**Store Sales Dataset Analysis - Project Planning & Management Documentation**

**1. Project Overview**

**Project Title:** Store Sales Dataset Analysis  
**Duration:** February 24, 2025 - March 21, 2025  
**Tools:** Python (pandas, numpy, scikit-learn), Tableau

**2. Team Roles and Responsibilities Matrix**

| **Team Member** | **Primary Role** | **Secondary Role** | **Shared Responsibilities** |
| --- | --- | --- | --- |
| Mahmoud Salah Elsaid Elmahalawy (Team Leader) | • Python Analysis Lead • Forecasting Model Development • Team Coordination | • Documentation Review • Quality Assurance | • Code Review • Team Meetings • Problem Solving |
| Asmaa | • Data Preprocessing • Statistical Analysis • Pattern Recognition | • Documentation • Model Testing | • Quality Checks • Code Testing • Knowledge Sharing |
| Asmaa Magdy Ali Masoud | • Data Cleaning • Feature Engineering • Time Series Analysis | • Documentation • Validation | • Data Validation • Team Meetings • Progress Updates |
| Nehad | • Tableau Dashboard Design • Visualization Development • Data Storytelling | • Analysis Support • Report Writing | • Dashboard Review • Documentation • Testing |
| Abdalla farag hassan | • Python-Tableau Integration • Data Transformation • Performance Optimization | • Technical Documentation • Testing | • Code Review • Integration Testing • Team Support |
| Mohamed Bakry Mansour Elsofy | • Visualization Support • Python Scripting • Quality Assurance | • Documentation • Testing Support | • Code Testing • Team Meetings • Knowledge Sharing |

### ****3. Project Timeline and Deliverables****

#### ****Week 1: Data Preparation Phase****

**Activities:**

* Dataset import and initial analysis
* Data cleaning and preprocessing
* Feature engineering
* Data validation

**Deliverables:**

* Cleaned dataset
* Preprocessing documentation
* Initial data quality report

#### ****Week 2: Analysis Phase****

**Activities:**

* Statistical analysis
* Pattern identification
* Trend analysis
* Initial visualizations

**Deliverables:**

* Analysis notebooks
* Statistical reports
* Preliminary findings documentation

#### ****Week 3: Forecasting Phase****

**Activities:**

* Time series analysis
* Model development
* Forecasting implementation
* Model validation

**Deliverables:**

* Forecasting models
* Prediction results
* Model performance metrics

#### ****Week 4: Visualization and Presentation Phase****

**Activities:**

* Tableau dashboard creation
* Final documentation
* Presentation preparation
* Project handover

**Deliverables:**

* Interactive dashboards
* Final presentation
* Complete project documentation

### ****4. Communication Plan****

#### ****Regular Meetings****

* **Daily Standups (15 minutes)**
  + Time: 3 PM
  + Format: Virtual/In-person
  + Focus: Progress updates and blockers
* **Weekly Reviews (1 hour)**
  + Time: 10 PM
  + Format: Virtual/In-person
  + Focus: Detailed progress review and planning

#### ****Communication Channels****

* Team Chat: Daily communication
* Email: Formal communications
* Shared Drive: Document storage
* Code Repository: Version control

### ****5. Quality Assurance****

#### ****Code Quality Measures****

* Regular code reviews
* Testing protocols
* Documentation standards
* Version control practices

#### ****Analysis Quality Measures****

* Data validation checks
* Model performance metrics
* Peer review process
* Result verification

### ****6. Risk Management****

#### ****Identified Risks****

* **Technical Risks**
  + Data quality issues
  + Tool compatibility
  + Performance problems
* **Project Risks**
  + Timeline delays
  + Resource constraints
  + Scope changes

#### ****Mitigation Strategies****

* Regular backups
* Cross-training
* Buffer time allocation
* Clear documentation
* Regular progress monitoring

### ****7. Success Criteria****

#### ****Technical Success Metrics****

* Code quality standards met
* Analysis accuracy achieved
* Dashboard functionality complete
* Documentation thoroughness

#### ****Project Success Metrics****

* Timeline adherence
* Deliverable completion
* Team collaboration effectiveness
* Stakeholder satisfaction

### ****8. Team Support Structure****

#### ****Knowledge Sharing****

* Technical workshops
* Pair programming sessions
* Documentation reviews
* Skills cross-training