Design Document

Hemang Murugan — Adrian Halgas

October 2025

1 Project Description

The goal of this project is to design and implement **The 9th Seat** an open idea-sharing platform that allows users to post creative concepts or projects and receive constructive critiques from others, acting as the "devil's advocate."

The platform encourages healthy debate and critical thinking by letting users take on the "ninth seat" a symbolic role derived from a Japanese innovation philosophy where every discussion reserves one seat for the critic, ensuring every idea is tested before it grows. Through upvoting and commenting, users can engage in meaningful discourse that sharpens ideas, promotes reflection, and rewards both creativity and analytical insight.

The primary audience includes:

- **Creators and Innovators** — individuals seeking feedback on early-stage ideas or projects before execution.
- **Critical Thinkers and Engineers** — users who enjoy dissecting and improving concepts through logical critique.
- **Professors, Mentors, and Educators** — those who use the platform for structured brainstorming or peer review exercises.
- **Observers and Learners** — users who simply wish to explore innovative ideas and learn from others' critiques.

The 9th Seat is built using modern **HTML, CSS, and JavaScript** for the frontend and **Express + MongoDB** for the backend, ensuring efficient data management, scalability, and responsiveness. It follows clean design principles and maintains accessibility for all types of users.

2 User Personas

The platform caters to a variety of participants who engage with it in different ways. The following personas represent the core target users and their motivations.

Persona 1: The Creator

Name Mike

Age 22

Role Innovator

Goals Wants to share his startup idea and receive structured, actionable critique before committing to product development.

Frustrations Often receives vague compliments instead of constructive feedback; finds no space online dedicated to structured idea refinement.

Scenario Mike posts his startup concept and receives thoughtful critiques from others that help him identify weak points and strengthen his plan.

Persona 2: The Challenger

Name James

Age 25

Role Engineer / Critical Thinker

Goals Enjoys analyzing and challenging ideas to uncover hidden flaws and stimulate deeper thinking.

Frustrations Finds that most platforms reward popularity over insight and lacks a space that values critical reasoning.

Scenario James takes the "Devil's Seat," leaving reasoned critiques on projects and receiving appreciation through upvotes for his insights.

Persona 3: The Mentor

Name Dr. Evelyn Tan

Age 44

Role Professor / Startup Mentor

Goals Wants to help students understand that strong ideas come from embracing critique and iteration.

Frustrations Students tend to avoid criticism or take it personally, limiting growth.

Scenario Dr. Tan uses the platform for classroom brainstorming, where students critique each other's ideas constructively.

Persona 4: The Observer

Name Leo Park

Age 20

Role Curious Learner

Goals Wants to explore innovative ideas and observe how experts discuss and refine them.

Frustrations Finds most online discussions too intimidating or disorganized to engage with.

Scenario Leo browses through ideas and comments to learn how great concepts evolve through structured critique.

3 User Stories

The following user stories describe how each type of user interacts with the platform:

1. **Creator:** As a creator, I want to post my idea or project concept so that I can receive meaningful critiques and refine it before building.

2. **Creator:** As a creator, I want to edit or delete my own posts so that I can update my idea as I improve it.

3. **Challenger:** As a challenger, I want to comment on other users' ideas so that I can offer constructive feedback or logical counterpoints.

4. **Challenger:** As a challenger, I want to up vote insightful ideas and comments so that the best contributions get highlighted.

5. **Mentor:** As a mentor, I want to organize discussions around specific ideas so that my students can practice healthy critique and collaborative thinking.

6. **Mentor:** As a mentor, I want a structured platform where critique is encouraged and appreciated, not discouraged.

7. **Observer:** As an observer, I want to browse through trending ideas and comments so that I can learn from high-quality debates.

8. **All Users:** As a user, I want to register, log in, and edit my profile so that I can manage my identity and interactions on the platform.

9. **All Users:** As a user, I want to search ideas by title and apply filters like "Top Rated" so that I can easily discover insightful discussions.

4 Mockup / Wireframe

4.1 Overall Layout

The 9th Seat follows a clean, minimal, and intuitive design layout. Each page serves a focused purpose from idea creation to critique, maintaining clarity and quick navigation.
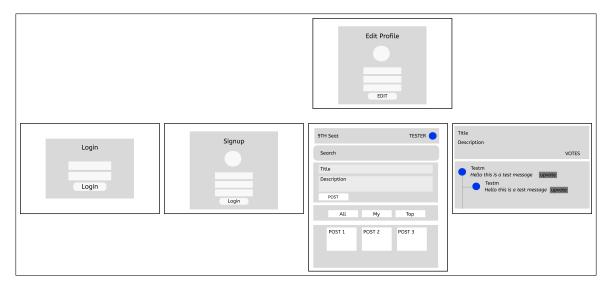

Figure 1: Wireframe showing key pages of The 9th Seat: Login, Signup, Edit Profile, Dashboard, and Comment View.

4.2 Page Structure Explanation

- **Login Page:** A simple two-field layout (Email and Password) centered on the screen
- **Signup Page:** Similar in structure to the Login page but includes an additional "Name" field and profile avatar placeholder. After account creation, users are redirected to the login screen.
- **Edit Profile Page:** Displays the current profile picture and editable fields for Name, Email, and Password. Includes a "Edit" button for saving changes.
- **Dashboard (Home Page):** Contains:
  - A top navigation bar with logo ("9th Seat"), username, and profile icon.
  - Search bar for filtering posts by keyword.
  - Input fields for creating a new post (Title, Description) followed by a "Post" button.
  - Filter buttons — "All", "My", and "Top" — for viewing global, personal, or top-rated ideas.
  - A dynamic feed displaying posts (Title, Creator, and Upvote Count).
- **Comment View:** Opens when a user clicks on a post from the feed. Shows the full Title, Description, and the total number of Votes. Below, comments are displayed in a nested thread-like structure, simulating a conversation tree. Each comment has:
  - Comment text
  - Upvote button for highlighting valuable critiques

5 Conclusion

The 9th Seat successfully creates a structured environment for idea-sharing and critique, bridging the gap between creativity and critical thinking. By encouraging constructive debate, rewarding thoughtful analysis, and supporting accessibility and ease of use, the platform empowers creators to refine their ideas before implementation. Its dual reward system for both innovation and criticism makes it a unique social platform for collaborative intellectual growth.