

# ■ Project Documentation

## Team Matcher & Harmony Engine

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## ■ Introduction

This project, Team Matcher & Harmony Engine, is designed to recommend the most effective teams and individual performers for different tasks in a workplace. It combines employee profiles, trait scores, skills, and synergy data to create meaningful insights. The system ensures that both admins and employees can interact with the application effectively.

### ■ 00\_user\_role\_selector\_and\_profile\_form

Handles user role selection (Admin/Employee) and stores employee profile details.

### ■ 01\_task\_input\_by\_admin

Allows the admin to input tasks, including descriptions, skill requirements, and deadlines.

### ■ 02\_trait\_scorer

Evaluates employee personality traits and assigns numerical scores to them.

### ■ 03\_skill\_matcher

Matches employees to tasks based on skill sets and creates match scores.

### ■ 04\_synergy\_calculator

Calculates synergy scores between employees based on their compatibility.

### ■ 05\_team\_recommender

Generates team recommendations using skill and synergy scores.

### ■ 06\_output\_visualizer

Visualizes results in graphs/tables for easier understanding.

## ■ 07\_team\_builder\_module

Integrates different parts of the project for structured team formation.

## ■ 08\_team\_matcher\_app

Streamlit-based web app where admins and employees can interact with the system.

## ■ Conclusion

The Team Matcher & Harmony Engine successfully demonstrates how data-driven analysis can improve task allocation and team formation in an organization. With features like synergy scoring, skill-based matching, and interactive visualizations, it serves as a comprehensive HR support tool.