

## PROBLEM STATEMENT

1. Creating immersive 3D websites is currently limited to developers and designers who are proficient with advanced tools like **Three.js**, **Blender**, or **WebGL**. These tools come with steep learning curves, and even minor edits require significant time and technical knowledge.
2. For most non-technical users — such as **startups**, **educators**, **freelancers**, or **small businesses** — this complexity becomes a bottleneck. It leads to increased development costs, long timelines, and dependency on external developers .
3. Even popular no-code platforms like **Wix**, **Webflow**, or **Squarespace** are mostly limited to 2D design, and lack in providing dynamic 3D environments.

## TARGET AUDIENCE & CONTEXT

1. 3Dverse targets digital creators, marketers, freelancers, content studios, and SMBs—anyone who wants 3D websites without coding.
2. No-code tools revolutionized 2D creation; 3D is the next frontier.
3. Like Canva or ChatGPT for 3D, 3Dverse makes site creation as simple as typing or speaking.
4. Supports text, voice, and visual input, matching how today's creators interact with AI.

## Use of Gen-AI

1. ZeroCode3D turns ideas into interactive 3D experiences—just describe your vision, and it builds it.
2. Powered by GPT-4, it transforms natural language into complete 3D website code using Three.js, HTML/CSS, and JS.
3. Smart prompt templates and layout patterns generate animations, transitions, and lighting effortlessly.
4. Vision models like CLIP/GPT-4V refine scenes from images or sketches.
5. Whisper enables voice input, making 3D creation as easy as speaking—perfect for mobile use.

## Solution Framework

### 3Dverse **Workflow:**

#### **Input Layer**

- Users type a prompt like: *"A fantasy 3D homepage with castle and mist."*
- Optional: voice input via **Whisper** or sketch/image for reference. **Gen-AI Engine**

#### **Gen-AI Engine**

- Uses **LLMs** to convert prompts into 3D layouts with **HTML/CSS/JS**.
- Includes curated prompt patterns for **animation**, **lighting**, **camera**, and **physics**.
- Powered by **Three.js** or Spline-like rendering structures.
- Auto-generates responsive layouts and animations.

### User Interface

- Real-time 3D preview window in browser.
  - Drag-and-drop adjustments: move objects, tweak animations.
  - “**Explain Scene**” uses LLM to describe code in simple terms.
  - “**Voice Change**” prompt lets users update scenes dynamically (e.g., “Add rain,” “Make it night”).
- ### Export & Share
- One-click export: zip file, GitHub repo, or publish via Netlify/Vercel.
  - Future: Webflow/Shopify plugin support.
- Combines flexibility for developers with no-code simplicity for general users.

## Feasibility & Execution Plan

- All required technologies are available:
  - **GPT-4** for code, ◦
  - Whisper** for voice, ◦
  - Three.js** for 3D visuals.
- Frontend: **React**, Backend: **Node.js** with modular API structure.
- Browser-based 3D previews reduce resource needs.
- MVP can be built in weeks with limited compute.
- Optimized API usage will minimize costs and latency.
- Designed for future mobile and offline expansion.

## Scalability & Impact

- Empowers millions to create 3D websites without code or agencies.
- Creators can build **interactive portfolios**, educators can design **immersive lessons**, and brands can run **3D campaigns**.
- **Multilingual prompts** support regional/global use (e.g., in India).
- ZeroCode3D brings the **democratization of 3D web design**, similar to what Canva did for graphics.

## Summary + Bonus (Monetizable Product)

- ZeroCode3D is a Gen-AI-powered tool that lets users build 3D websites using simple text or voice prompts — no coding needed. With support for multilingual input, template reuse, and SaaS hosting, it turns into a monetizable platform for creators, educators, and small brands. Its simplicity and scalability make it an ideal Gen-AI product with real market demand.

