Daily Staff Report Review Agent - Detailed Documentation

# Daily Staff Report Review Agent

# Overview

The Daily Staff Report Review Agent is a comprehensive Streamlit web application designed to analyze staff daily reports, detect missed tasks, and generate appropriate follow-up actions. This tool helps managers and supervisors efficiently identify performance issues and take corrective measures.

# Features

## Core Functionality

* • Smart Task Analysis: Automatically detects missed tasks and categorizes them
* • Follow-up Generation: Creates "Follow-up" actions for single-day misses
* • Escalation Management: Generates "Escalate" actions for consecutive missed days
* • Priority Classification: Assigns priority levels based on task type and duration

## Advanced Features

* • Multiple File Format Support: Handles both .xlsx and .xls Excel files
* • Data Validation: Comprehensive validation with detailed error reporting
* • Interactive Visualizations: Charts and graphs for better data insights
* • Export Options: Multiple export formats (CSV, Excel, Action Plans)
* • Session Management: Data persistence across interactions

## Priority System

* • Critical: Safety/compliance tasks or 5+ days missed
* • High: Important tasks or 3+ days missed
* • Medium: 2+ days missed
* • Low: Single day missed

# Requirements

System: Python 3.7+, Streamlit, Pandas, Plotly, OpenPyXL, XLRD

Data: Excel file must contain Employee, Task, Date, and Status columns.

# Installation

1. Clone or download the project files

2. Install dependencies with pip install -r requirements.txt

3. Run with streamlit run app.py

# Usage Guide

1. Upload Excel file or use sample data

2. Validate data format

3. Click Analyze Reports

4. View results with priority levels

5. Export results (CSV, Excel, Action Plans)

# Architecture

* • app.py: Main Streamlit app
* • report\_processor.py: Core analysis engine
* • sample\_data.py: Generates sample data
* • docs/: Extra documentation

# Analysis Logic

* • Detects consecutive missed days (accounts for weekends, multiple formats)
* • Calculates priority based on task type, duration, and impact
* • Generates actions: Follow-up for single miss, Escalate for multiple

# Output Reports

* • Detailed results table (employee, task, date(s), action, priority, days missed)
* • Summary statistics and action breakdown
* • Export options (CSV, Excel, Action Plan)

# Configuration

* • Advanced settings for warnings, visualizations, and auto-analysis
* • Customizable priority keywords and thresholds

# Error Handling

* • Validates columns, dates, empty/corrupted files, duplicates
* • Comprehensive error logging and recovery suggestions

# Visualizations

* • Action distribution, priority breakdown, employee performance
* • Interactive, color-coded charts

# Troubleshooting

* • Missing dependencies (xlrd, openpyxl)
* • No results due to missing "Not Done" tasks
* • Date parsing issues

# Deployment

* • Local: streamlit run app.py
* <https://daily-staff-report-review-agent.streamlit.app/>

# Contributing

* • Fork repo, create environment, install dependencies, make changes, submit PR
* • Follow PEP 8, docstrings, error handling, testing

# License

MIT License

# Support

* • Open issues, check troubleshooting, review docs

# Version History

* • v1.0.0: Initial release
* • Planned: Email notifications, advanced filtering, trends, multi-language, API

# Acknowledgments

* • Built with Streamlit, Pandas, Plotly, OpenPyXL, XLRD