Power BI Project: Zomato Restaurant Analytics Dashboard

📍 **Project Title:**
Data Manipulation & Reporting with Power BI — Zomato Analytics
📅 **Project Type:** Course-End Project
📊 **Tool:** Power BI
📁 **Dataset:** Regional Excel files (Africa, Asia, Europe, etc.)

🎯 Project Objective

As part of Zomato's global expansion strategy, the aim was to create a **consolidated, interactive Power BI dashboard** that allows stakeholders to:

- Monitor restaurant presence across **continents, countries, and cities**
- Evaluate performance based on **customer ratings**, **service offerings**, and **cost**
- Identify **high-performing** and **high-diversity** restaurants
- Enable both **web** and **mobile** access to insights for business decision-making

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📐 Project Scope: Business Questions Answered

1. **How many restaurants are listed across each continent, country, and city?**
   → Aggregated counts and drill-down visuals provided.
2. **Which restaurants have the highest customer satisfaction (average ratings)?**
   → Bar charts and counts by rating distribution.
3. **Which locations offer the most budget-friendly options?**
   → Visuals for average cost across countries.
4. **Can we filter restaurants by services (online delivery, table booking)?**
   → Dynamic table visual supports service-based filtering.

5. **How do cuisine variety and geographical location correlate?**
   → Cuisine count measure identifies top multi-cuisine restaurants.

6. **How can users interact with the report on mobile and web?**
   → Optimized layout ensures responsiveness and usability across devices.

📊 Key Dashboard Features

✅ KPI Cards

- **Total Restaurants:** 9551
- **Average Cost:** ₹1.20K
- **Sum of Aggregate Ratings:** 25.47K

✅ Interactive Filters

- Continent-based navigation buttons
- Country-wise slicers and legends
- Filters for online delivery, table booking, and rating slabs

✅ Visuals Breakdown

Visual Type	Purpose
Stacked Bar Chart	Restaurant count by country
Matrix/Table	Restaurant-level detail (rating, cuisine, services)
Clustered Bar Chart	Top-rated restaurants per country
Pie Chart	Average cost distribution across countries
Continent Button Panel	One-click regional drilldown

🧠 DAX and Data Modeling Highlights

- **Cuisines Count Measure**
  ```
  Cuisines Count = DISTINCTCOUNT(All_Restaurants[Cuisine Type])
  ```

- **Aggregate Rating Logic**
  Combined across duplicates while maintaining unique scores

- **Relationships**
  Created between country, continent, and restaurant-level tables using clean star schema

- **Append Queries**
  Used Power Query to append 6 region-specific tables (Africa, Asia, etc.) after standardizing columns

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🧭 User Experience Design

✅ **Zomato-themed branding** using red-black visual palette
✅ **Minimalist, grid-aligned layout** for visual clarity
✅ **Mobile responsiveness** for on-the-go access
✅ **Dynamic drilldowns** from continent → country → restaurant

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🌟 What Sets This Dashboard Apart

✅ Combines **geography, services, and customer behavior** into a single view
✅ Efficiently handles **multi-source data integration**
✅ Provides both **macro-level KPIs** and **micro-level drilldowns**
✅ Built with **stakeholder navigation** in mind — not just data display

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📲 Ready for Deployment

- ✔ Web-optimized

- ✔ Mobile-friendly
- ✔ Easily extendable with additional regions or time-based trends

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💬 Summary

This dashboard demonstrates how Zomato's global restaurant data can be transformed into actionable intelligence. It empowers business users to identify trends, filter by key services, and assess top-performing restaurants in a seamless visual experience.