UE22CS341A: Software Engineering
Project Synopsis

Team Members:	**Suhit Hegde**	**PES2UG22CS591**
	Tanistha Hota	**PES2UG22CS618**

PROJECT SYNOPSIS

Project Title: Automated Skill Matching and Gap Analysis Tool

Overview:
The Automated Skill Matching and Gap Analysis Tool is an innovative web application aimed at helping individuals align their skills with the requirements of specific job roles. In today's dynamic job market, continuous skill development is crucial to remain competitive. This tool provides a solution by allowing users to assess their existing skills against job descriptions, identify skill gaps, and receive personalized recommendations for targeted learning and upskilling.

Problem Statement:
Professionals, job seekers, and students often struggle to evaluate how well their skills align with job requirements. Traditional methods of skill assessment are manual, time-consuming, and lack tailored insights. As the need for continuous skill development increases, there is a growing demand for an automated system that can efficiently analyze skill gaps and recommend relevant learning resources.

Objective:
The primary goal of the tool is to enable users to take control of their career development by providing actionable insights into their skill sets. It empowers individuals by automatically analyzing their resumes against job descriptions, identifying areas where their skills meet or fall short of requirements, and suggesting learning resources to close those gaps.

Key Features:

1. **Resume and Job Description Parsing**: Users can upload their resumes and job descriptions of interest, and the tool will extract relevant skills from both.
2. **Skill Matching and Gap Analysis**: The tool compares the user's skillset with the job requirements, performing a comprehensive analysis to highlight both matched and missing skills.

3. **Learning Recommendations**: By integrating with various learning platforms, the system provides targeted recommendations for courses and tutorials to help users bridge their skill gaps.
4. **User-Friendly Interface**: The tool offers an intuitive interface with drag-and-drop functionality for document uploads, making it accessible to a wide range of users, including students, job seekers, and professionals.
5. **Dashboard and Visualizations**: Results are displayed through a dashboard, featuring clear visual representations of skill gaps and personalized learning paths.

Conclusion:
The Automated Skill Matching and Gap Analysis Tool equips individuals with the insights they need to enhance their skills and stay competitive in the evolving job market. By automating the skill evaluation process and offering tailored learning recommendations, the tool significantly reduces the effort required for skill assessment and personal development.