

ME781 Project

Data Counsel

~ Team 20

Arpit Saxena - 180040019

Utkarsh Sahu - 180100120

Vinut Raibagi - 203100056

Ashish Kumar - 213370007

Arpit Tiwari - 190110011

Product Demonstration

Select Model
Type and
Hyperparameters(*)

The screenshot shows a web application interface for 'SB Admin 2 - Charts'. The browser address bar displays '127.0.0.1:8000/analytics/'. The application has a dark blue sidebar on the left with the user 'ME781' at the top. The sidebar contains a 'Sales Analysis' section with two options: 'Select Model Type' (marked with a star icon) and 'Select Hyperparameters' (marked with a pencil icon). Below this is an 'OTHER FEATURES' section with 'Inventory Optimization' and 'Customer Demographics'. At the bottom of the sidebar is a 'Production Planning' option. The main content area is titled 'Sales Analysis' and includes a search bar. Below the title, it says 'Upload the sales data in the form of a csv file. We will build a machine learning model and predict the sales for each product at a particular outlet.' There are two sections for data upload: 'Training Data' and 'Test Data', each with a 'Choose File' button and the text 'No file chosen'. An 'Upload' button is located at the bottom of the data upload section.

* : To be implemented

Product Demonstration

Other features like
Inventory Optimiz. ,
Demographics &
Production Planning
(*)

The screenshot shows a web application interface for 'SB Admin 2 - Charts'. The browser address bar displays '127.0.0.1:8000/analytics/'. The left sidebar is blue and contains the following menu items: 'ME781' (with a smiley face icon), 'Sales Analysis', 'MODEL SETTINGS' (with a sub-menu: 'Select Model Type'), 'Select Hyperparameters', 'OTHER FEATURES' (with sub-items: 'Inventory Optimization', 'Customer Demographics', and 'Production Planning'). The main content area is titled 'Sales Analysis' and includes the instruction: 'Upload the sales data in the form of a csv file. We will build a machine learning model and predict the sales for each product at a particular outlet.' Below this, there are two sections: 'Training Data:' and 'Test Data:'. Each section has a 'Choose File' button and the text 'No file chosen'. At the bottom of the 'Test Data:' section is an 'Upload' button.

* : To be implemented

Product Demonstration

Upload Training and Testing Files. Files should follow rules mentioned in Manual

The screenshot shows a web application interface for 'SB Admin 2 - Charts'. The browser address bar displays '127.0.0.1:8000/analytics/'. The sidebar on the left contains the following menu items: 'ME781' (with a smiley face icon), 'Sales Analysis', 'MODEL SETTINGS' (with a gear icon), 'Select Model Type' (with a right arrow), 'Select Hyperparameters' (with a right arrow), 'OTHER FEATURES' (with a right arrow), 'Inventory Optimization' (with a right arrow), 'Customer Demographics' (with a bar chart icon), and 'Production Planning' (with a calendar icon). The main content area is titled 'Sales Analysis' and includes a search bar at the top. Below the title, there is a description: 'Upload the sales data in the form of a csv file. We will build a machine learning model and predict the sales for each product at a particular outlet.' The 'Training Data:' section has a 'Choose File' button and the filename 'train_v9rqX0R.csv'. The 'Test Data:' section has a 'Choose File' button and the filename 'test_AbJTz2L.csv'. An 'Upload' button is located below the 'Test Data' section. Two arrows point from the text box on the left to the 'Choose File' buttons, and another arrow points from the text box on the right to the 'Upload' button.

SB Admin 2 - Charts

127.0.0.1:8000/analytics/

ME781

Sales Analysis

MODEL SETTINGS

Select Model Type

Select Hyperparameters

OTHER FEATURES

Inventory Optimization

Customer Demographics

Production Planning

Sales Analysis

Upload the sales data in the form of a csv file. We will build a machine learning model and predict the sales for each product at a particular outlet.

Training Data:

Choose File train_v9rqX0R.csv

Test Data:

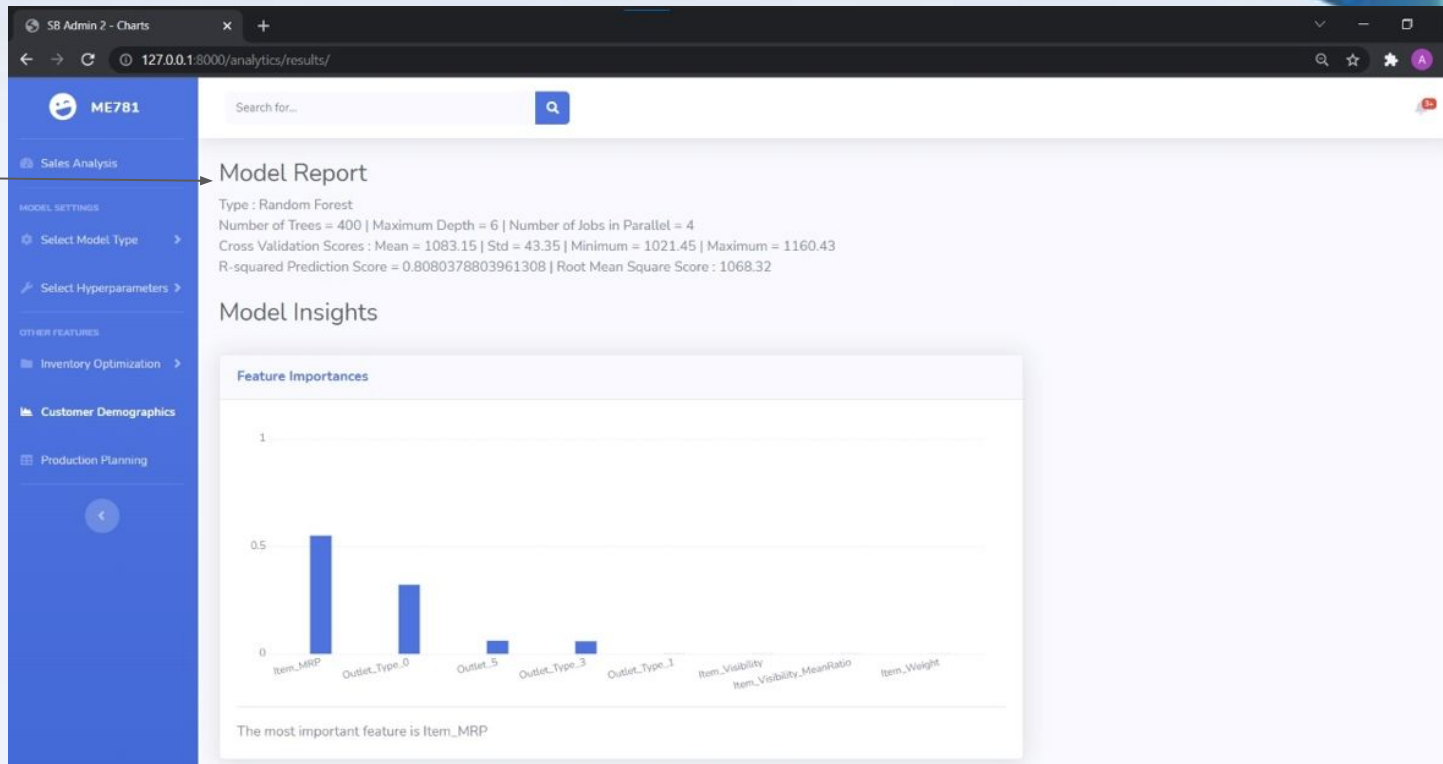
Choose File test_AbJTz2L.csv

Upload

Click on Upload

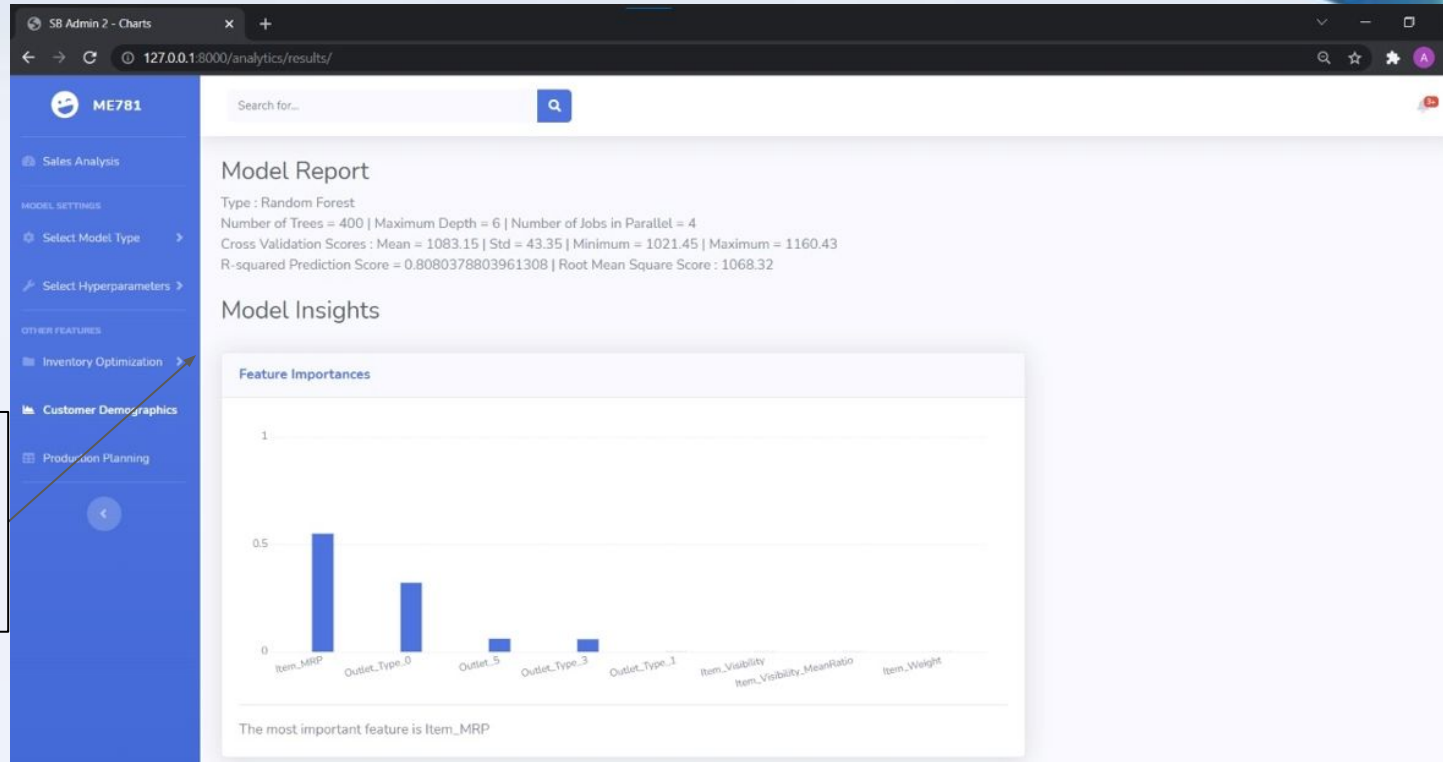
Product Demonstration

Model Report showing
model settings &
performance



Product Demonstration

Insights generated
i) Feature Importances
sorted in descending
order



Product Demonstration

Insights generated
ii) Variation of Sales
(y-axis) with the most
important feature (x-axis)

Item_MRP vs Sales



The Variation of Sales plotted against the most important feature (Item_MRP)

Model Predictions

Item_Identifier	Item_MRP	Item_Type	Outlet_Location_Type	Outlet_Type	Item_Outlet_Sales (Predicted)
FDW58	107.8622	Snack Foods	Tier 1	Supermarket Type1	1646.0
FDW14	87.3198	Dairy	Tier 2	Supermarket Type1	1370.0
NCN55	241.7538	Others	Tier 3	Grocery Store	575.0
FDQ58	155.034	Snack Foods	Tier 2	Supermarket Type1	2486.0

Product Demonstration

Item_MRP vs Sales



The Variation of Sales plotted against the most important feature (Item_MRP)

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