Background

Insyd is the next-gen social web for the Architecture Industry. In steady state, it can have 1 million daily active users (DAUs) from India alone, engaging with others through blogs, chats, jobs etc. To keep users engaged, the Insyd platform will need to notify people of activity from people they follow, people who follow them or from people who discover their content organically. Your task here is to design and implement a proof-of-concept of this notification system.

Key points

1. Design for a bootstrapped startup with a 100 DAUs in mind
2. Use of AI is **heavily** encouraged. You may not be able to finish this assignment in 1 day otherwise anyway.

Part 1: System Design document

Write a system design document which explains components involved, flow of execution, scale considerations, performance and limitations of this design.

Deliverables

1. A link to the document

Part 2: POC App

Implement a proof of concept for the design you wrote above. The app should have a frontend in NextJS and a backend in NodeJS. You can use a database of your choice.

Tips

1. Don't waste time working on the aesthetics of the app
2. Don't implement anything which is not strictly needed for the POC. This includes auth, caching, responsive UI etc.

Deliverables

1. Links to Github repositories
2. A deployed App on a platform of your choice