

Build a CrewAI-based talent evaluation system with the following structure:

#### SYSTEM OVERVIEW:

Create a multi-agent workflow that evaluates candidates by analyzing their resume against a job description, scoring soft skills, hard skills, and potential, then providing a comprehensive summary.

#### REQUIRED AGENTS:

##### 1. Job Description Analyzer Agent

- Role: Job Requirements Expert
- Goal: Extract and structure key requirements from job descriptions
- Backstory: Expert at parsing job descriptions and identifying critical skills, qualifications, and competencies
- Tasks: Identify required hard skills, desired soft skills, experience level, and key responsibilities

##### 2. Resume Parser Agent

- Role: Resume Analysis Specialist
- Goal: Extract structured information from candidate resumes
- Backstory: Skilled at analyzing resumes and extracting relevant experience, skills, and achievements
- Tasks: Parse education, work experience, skills, certifications, and accomplishments

##### 3. Hard Skills Evaluator Agent

- Role: Technical Skills Assessor
- Goal: Evaluate candidate's technical/hard skills match with job requirements
- Backstory: Expert in assessing technical competencies and domain-specific skills
- Tasks: Compare required technical skills with candidate's demonstrated skills, provide score (0-100) with justification

##### 4. Soft Skills Evaluator Agent

- Role: Behavioral Competency Analyst
- Goal: Assess soft skills and cultural fit
- Backstory: Specialist in evaluating communication, leadership, teamwork, and interpersonal skills
- Tasks: Analyze resume for soft skill indicators, provide score (0-100) with examples

##### 5. Potential Evaluator Agent

- Role: Growth & Potential Assessor
- Goal: Evaluate candidate's learning ability, growth trajectory, and future potential
- Backstory: Expert at identifying high-potential talent and growth indicators
- Tasks: Assess career progression, adaptability, learning agility, score (0-100) with reasoning

## 6. Report Synthesizer Agent

- Role: Evaluation Report Writer
- Goal: Create comprehensive, actionable evaluation summary
- Backstory: Skilled at synthesizing multiple assessments into clear, actionable insights
- Tasks: Combine all scores and analyses into a coherent summary with recommendations

## WORKFLOW STRUCTURE:

Step 1: Job Description Analyzer processes the job description

Step 2: Resume Parser processes the candidate's resume

Step 3: All evaluator agents (Hard Skills, Soft Skills, Potential) work in parallel using outputs from steps 1-2

Step 4: Report Synthesizer compiles final evaluation

## API ENDPOINTS:

### 1. POST /api/generate-job-description

Input: { "jobTitle": str }

Process: Use an LLM agent to generate a comprehensive job description

Output: { "jobDescription": str }

### 2. POST /api/evaluate-candidate

Input: {

  "jobDescription": str,

  "resume": str

}

Process: Execute the multi-agent crew workflow

Output: {

  "softSkills": int (0-100),

  "hardSkills": int (0-100),

  "potential": int (0-100),

  "summary": str (comprehensive evaluation report)

}

## CREW CONFIGURATION:

- Use sequential process for main workflow
- Enable memory for context retention
- Set verbose=True for debugging
- Use Claude (claude-3-5-sonnet-20241022) or GPT-4 as LLM
- Implement error handling and retries

## OUTPUT FORMAT:

The summary should include:

- Overall recommendation (Strong Match / Good Match / Partial Match / Not Recommended)
- Key strengths (3-5 bullet points)
- Areas for development (2-3 bullet points)
- Specific examples from resume supporting scores
- Hiring recommendation paragraph

#### SCORING RUBRIC:

Hard Skills (0-100):

- 90-100: Exceeds all requirements with advanced expertise
- 70-89: Meets all requirements with solid experience
- 50-69: Meets most requirements, some gaps
- Below 50: Significant skill gaps

Soft Skills (0-100):

- 90-100: Exceptional communication, leadership, teamwork indicators
- 70-89: Strong soft skills demonstrated
- 50-69: Adequate soft skills, room for growth
- Below 50: Limited evidence of soft skills

Potential (0-100):

- 90-100: Exceptional growth trajectory and learning agility
- 70-89: Strong potential and adaptability
- 50-69: Moderate potential
- Below 50: Limited growth indicators

#### ERROR HANDLING:

- Validate inputs (non-empty strings)
- Handle API timeouts gracefully
- Return meaningful error messages
- Log all evaluations for audit trail

#### PERFORMANCE:

- Target response time: < 30 seconds
- Implement caching for similar job descriptions
- Use async operations where possible

Build this as a production-ready FastAPI application with proper logging, validation, and documentation.

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