboard Overview:

This Power BI dashboard provides deep insights into coffee machine inventory, sales performance, customer orders, and geographical trends. The dashboard is interactive, user-friendly, and designed for both monitoring KPIs and exploring data visually.

Page 1:

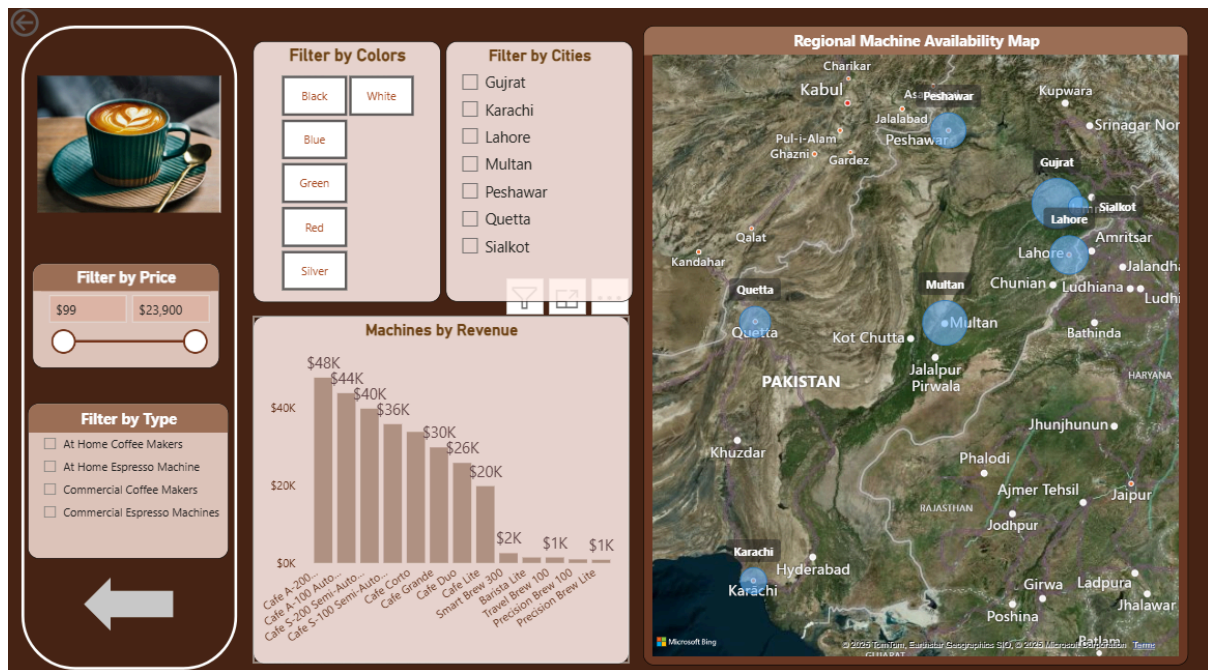
The first page offers an overview of coffee machine sales with key KPIs like total orders, revenue, and stock status. A sidebar includes slicers for filtering by **price** and **machine type**, along with a navigation button.

Central visuals display **sales by customer and machine type**, with toggle options for bar or line charts. Additional charts show **sales by color** and **machine type**, helping identify popular products and customer trends.



Page 2:

Page 2 focuses on **regional machine insights**. It features an interactive **map** showing machine distribution across cities in Pakistan. Users can filter by **color**, **city**, **price**, and **machine type** using slicers on the left. The **Machines by Revenue** chart highlights top-performing products based on sales revenue, offering a clear view of product performance by geography.



Map-Specific Features:

- City-based quantity distribution using bubble sizes.
- **Dynamic zooming** into cities based on slicer selection.
- Tooltip shows:
 - City
 - Total Quantity
 - Revenue
 - Machine Type

Data Mode:

- **Machine Table:** Details about machine inventory (Name, Price, Color, Type, Stock).
- **Orders Table:** Records each order with Customer Name, Machine ID, Quantity, Order Date.
- **Relationships:** Both tables linked via **MachineID** for accurate aggregation and lookup.

Power Apps Link:

<https://apps.powerapps.com/play/e/2cfcc5ee-4dd0-e6b1-a4c7-e76fdb39654e/a/31c1355e-0e50-4a41-9b34-c6f8a4b242ad?tenantId=a1e3cc4f-47e2-4e32-a7a1-5b14136b160b&hint=929d8281-05c1-41a0-ac21-11cf7efab470&sourcetime=1754040549141>

Power BI Link:

https://nupakistan-my.sharepoint.com/:u:/g/personal/l226652_lhr_nu_edu_pk/EefAYA-BPCZJrtJLuoEj1WIBSoPtE2qv6edVSt3Xroelkg?e=z8nsln