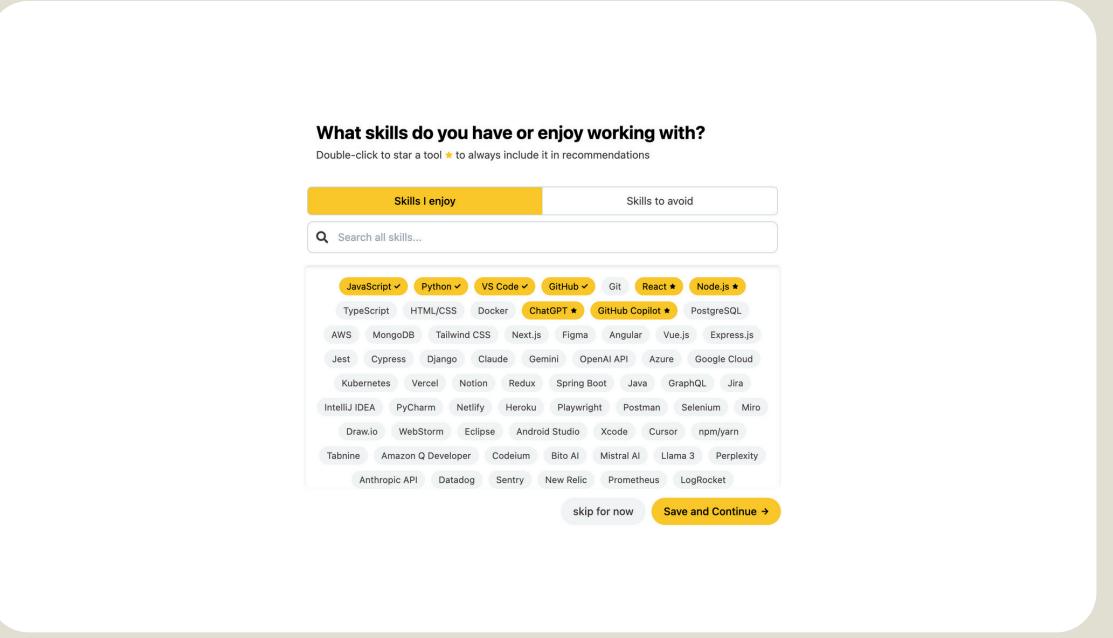
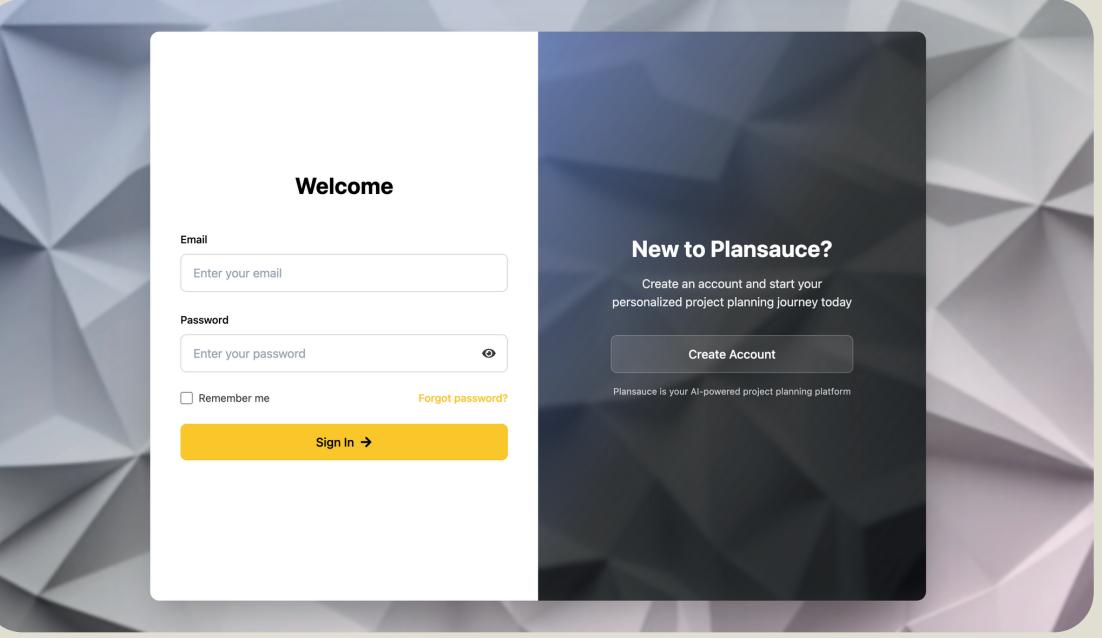




Overview

Project planning presents significant challenges for developers at all skill levels, often consuming valuable time better spent on implementation. Plansauce streamlines this process as a comprehensive planning companion, analyzing project requirements to recommend customized tech stacks and breaking implementation into structured tasks. The platform's contextual prompt generation enhances productivity by crafting task-specific queries for AI assistance, allowing developers to focus more energy on execution rather than planning complexities.



User Flow

Initial Setup

- User Registration: Create account; Specify technical background (familiar tools, preferred tools, avoided tools)
- Project Definition: Input project name; Describe idea; Select priority (speed vs. scalability)
- Idea Enhancement: System processes input via Gemini API; Generates enhanced description with contextual background and feature recommendations.

Tools & Task Generation

- Tech Stack Analysis: CrewAI orchestrates specialized agents to analyze requirements and generate tailored technology recommendations across development phases(setup, frontend, backend, deploy, testing, maintain)
- Task Creation: System converts recommendations into structured implementation steps; Interactive dashboard displays categorized tasks with progress tracking

Prompt Generation

- Contextual Assistance: generates task-specific prompts with toggleable context options; Formatted prompts include task details and recommended tooling

Methods

AI Agent Architecture:

The application employs a multi-agent system using the CrewAI for orchestrated decision-making. The primary functionality consists of two specialized crews(a team of AI agents):

TechStackGenerationCrew:

- Implements sequential agent collaboration with a Research Agent and Curator Agent
- Research Agent utilizes a web search API to evaluate technologies across all project phases
- Curator Agent synthesizes research findings to create comprehensive tech stack recommendations
- Agent responses are processed through the CrewAI sequential task execution model

TaskGenerationCrew:

- Ingests outputs from the TechStackCuratorCrew through standardized data structures
- Analyzes project metadata including description, priority settings, and recommended technologies
- Generates categorized task sequences mapped to the six development phases.

Tech Stack

Integrates MERN stack (**MongoDB, Express, React, Node**) with additional technologies including **Tailwind, Redux, and JavaScript**. The backend leverages an additional server **FastAPI** to support **CrewAI**'s agent orchestration capabilities. **Gemini API** powers the language model integration.

