

Project Contribution Form

This document should be included as part of your final project presentation submission. It should state for each student the main tasks completed to ensure the successful completion of your project.

Group: IAI5101 Group 15

Student Name: Adam Lyu

- Feature Engineering exploration and presentation
 - Label Encoding of non-numeric attributes
 - Multivariate Analysis pre and post-encoding of merged dataset attributes
 - Transforms & Normalization of numeric attributes
 - Scaling all encoded attributes

Student Name: Aron Arany-Takacs

- Data Compilation & Extraction, presentation
 - Rehosting, import, and concatenation of CPI Data
 - Rehost, import, and decomposition of Superstore Data Set
 - Feature Enhancement & Reduction of relevant attributes
 - Preparation of merged initial dataset for further work
 - Additional work on various components
- Final Presentation outline and templating

Student Name: Hassan Megahed

- Exploratory Data Analysis & Breakdown, presentation
 - Analysis of Annual, Seasonal, and Monthly trends of Sales, CPI
 - Comparison & Correlation Analysis of attributes
 - Compilation of plots and graphs to illustrate overall trends in underlying data
- Addition Feature Expansion
 - Extraction of Seasonal breakdown for in-depth EDA

Student Name: Maryam Kian

- Model Evaluation Analysis & Breakdown, presentation
 - Elbow KMeans Analysis & Clustering
 - PCA Correlation analysis
 - MSE Analysis of individual model performance

Student Name: Sonam Rinchen

- Project Proposal
 - Initial draft
 - Literature review
- Final project codebase
 - Project staging outline & drafts
 - Additional work on various components
- Model Implementation exploration and presentation
 - Regression Analysis model & hyperparameter tuning
 - SARIMA Forecast model & hyperparameter tuning
 - LSTM Adam-based Model & hyperparameter tuning