

Below is a suggested wireframe for the **BigMart Sales Prediction Project**, illustrating the key screens and interface elements for the web application where users can interact with the sales prediction model.

1. Home Dashboard Screen

Wireframe Layout:

| | |
|--|---|
| BigMart Sales Prediction | |
| [NavBar] | Home Predict Sales View Analysis Settings |
| [Welcome to BigMart Sales Prediction] | |
| - Upload product/store data and predict sales for various stores across BigMart using machine learning models. | |
| [Button: Predict Sales Now] | |
| [Button: View Analysis] | |

- **Navbar:** Contains links for navigating between the homepage, prediction, view analysis, and settings.
- **Call to Action (CTA) Buttons:**
 - **Predict Sales Now:** Redirects to the sales prediction page where users can input new data.
 - **View Analysis:** Displays a page showing key insights and visualizations based on the sales data.

2. Predict Sales Screen

Wireframe Layout:

| | |
|-------------------------------|---|
| BigMart Sales Prediction | |
| [NavBar] | Home Predict Sales View Analysis Settings |
| [Predict Sales for a Product] | |
| [Form: Product/Store Details] | |
| ----- | |
| Item Identifier: | [_____] |
| Item Weight: | [_____] |
| Item Fat Content: | [Low Fat Regular High Fat] |
| Item Visibility: | [_____] |
| Item Type: | [_____] |
| Item MRP: | [_____] |
| Outlet Identifier: | [_____] |
| Outlet Size: | [Small Medium Large] |
| Outlet Location: | [Urban Rural Suburban] |
| Outlet Type: | [Supermarket Grocery ...] |
| ----- | |

| |
|----------------------------|
| [Button: Predict Sales] |
| [Predicted Sales: \$_____] |

- **Form:** Allows the user to input the product and store details (e.g., Item_Identifier, Item_Weight, Item_Type, etc.) and submit the form.
- **Prediction Button:** On clicking “Predict Sales,” the system predicts the sales using the model and displays the result.
- **Predicted Sales Output:** Displays the predicted sales for the entered product/store combination.

3. Data Upload Screen (Optional)

Wireframe Layout:

| | |
|--|--|
| BigMart Sales Prediction | |
| [NavBar] Home Predict Sales View Analysis Settings | |
| [Bulk Data Upload for Prediction] | |
| [File Upload] | |
| Choose CSV File: [_____] [Browse Button] | |
| [Button: Upload and Predict] | |
| [Download Predicted Sales] | |

- **File Upload:** Allows users to upload a CSV file containing product/store details.
- **Upload and Predict Button:** Triggers batch predictions for all items in the uploaded file.
- **Download Predicted Sales:** Allows users to download a CSV file with the predicted sales values.

4. View Analysis Screen

Wireframe Layout:

| | |
|--|--|
| BigMart Sales Prediction | |
| [NavBar] Home Predict Sales View Analysis Settings | |
| [Sales Data Analysis] | |
| [Sales vs. Product Price] | |
| Graph: (Scatter Plot of Item MRP vs. Sales) | |

| | |
|---|--|
| [Sales by Outlet Type] | |
| Graph: (Bar Plot for Outlet Type vs. Sales) | |
| [Sales by Item Category] | |
| Graph: (Bar Plot for Item Type vs. Sales) | |
| [Button: Download Report] | |

- **Graphical Insights:** Includes various plots such as:
 - Sales vs. Item MRP (scatter plot).
 - Sales by Outlet Type (bar chart).
 - Sales by Item Category (bar chart).
- **Download Report:** Allows users to download a PDF or CSV report summarizing the insights.

5. Settings Screen

Wireframe Layout:

| |
|--|
| BigMart Sales Prediction |
| [NavBar] Home Predict Sales View Analysis Settings |
| [Settings] |
| - API Key: [_____] |
| - Model: [Linear Regression Random Forest XGBoost] |
| [Button: Save Settings] |

- **Model Selection:** Users can select different models (e.g., Linear Regression, Random Forest, XGBoost) to use for predictions.
- **Save Settings:** Allows the user to save their preferences for model selection or other settings.

6. Error Screen

Wireframe Layout:

| |
|--|
| BigMart Sales Prediction |
| [NavBar] Home Predict Sales View Analysis Settings |
| [Error: Something Went Wrong] |
| [Button: Return to Home] |

-
- **Error Message:** Provides feedback if something goes wrong (e.g., invalid input, server issues).
 - **Return to Home Button:** Directs the user back to the home screen.
-

Summary of Pages:

1. **Home Dashboard:** Introductory page with quick links.
2. **Predict Sales Page:** Input form for predicting sales.
3. **Data Upload Page:** Optional feature for bulk data upload and batch predictions.
4. **View Analysis Page:** Graphical insights and data visualizations.
5. **Settings Page:** Options to configure the model and other preferences.
6. **Error Page:** Displays error messages when issues occur.