

Hackathon Project Phases Template

Project Title: "Logo Craft : Innovative Logo Generation with Diffusion Technology"

Team Name: Tech Forces

Team Members:

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Phase-1: Brainstorming & Ideation

Objective:

"LogoCraft aims to revolutionize logo creation by utilizing advanced diffusion technology to generate high-quality, custom logos. Its objective is to streamline the design process for businesses and individuals, providing unique and visually appealing logos efficiently."

Key Points:

1. Problem Statement:

- In today's competitive market, establishing a memorable brand identity through a captivating logo is crucial for businesses.
- However, many companies face challenges in creating unique and compelling logos that accurately represent their brand values and vision.

2. Proposed Solution:

- Logo Craft is use to easily generate professional logos that match his brand's identity and values. This helpsthem establish a strong brand identity from the start.
- Using Logo Craft, users can quickly pivot from design ideation to business operations, maximizing his time and resources to focus on innovation and growth.

3. Target Users:

- **Entrepreneurs** who need a professional logo to establish their brand identity.
- **Marketing Agencies** offers branding services which need a efficient logo.
- **Businesses** owners who lack design expertise and needs a logo.

4. Expected Outcome:

- Logo Craft platform generates logo design files (PNG,SVG,EPS), customization options, and a design rationale explaining the inspiration behind the logo.

Phase-2: Requirement Analysis

Objective:

Define the technical and functional requirements for the LogoCraft App.

Key Points:

1. Technical Requirements:

- Programming Language: **Python**
- Backend :**Node.js with Express.js**
- Frontend: **Html, CSS**
- Database: **MySql**

2. Functional Requirements:

- Generate custom logos based on brand input using diffusion technology.
- Allow users to customize logos with options for text , color, and layout.
- Provide download able logo files in multiple formats (PNG , SVG , EPS).
- Enable logo previews in real-world scenarios (e.g., business cards, websites).

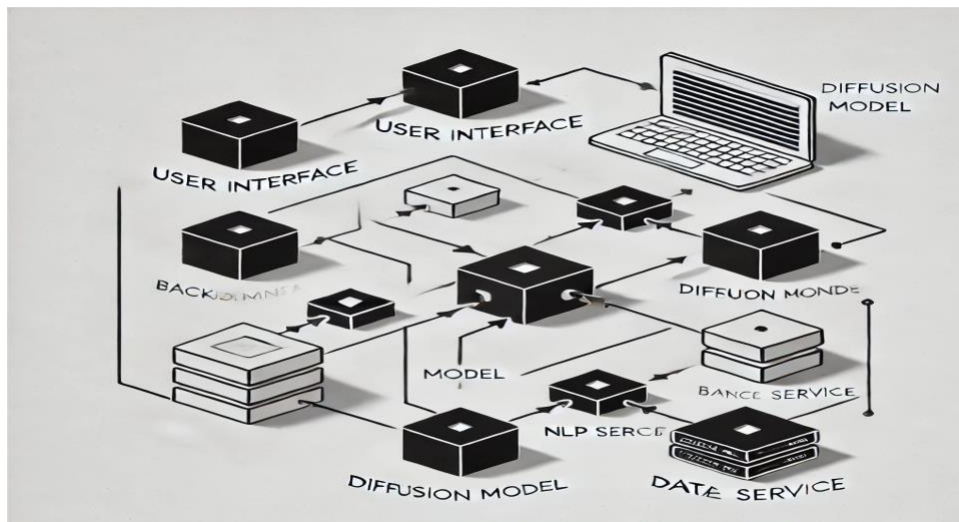
3. Constraints & Challenges:

- Ensuring high- quality, diverse logo generation with diffusion technology.
 - Balancing ease of use with advanced customization options.
 - Preventing potential copyright issues with generated logo designs.
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Phase-3: Project Design

Objective:

Develop the architecture and user flow of the application.



Key Points:

1. System Architecture:

- **User Interface:** User inputs logo requirements.
- **Processing:** Diffusion model generates logo concepts.
- **Backend:** NLP services refine design details.
- **Display :** UI presents logo variations & edits.

2. User Flow:

- **Input:** User enters logo idea (e.g., "Minimalist tech logo").
- **Processing:** Diffusion model generates design options.
- **Refinement:** Backend fine-tunes logos with NLP services.
- **Output:** UI displays final logos for download/editing.

3. UI/ UX Considerations:

- **Simple UI for easy logo customization.**
 - **Filters: Style ,colors ,and typography.**
 - **Dark &light mode for better design experience.**
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Phase-4: Project Planning(Agile Methodologies)

Objective:

Break down development tasks for efficient completion.

Sprint	Task	Duration	Assigned To
Sprint1	Environment Setup	2 hours	Member3
Sprint2	Frontend Development	4 hours	Member2&4
Sprint3	Backend Development	4 hours	Member1
Sprint4	Final Presentation	2 hours	Entire Team

Phase-5: Project Development

Objective:

Implement core features of the LogoCraft App.

Key Points:

1. Technology Stack Used:

- Frontend: HTML,CSS.
- Backend: Node.js with Express.js
- Programming Language: Python

2. Development Process:

- Build a React.js frontend for user interaction and logo display
- Develop a Python service , communicating with the backend to generate logos based on user prompts.

- Implement prompt processing, data storage, and deploy the application to a cloud platform.

3. Challenges & Fixes:

- Challenge: Slow logo generation times.
 - Fix: Caching, model optimization, cloud GPUs.
 - Challenge: Inaccurate logo generation results.
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Final Submission

1. **Project Report Based on the templates**
2. **Demo Video(3-5 Minutes)**
3. **GitHub / Code Repository Link**
4. **Presentation**