**Proposal for SmartSkill**

**Overview**

The SmartSkill Application is designed to help organizations efficiently manage employee skills, experience, and certifications. The application will enable project managers to create new projects and automatically receive suggestions for suitable employees based on their skills, experience, and other relevant attributes. Additionally, the application will track employee progress, recommend training courses, and support career growth, making it a valuable tool for both project managers and employees.

**Key Features**

1. **User Profiles**:
   * Store detailed CVs and biodata of employees.
   * Include fields for skills, languages, experience, certifications, and roles.
2. **Project Creation**:
   * Allow project managers to create new projects with specific requirements.
   * Include fields for project name, description, required skills, required languages, experience range, and role.
3. **Automatic Matching**:
   * Implement an algorithm to automatically suggest suitable employees for new projects.
   * Match based on skills, languages, experience, and other relevant attributes.
4. **Employee Progress Tracking**:
   * Track employee progress on projects and skill development.
   * Provide a dashboard for employees to view their progress and career growth.
5. **Training Recommendations**:
   * Analyze employee data to identify skill gaps.
   * Recommend relevant training courses to employees based on their skill gaps.
   * Allow employees to provide feedback on the recommended courses.
6. **User Interface**:
   * Provide a user-friendly interface for project managers to create projects and view suggested employees.
   * Allow employees to update their profiles with new skills, certifications, and experience.
   * Display recommended training courses and progress tracking information.

**Technical Implementation**

1. **Models**:
   * **User**: Store basic user information.
   * **Skill**: Store information about different skills.
   * **Language**: Store information about different languages.
   * **UserSkill**: Link users to their skills with proficiency levels.
   * **UserLanguage**: Link users to their languages with proficiency levels.
   * **Project**: Store project information and requirements.
   * **ProjectSkill**: Link projects to required skills with proficiency levels.
   * **ProjectLanguage**: Link projects to required languages with proficiency levels.
   * **TrainingCourse**: Store information about available training courses.
2. **Matching Algorithm**:
   * Create a function to find suitable employees based on project requirements.
   * Consider skills, languages, experience range, and other relevant attributes.
3. **Employee Progress Tracking**:
   * Implement models and views to track employee progress on projects and skill development.
   * Provide a dashboard for employees to view their progress and career growth.
4. **Training Recommendations**:
   * Analyze employee data to identify skill gaps.
   * Recommend relevant training courses to employees based on the identified skill gaps.
   * Allow employees to provide feedback on the recommended courses.