

EYouth X DEPI Project Proposal



Submitted by:
EYouth

Final Project– Proposal Submission Guidelines

As part of your current project, you are required to submit a proposal that includes the following:

- **Project Description:** Provide a clear and concise explanation of the project.

This project aims to analyze the sales data of Blinkit, an online grocery delivery platform, to understand key trends in customer behavior and purchasing patterns. The dataset includes information on product details, order quantities, revenue, and timestamps. By analyzing these data points, the project seeks to identify sales trends, product demand, seasonal variations, and factors influencing overall sales performance and revenue over time.

- **Group Members & Roles:** List all team members along with their assigned roles.

Group Members & Roles:

Python Team:

Responsible for data cleaning, exploratory data analysis, and developing predictive models.

Malak Waleed

Noura Elsaman

SQL Team:

In charge of designing the database schema, data modeling, importing data into SQL Server, and performing queries to extract insights.

Ahmed Sabry

Ziad Makled

Analysis Team:

Tasked with defining business questions, performing data analysis, creating visualizations, dashboards, and compiling the final report.

Mohammed Hassani

Aya Abdelfattah

- **Team Leader:** Specify the name of the team leader.

Mohamed Hassani Mohamed Kamal Ibrahim

- **Objectives:** Outline the main goals of the project.

Time Series Analysis:

Examine sales trends over different time periods to identify peak and low-demand periods.

Demand Forecasting:

Predict future product demand based on historical data to optimize inventory management.

Price Optimization:

Assess the impact of different pricing strategies on sales and revenue to determine the most effective pricing model.

Customer Behavior Analysis:

Understand consumer purchasing patterns, preferences, and factors affecting their buying decisions.

Market Insights and Performance Improvement:

Evaluate the effectiveness of marketing campaigns and promotions while identifying growth opportunities in the e-commerce sector.

Business Decision Support:

Provide data-driven insights to assist business leaders in making informed strategic decisions to enhance overall performance and profitability.

- **Tools & Technologies:** Mention the tools and technologies that will be used.

Python Libraries: Pandas, NumPy, scikit-learn, Matplotlib, Seaborn

SQL Server Management Studio (SSMS)

Tableau

Power BI

Advanced Excel

Figma for Design & Prototyping

Discord for Collaboration & Communication

- **Milestones & Deadlines:** Define key project milestones with their respective deadlines

Milestones & Deadlines:

Project Kickoff & Planning:

Deadline: End of Week 1

Activities: Hold an introductory meeting, assign roles, finalize project requirements, and establish a detailed project plan.

Data Collection & Preprocessing:

Python Team: Complete data cleaning and exploratory analysis.

SQL Team: Design the database schema and import the raw data into SQL Server.

Deadline: End of Week 3

Data Modeling & Insight Extraction:

SQL Team: Develop data models and execute queries to extract initial insights.

Deadline: End of Week 4

Business Analysis & Visualization Draft:

Analysis Team: Identify key business questions, perform data analysis, and start drafting visualizations and dashboard layouts.

Deadline: End of Week 5

Dashboard & Report Development:

Analysis Team: Finalize visualizations, build the dashboard using Tableau, Figma, and prepare a comprehensive draft of the final report.

Deadline: End of Week 6

Integration & Final Review:

All Teams: Collaborate to integrate insights from all teams, review and refine models, queries, and visualizations, and ensure consistency across deliverables.

Deadline: End of Week 7

Final Report & Presentation Submission:

Deadline: End of Week 8

Activities: Submit the final report and dashboards, and prepare the final presentation summarizing the project's findings and insights.

- **KPIs (Key Performance Indicators):** Each team should customize the following KPIs based on their project requirements:

Data Cleaning & Processing:

- Ensure data is clean, structured, and well-documented.
- Complete data processing efficiently within the project timeline.

Analysis & Insights:

- Identify key analytical questions relevant to business needs.
- Provide clear, data-driven insights with effective visualizations.

Forecasting & Predictions:

- Use reliable models to generate accurate predictions.
- Compare multiple forecasting approaches for better accuracy.

Visualization & Reporting:

- Develop an interactive and user-friendly dashboard.
- Ensure fast and smooth dashboard performance.

Final Documentation & Presentation:

- Deliver a well-structured final report covering key findings.
- Provide actionable recommendations based on the analysis.

Thank you for your efforts. Best of luck!