Hackathon Project Phases Template

Project Title:

Smart Resume Generator: Customized Resumes for Every Opportunity

Team Name:

ICON INNOVATORS

Team Members:

- Name1:Y.MOUNIKA
- Name2:U.KUSUMA
- Name3:V.SWATHI

Phase-1:Brainstorming&Ideation

Objective:

-→The Resume Generator project aims to develop an AI-driven tool for automating the creation of professional resumes.

-→This Resume Generator enables the users to generate polished and personalized resumes enhance quickly, thereby enhancing the ability to present themselves effectively to potential employers and improve their job application success.

- **Identify the problem statement.**
- Define the purpose and impact of the project.

Key Points:

1. **Problem Statement:** In today's fast-paced job market, job seekers face challenges in creating well-structured, professional, and ATS-friendly resumes. Many individuals,

especially students and fresh graduates, struggle with:

. Lack of formatting skills.

· Difficulty in writing professional content.

·Inability to tailor resumes for different job roles.

2. **Proposed Solution:**

The system will:

· Use AI to generate content (suggest skills, achievements, and descriptions).
· Offer real-time resume review & scoring to improve quality.
· Allow users to download resumes in multiple formats (PDF, DOCX, etc.).

3. **Target Users:**
4. This project will benefit a wide range of users
   · Job Seekers (Students and Professionals)
   · Recruiters and Hiring managers
   · HR Tech and Job Portals

5. **Expected Outcome:**

The expected outcome of a Smart Resume Generator is a well-structured, tailored, and effective resume that highlights the candidate's skills, experience, and achievements. Here are some key expected outcomes:

· Relevant sections
· Tailored content

Phase-2:RequirementAnalysis

Objective:

- Define technical land functional requirements.

1. **Technical Requirements:**

   ● Programming Language: Python 3.x

   ● Web Framework: Flask or Django

   ● Database: Relational database management system like MySQL or PostgreSQL

   ● Natural Language Processing (NLP) Library: NLTK, spaCy, or Stanford CoreNLP

   ● Machine Learning Library: scikit-learn, Tensor Flow, or PyTorch

   ● Cloud Platform: Amazon Web Services (AWS), Microsoft Azure, or Google Cloud Platform (GCP)

   ● Front-end Framework: React, Angular, or Vue.js

2. **Functional Requirements:** User Interface
   ● User Registration: Users can register with their email address and password
   ● User Login: Users can log in with their email address and password
   ● Resume Input Form: Users can input their resume information, including work experience, education, skills, and achievements

Key Points:

3. Technical Requirements:
   · Programming Language: Python 3.x
   · Web Framework: Flask/Django
   · Database: My SQL /Postgre SQL
   · NLP Library: NLTK/spa Cy
   · Machine Learning Library: scikit-learn/Tensor Flow
   · Cloud Platform: AWS/Azure/GCP
   · Functional Requirements:

Resume Generation (template-based)

   · Content Generation (keyword extraction)
   · Resume Preview/Formatting
   · Resume Effectiveness Score/Feedback

4. **Constraints &Challenges:**
   · Data Quality
   · Technical Limitations
   · Time/Resource Constraints
   · Limited Domain Knowledge
   · User Expectations

5. Risks:

   · Data Privacy/Security
   · Bias/Discrimination
   · Inaccurate/Incomplete Resumes
   · Dependence on Third-Party Services

· Maintenance/Update Challenges

Phase-3:ProjectDesign

Objective:

- Create the architecture and user flow.

Key Points:

1. **System Architecture Diagram:**

2. **User Flow:**
   · On boarding: Sign up/Login
   · Profile Creation: Fill out registration form
   · Resume Input: Enter work experience, education, skills, etc.
   · Template Selection: Choose a resume template

· Resume Generation: AI-powered resume creation
· Review & Edit: Customize and refine resume
· Download & Share: Save and share resume

3. **UI/UX Considerations:** Simple & Minimalist Design – Clean UI with easy navigation
   · Step-by-Step Form – Guided resume creation process
   · Real-Time Preview – Instant updates as users fill details
   · Customization Options – Templates, colors, fonts, and layout choices

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Phase-4: Project Planning (Agile Methodologies)

Objective:

1. Sprint 1: User Onboarding (1 week)

2. User Story 1: As a user, I want to sign up for the Smart Resume Generator so that I can create my resume.

   - Tasks:

   - Design and implement registration form

   - Integrate with authentication service

   - Write unit tests for registration functionality

3. Sprint 2: Resume Input (1 week)

User Story 2: As a user, I want to input my work experience so that I can create my resume

- Break down the tasks using Agile methodologies.

Key Points:

4. **Sprint Planning:**

team 1: Frontend

- Implement user interface

- Tasks: Registration/Login Forms, Input Forms, Integrate with Backend API

Team 2: Backend

- Implement backend API

- Tasks: User Authentication, Resume Generation API, Integrate with Frontend

Team 3: Algorithm

- Develop resume generation algorithm

- Tasks: Research and Design, Implement Algorithm, Integrate with Backend API

5. **Task Allocation:**

Frontend Team

·mounika(Frontend Lead)

1. Design and implement registration/login forms
2. Integrate frontend with backend API
3. Create input forms for work experience and education
4. Implement resume preview and editing feature

Backend Team

·kusuma(Backend Lead)

1. Design and implement user authentication
2. Integrate backend with frontend

swathi

1. Develop API for resume generation
2. Implement data storage for user resumes

6. **Time line &Milestones:**

Sprints

· Research (2h)
· Frontend (8h)
· Backend (8h)
· Algorithm (10h)
· Deployment (2h)

7. Milestones

· Alpha: 8h
· Beta: 18h
· Production: 30h

Phase-5: Project Development

Objective:

- Code the project and integrate components.

KeyPoints:

1. **Technology Stack Used: A technology stack, often referred to as a tech stack, is a combination of software products and programming languages used to create a web or mobile application**
2. **Development Process: A development process is a set of steps or phases to create a software product. The specific steps can vary depending on the methodology used, but a development process .**
3. **Challenges& Fixes: A development process is a set of steps or phases to create a software product. The specific steps can vary depending on the methodology used, but a development .**

Phase-6: Functional & Performance Testing

Objective:

1. Code the project and integrate component

- Ensure the project works as expected.

KeyPoints:

2. **Test Cases Executed:**

Key Points:

1. Technology Stack Used: (List of programming languages, APIs, etc.)

2. Development Process: (Steps followed for coding)

3. Challenges & Fixes: (Mention any obstacles faced and how they were solved)

3. **Bug Fixes & Improvements: Software testing is the process of verifying that a software product or application is doing what it is supposed to do. The benefits of testing include preventing distractions, reducing development costs, and improving performance.**

4. **Final Validation: Show Impact With Numbers: Top resumes demonstrate value by quantifying results. includes error reduction percentages, process optimization time savings, cost savings through efficiency, and compliance rate improvements.**

5. **Deployment(if applicable):**

Final Submission

1. **Project Report Base done the templates**
2. **Demo Video(3-5Minutes)**
3. **GitHub /Code RepositoryLink**
4. **Presentation**