Image Forge AI –

AI-Powered Image Generation Web App

B. Tech Final Year Project

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Step into Wonder – Project Overview

ImageForge AI is a comprehensive platform enabling users to create, enhance, and interact with images through advanced AI technologies.

Built with modern tools: Firebase Studio, Next.js, React, HTML, CSS, JS, and integrated with Gemini API for powerful image generation.

Our goal: Empower users from creatives to developers to effortlessly generate and refine visual content.

Why This Project?

- No unified platforms combining AI image generation, storytelling, and UI-to-code conversion.

- Creativity barriers restrict non-designers from expressing ideas visually.

- Manual UI development consumes excessive time and resources.

- Growing market demand for AI-assisted content and design tools.

What We Aim to Achieve

- Develop an intuitive, multi-functional AI image platform accessible to all skill levels.

- Enable effortless text-to-image generation with custom styles and themes.

- Provide developers with seamless UI-to-code conversion capabilities.

- Offer creative prompt ideas to spark user inspiration.

- Transform user-created images into engaging interactive stories.

Technology Stack

Frontend: HTML, CSS, JavaScript, React.js, Next.js

Backend: Firebase for hosting and data management

AI Model: Gemini API for advanced image and content generation

Design Tools: Figma and Canva integration for UI-to-Code inputs

How It All Connects

User inputs go to the React frontend, which interacts with Gemini API for generation. Backend Firebase manages data and hosting. Outputs include images, code snippets, and interactive stories.

Main Functionalities

🎨 AI Image Generator

Create stunning images from text prompts with multiple artistic styles.

✨ Prompt Builder

AI-driven prompt suggestions to inspire unique creations instantly.

🧠 Image-to-Code

Convert UI designs and screenshots into developer-ready HTML, CSS, and JS.

📖 Image-to-Story

Transform generated images into interactive storytelling experiences.

Unleash Your Creativity: AI Image Generator

Users input a descriptive prompt and select styles like Anime, Surreal, or Realistic to generate high-quality images.

Customize color palettes, themes, and artistic styles to suit any creative vision.

Prompt (AI Optimized):

...nescent flora illuminates an ancient, vine-choked jungle in the style of fantasy art. Tow... ...ed roots reach towards a sky swirling with nebulae visible even through the dense car... ...cascade into crystal-clear pools inhabited by fantastical, scaled creatures with iridesc... ...ungle, a wise, elven druid with flowing emerald hair stands before an altar of living woo... ...agic. The air crackles with arcane energy, casting ethereal glows on the surrounding v... ...is one of mystical wonder and ancient secrets, with a composition emphasizing depth ... ...iewer into the heart of this fantastical world. Dramatic lighting highlights the textures o... ...etails of the druid's attire, creating a vibrant and enchanting scene.

⬇ Download Image

Get Inspired Instantly: Prompt Builder

Enter a theme or keyword, and AI generates creative prompt ideas like "Crystalline Dragon" or "Steampunk City."

This jump-starts the image generation process with fresh, imaginative concepts.

From Design to Development: Image to Code

Users upload UI screenshots; AI converts them into clean, developer-ready React components using HTML, CSS, JS with ShadCN conventions.

This streamlines frontend development, saving valuable time and effort.

to Code Genera

eenshot of a user interface, and watch the AI conve
code.

Upload UI Screenshot

Select an image file from your device (max 4MB).

Click to upload or drag and drop

PNG, JPG, WEBP up to 4MB

ave a design?

ur own UI mockup with these industry-leading tools:

to Figma ☐   ● Go to Canva ☐

n example:

Future Scope

Our vision extends beyond current features to embrace emerging AI advancements, enhancing image generation creativity and interactivity.

Planned innovations include:

- Real-time collaborative image creation and storyboarding

- Expanded AI styles and personalized style training

- Integration with AR/VR platforms for immersive storytelling

- Advanced UI-to-code for multiple frontend frameworks

- Community-driven content sharing and feedback loops