DEPI Final Project

TechEdu

WE OWN THE FUTURE

Team Names

Ziad Essam Abdelaziz AbdelMoula

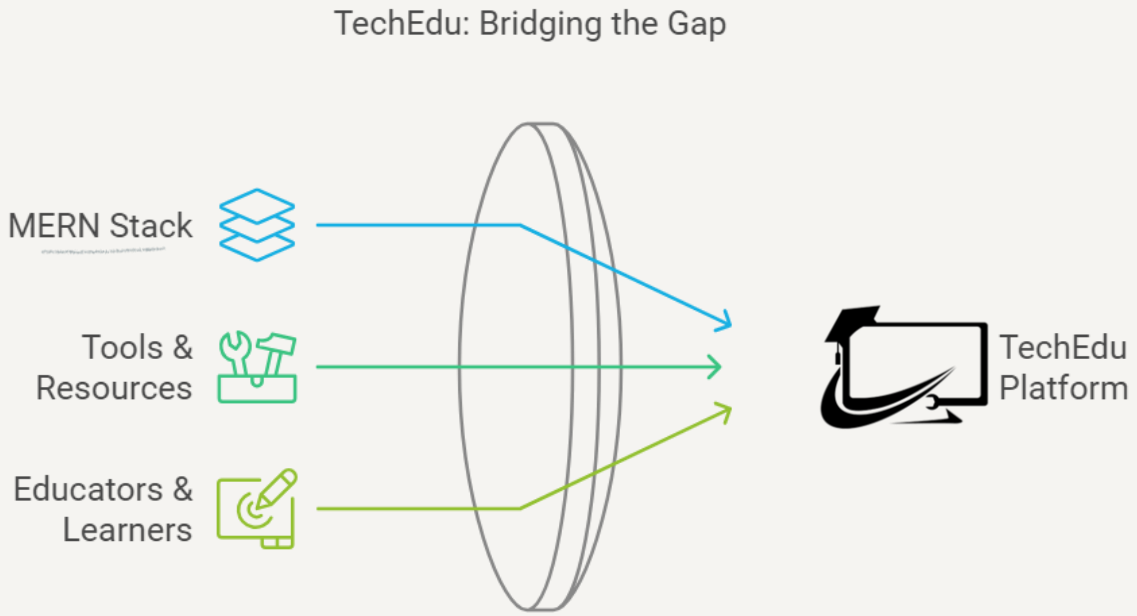
Karim Hazem Hamed Mohamed

Table Of Content

- Brief overview of TechEdu
- Technologies Used.
- Audience and Stakeholders
- TechEdu Sequence
- Functional and Non-Functional Requirements
- TechEdu Use cases
- System Architecture
- Design of Each Building Block
- Implementation

Brief overview of TechEdu

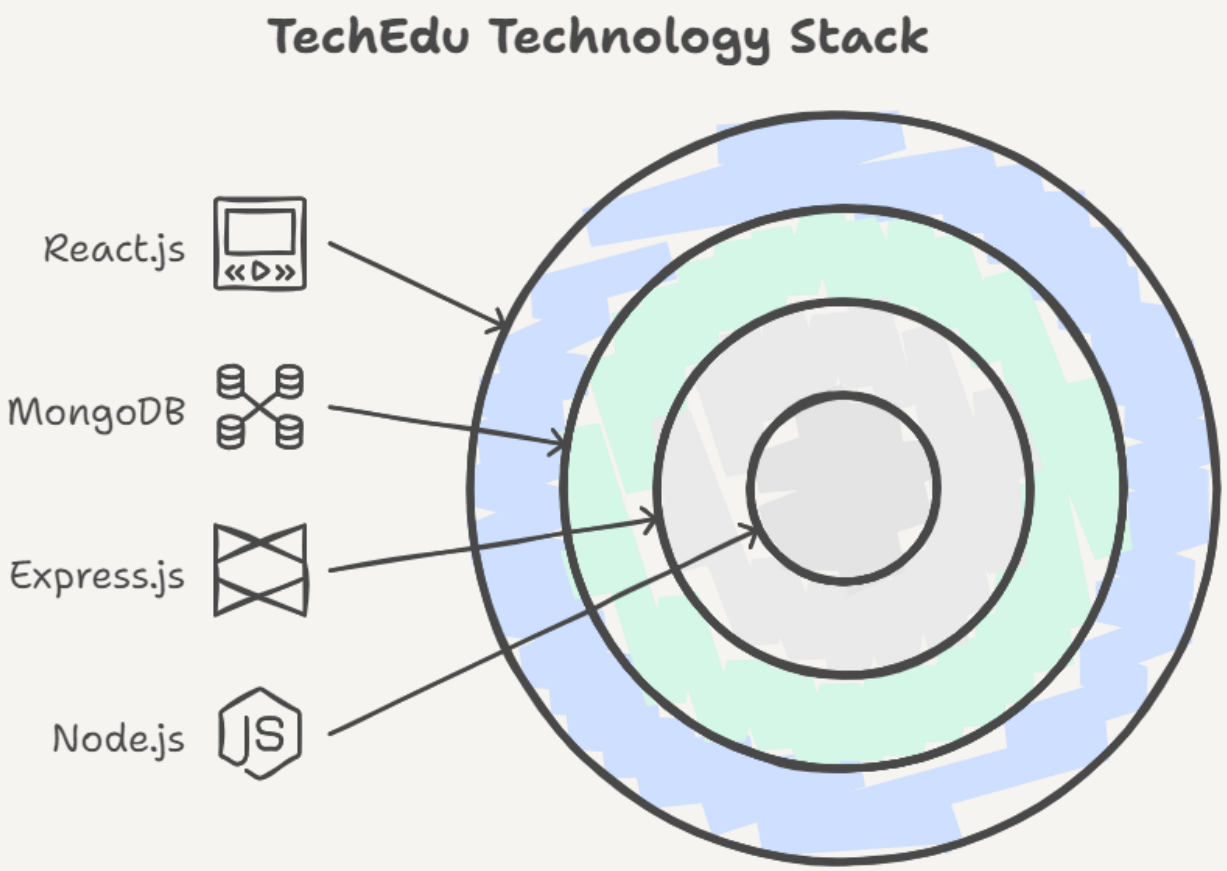
- TechEdu is an online education platform designed to facilitate learning and teaching across a variety of disciplines. It leverages the MERN stack (MongoDB, Express.js, React.js, Node.js) to deliver a seamless and interactive user experience. The platform aims to bridge the gap between educators and learners by providing a comprehensive suite of tools and resources



Technologies Used

TechEdu is built using the following technologies:

- **React.js:** For frontend development.
- **MongoDB:** For database management.
- **Express.js:** For backend framework.
- **Node.js:** For server-side runtime.



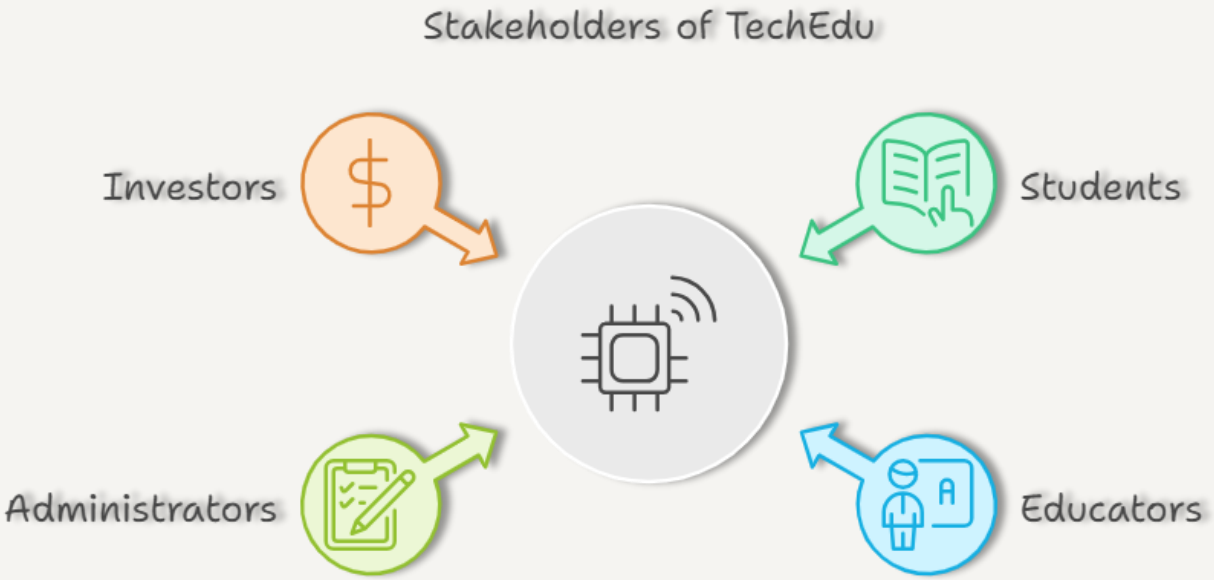
Audience and Stakeholders

Students: Individuals seeking to learn new skills and knowledge.

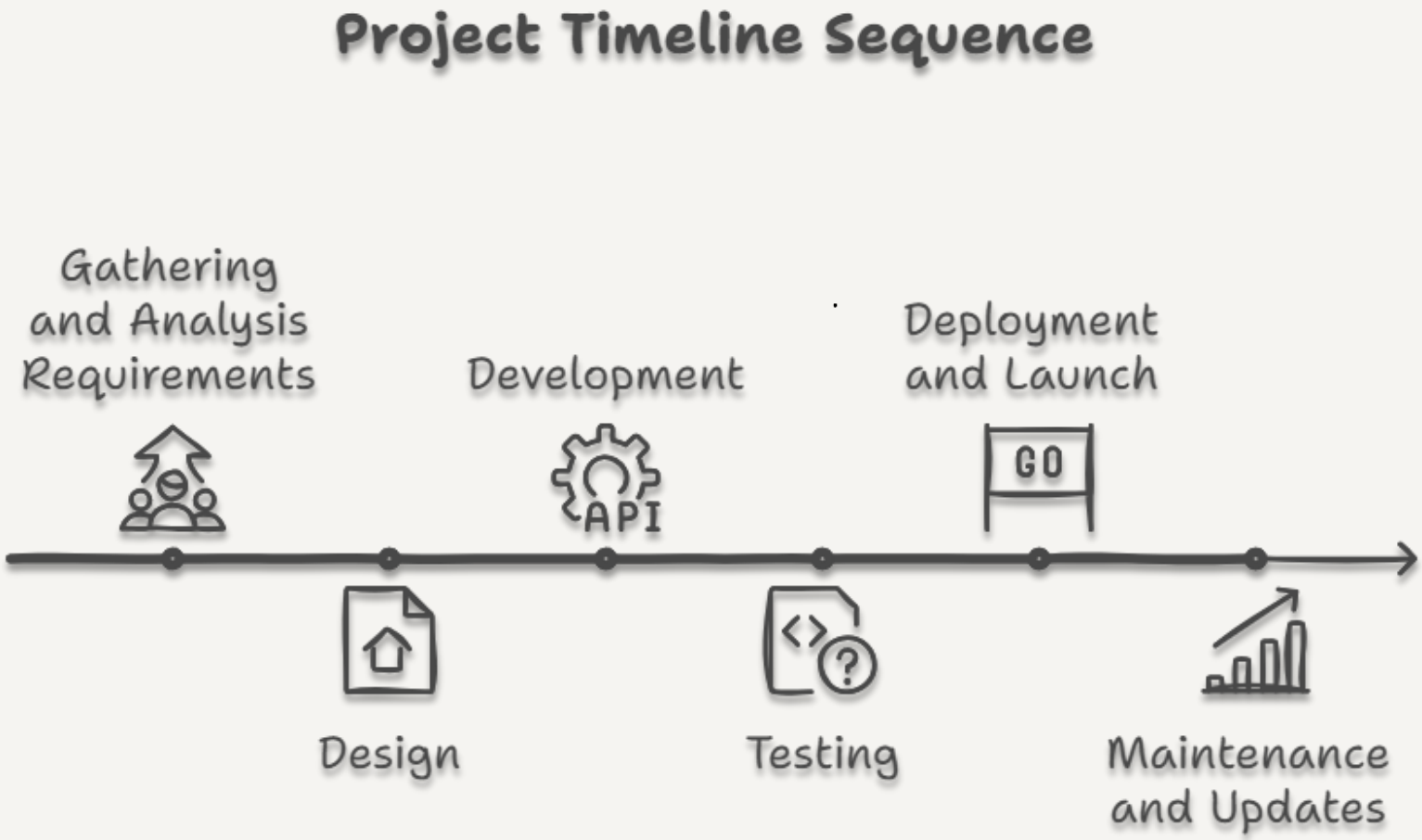
Educators: Professionals creating and managing educational content.

Administrators: Users overseeing the platform's operations and maintenance.

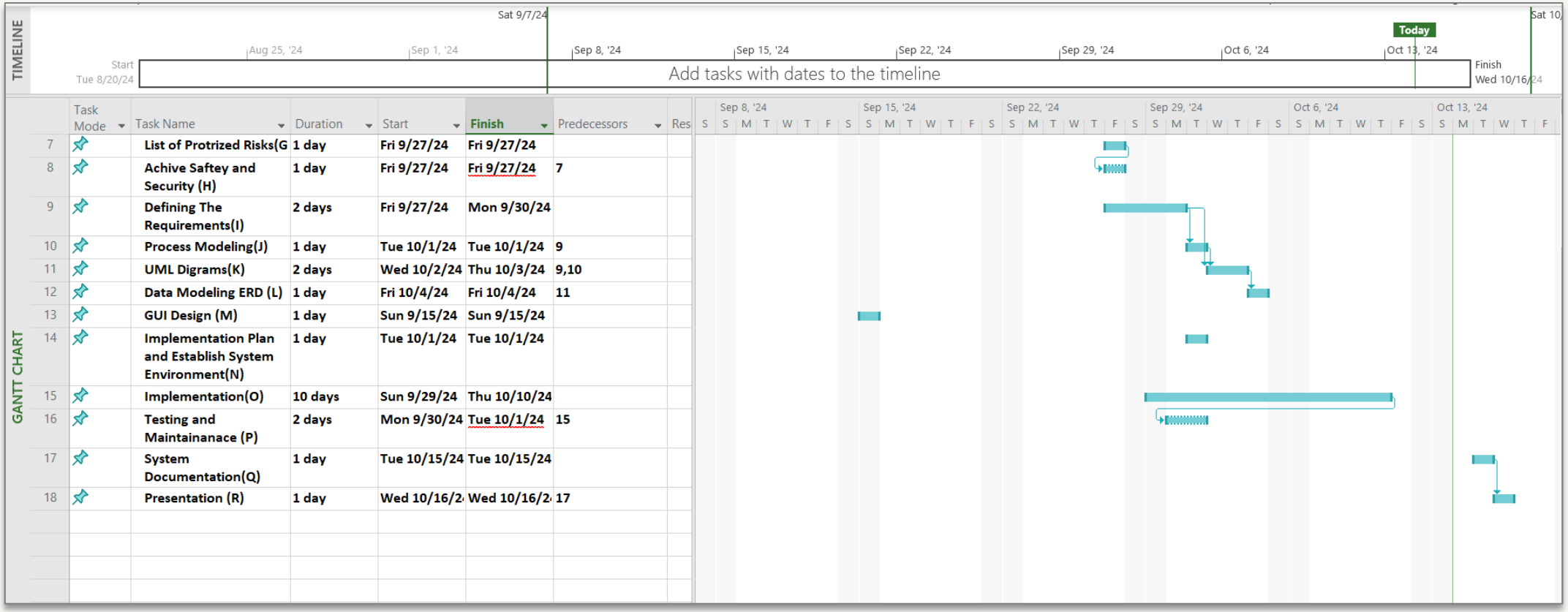
Investors: Parties interested in the development and success of the platform.



TechEdu Sequence

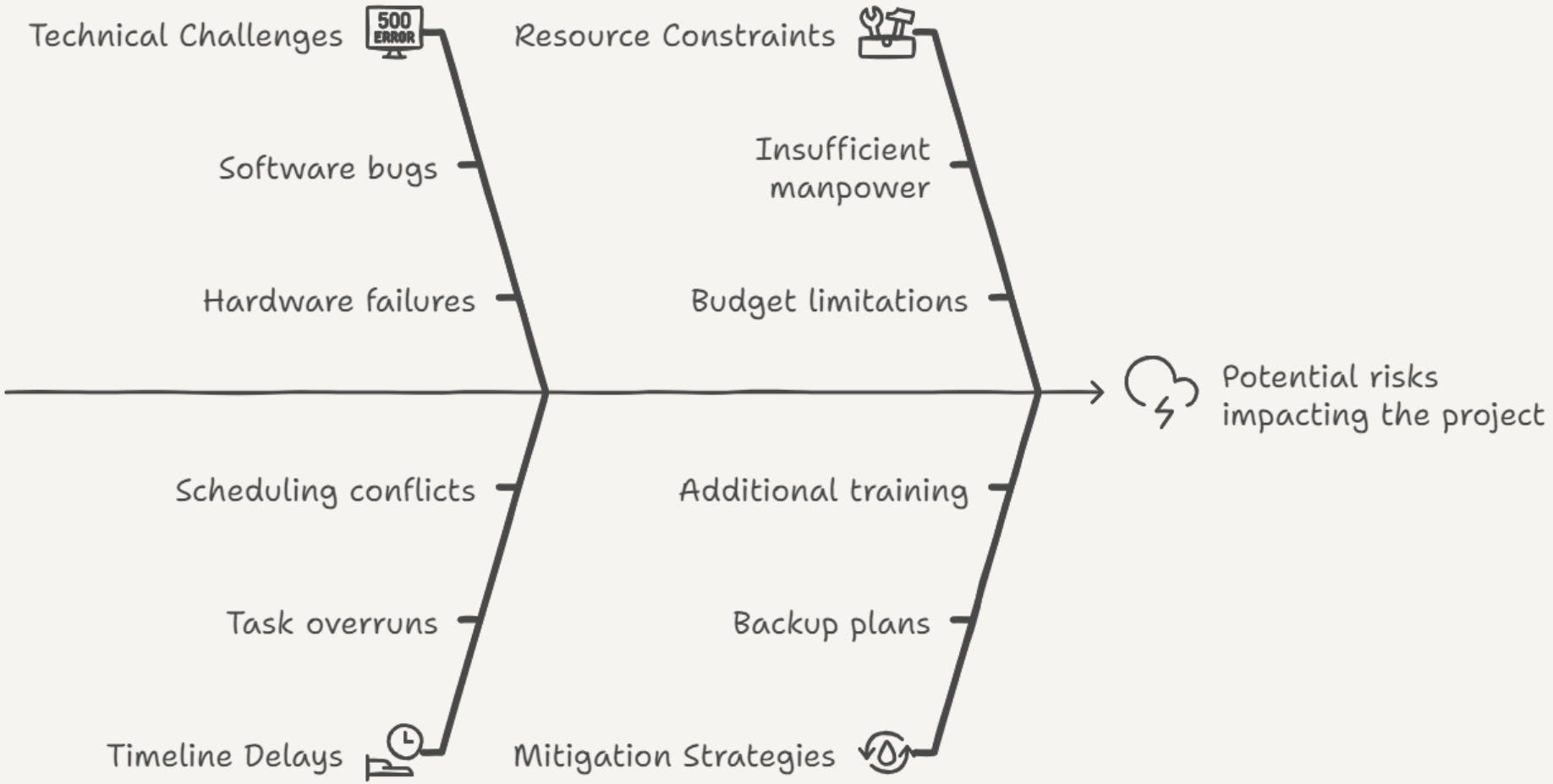


TechEdu Sequence

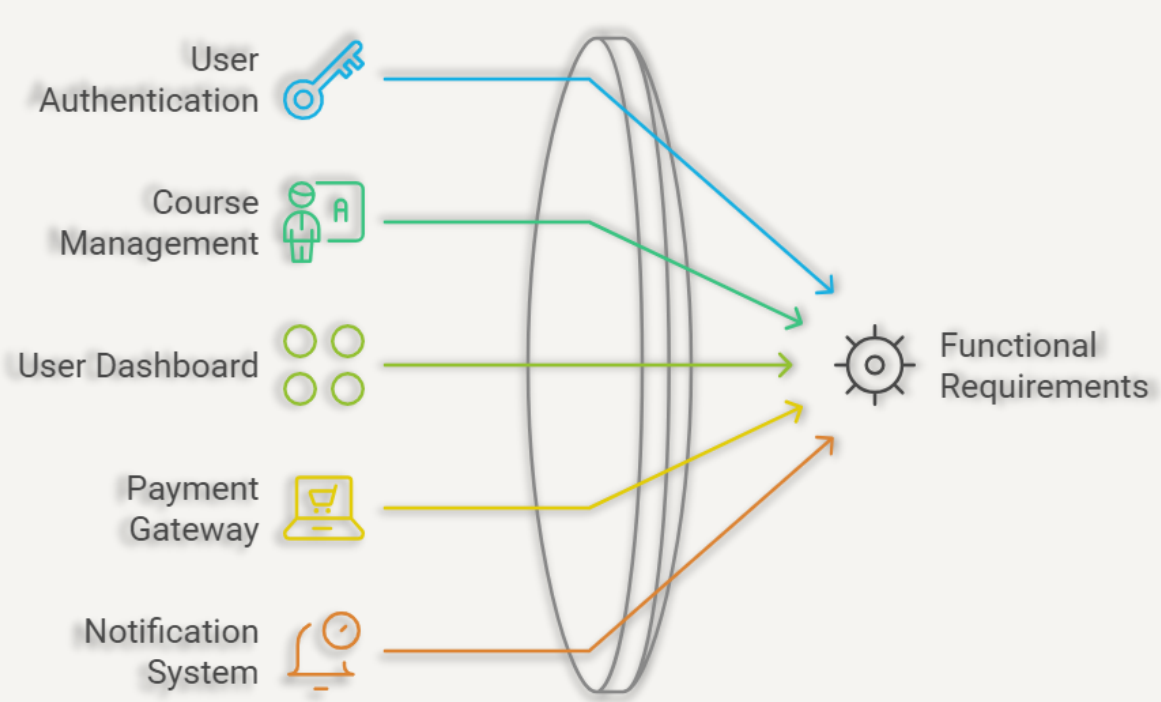


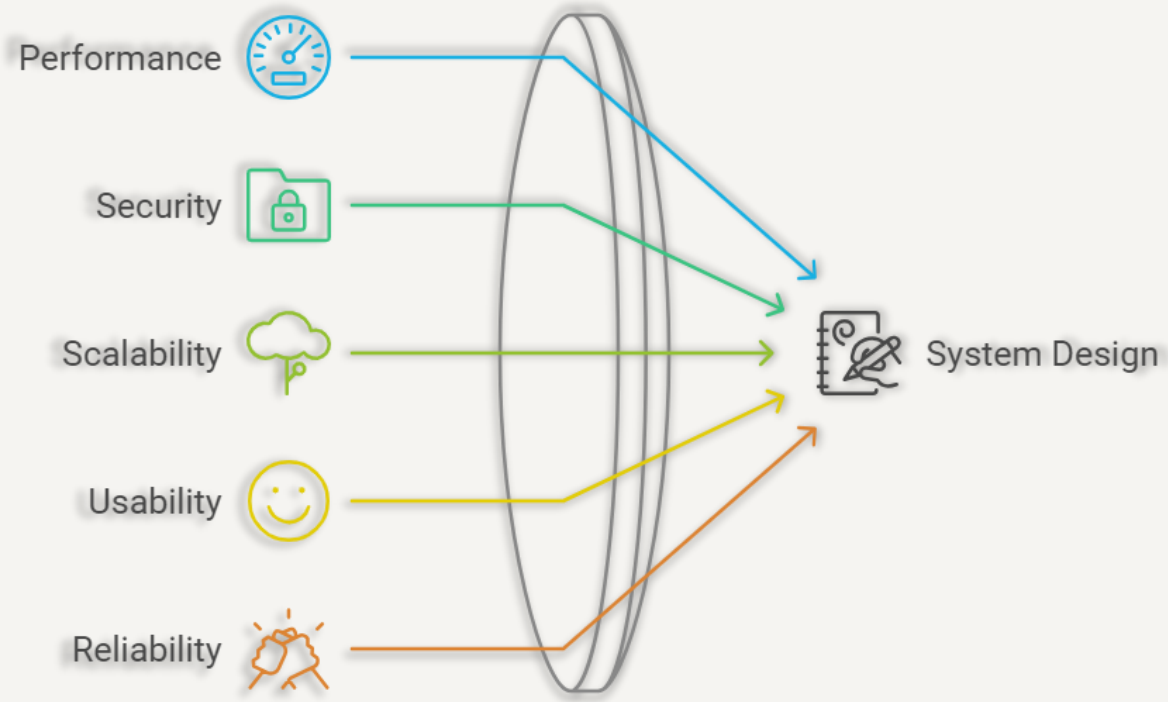
	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Res
7		List of Protrized Risks(G	1 day	Fri 9/27/24	Fri 9/27/24		
8		Achive Saftey and Security (H)	1 day	Fri 9/27/24	Fri 9/27/24	7	
9		Defining The Requirements(I)	2 days	Fri 9/27/24	Mon 9/30/24		
10		Process Modeling(J)	1 day	Tue 10/1/24	Tue 10/1/24	9	
11		UML Digrams(K)	2 days	Wed 10/2/24	Thu 10/3/24	9,10	
12		Data Modeling ERD (L)	1 day	Fri 10/4/24	Fri 10/4/24	11	
13		GUI Design (M)	1 day	Sun 9/15/24	Sun 9/15/24		
14		Implementation Plan and Establish System Environment(N)	1 day	Tue 10/1/24	Tue 10/1/24		
15		Implementation(O)	10 days	Sun 9/29/24	Thu 10/10/24		
16		Testing and Maintainanace (P)	2 days	Mon 9/30/24	Tue 10/1/24	15	
17		System Documentation(Q)	1 day	Tue 10/15/24	Tue 10/15/24		
18		Presentation (R)	1 day	Wed 10/16/2	Wed 10/16/2	17	

TechEdu Sequence



Functional and Non- Functional Requirements

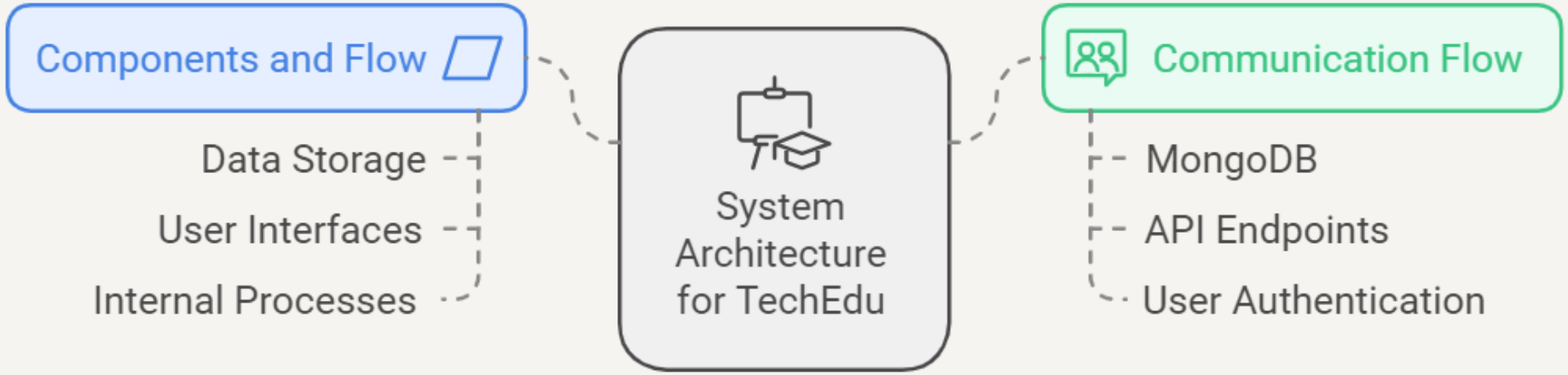




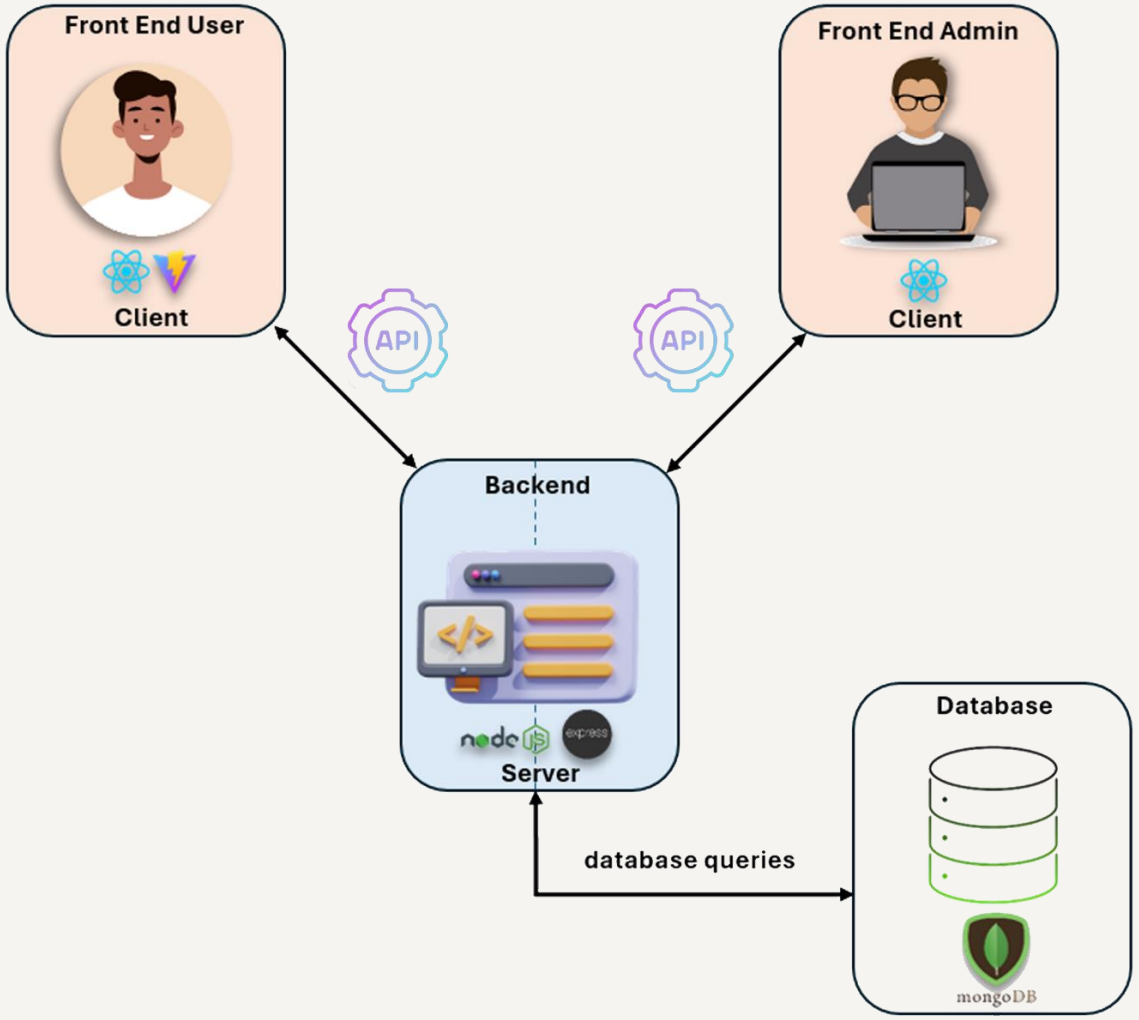
TechEdu Use cases

System Architecture

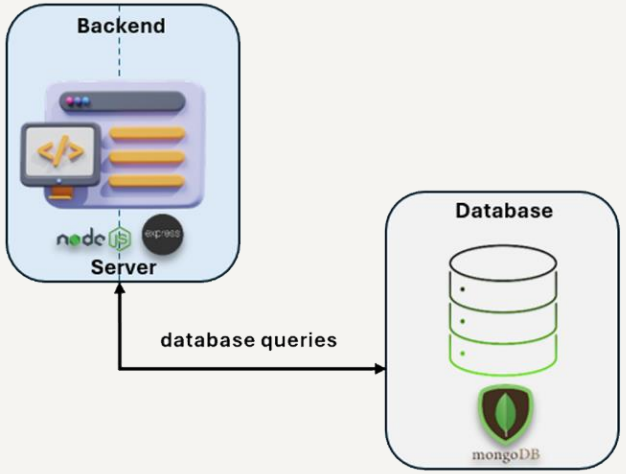
- **System Architecture** for TechEdu built from two things Components and Flow and communication flow

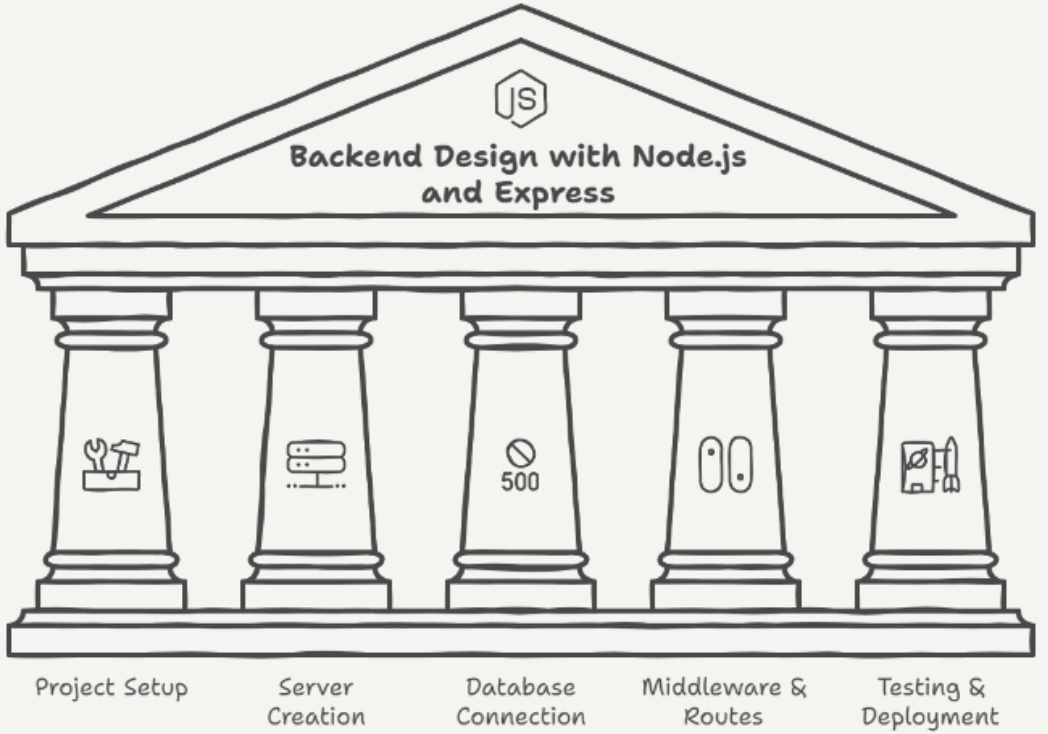


System Architecture

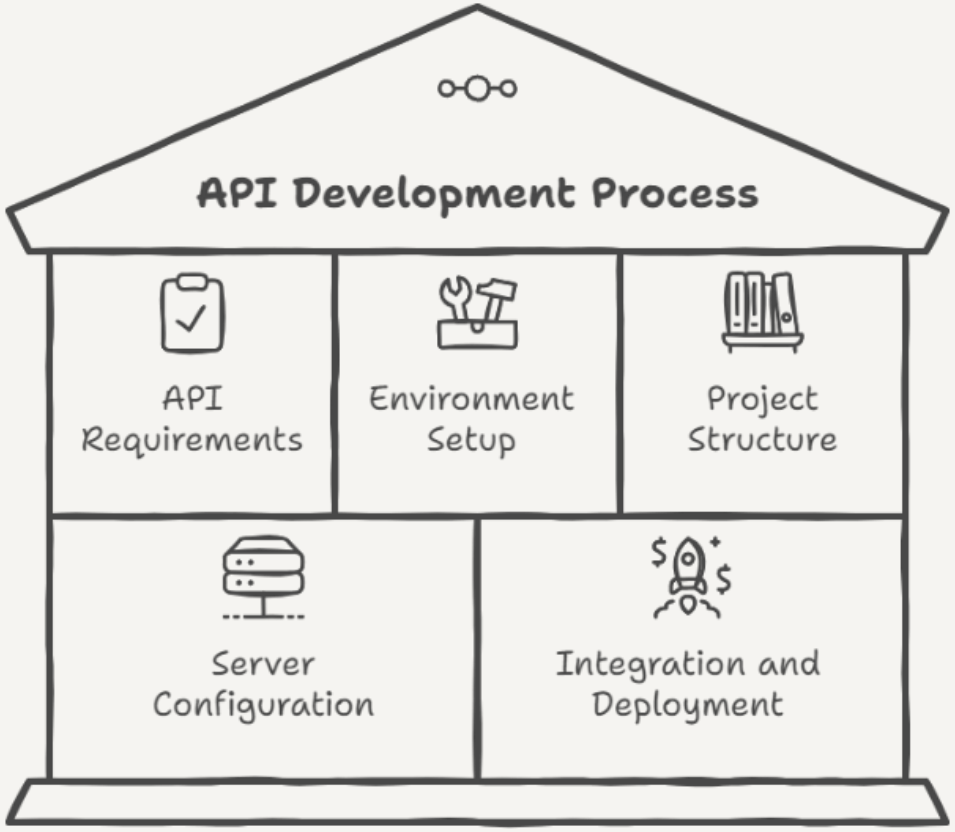


Design of Each Building Block





Design of Each Building Block



Design of Each Building Block

User and Admin

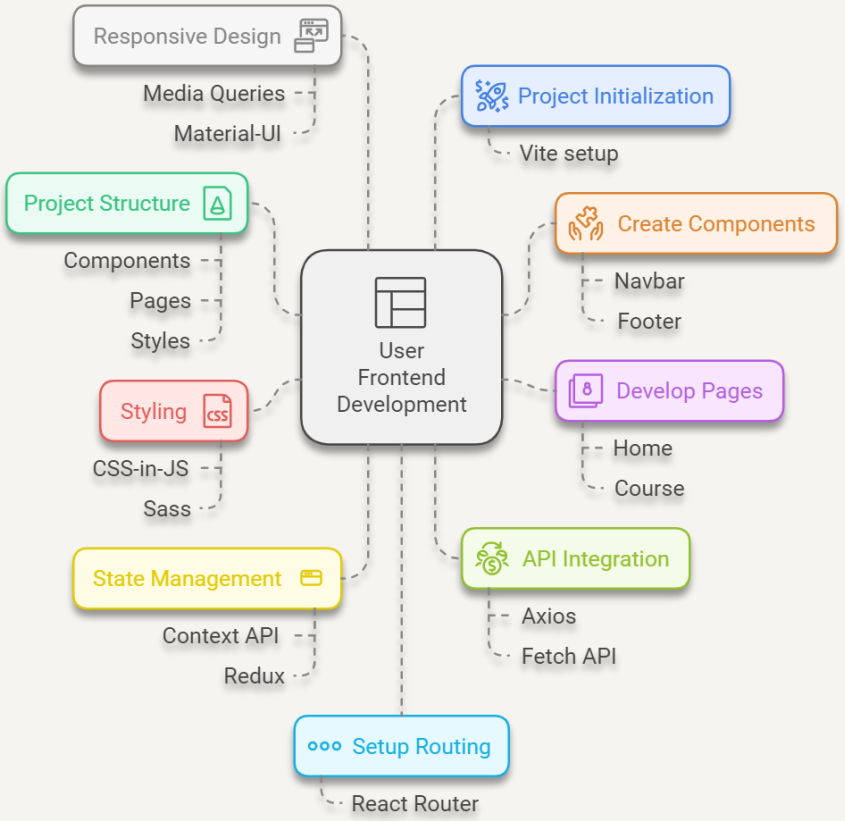
User Frontend

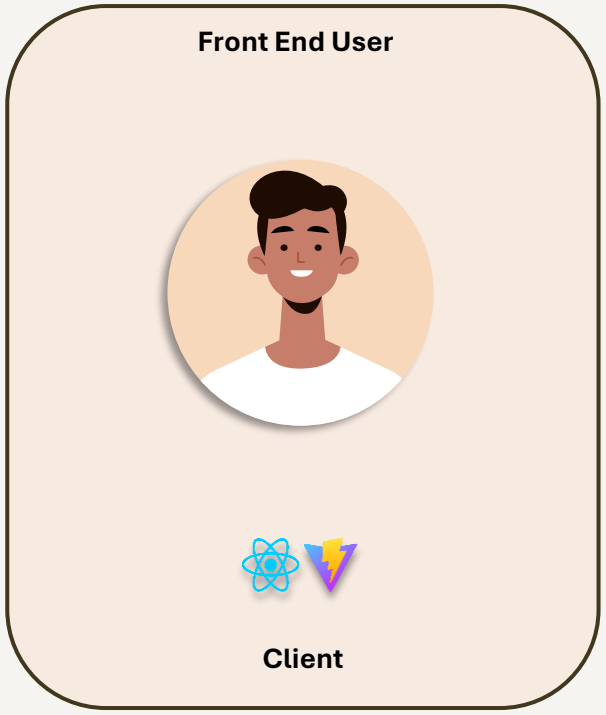
Seamless user experience

Admin Frontend

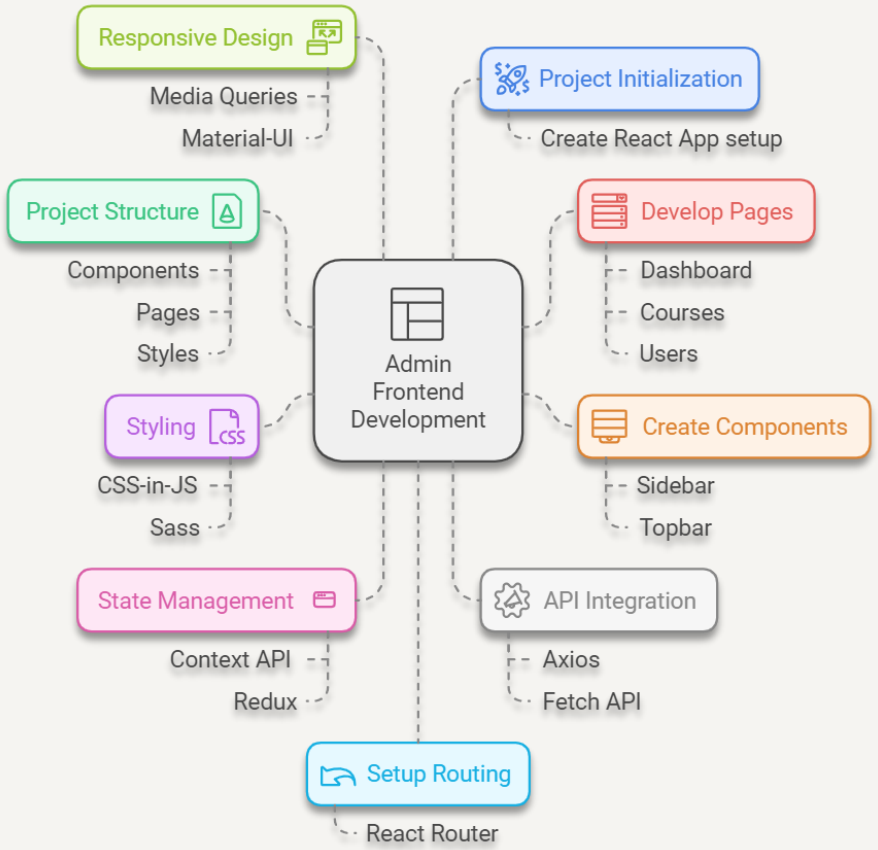
Efficient course management

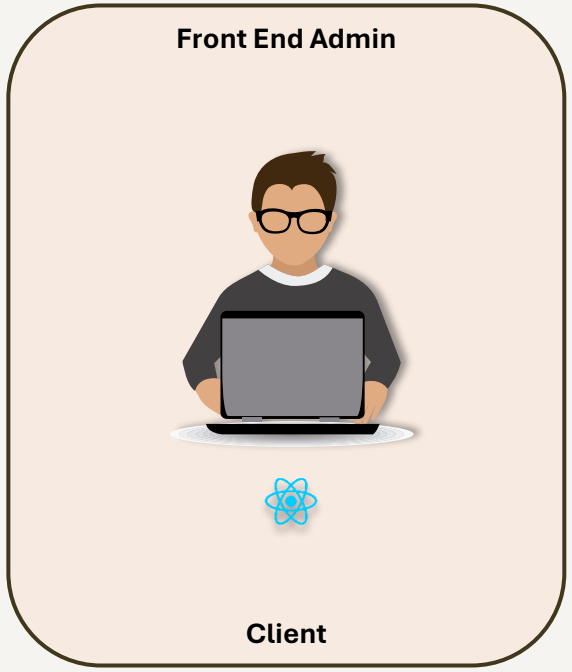
Design of Each Building Block



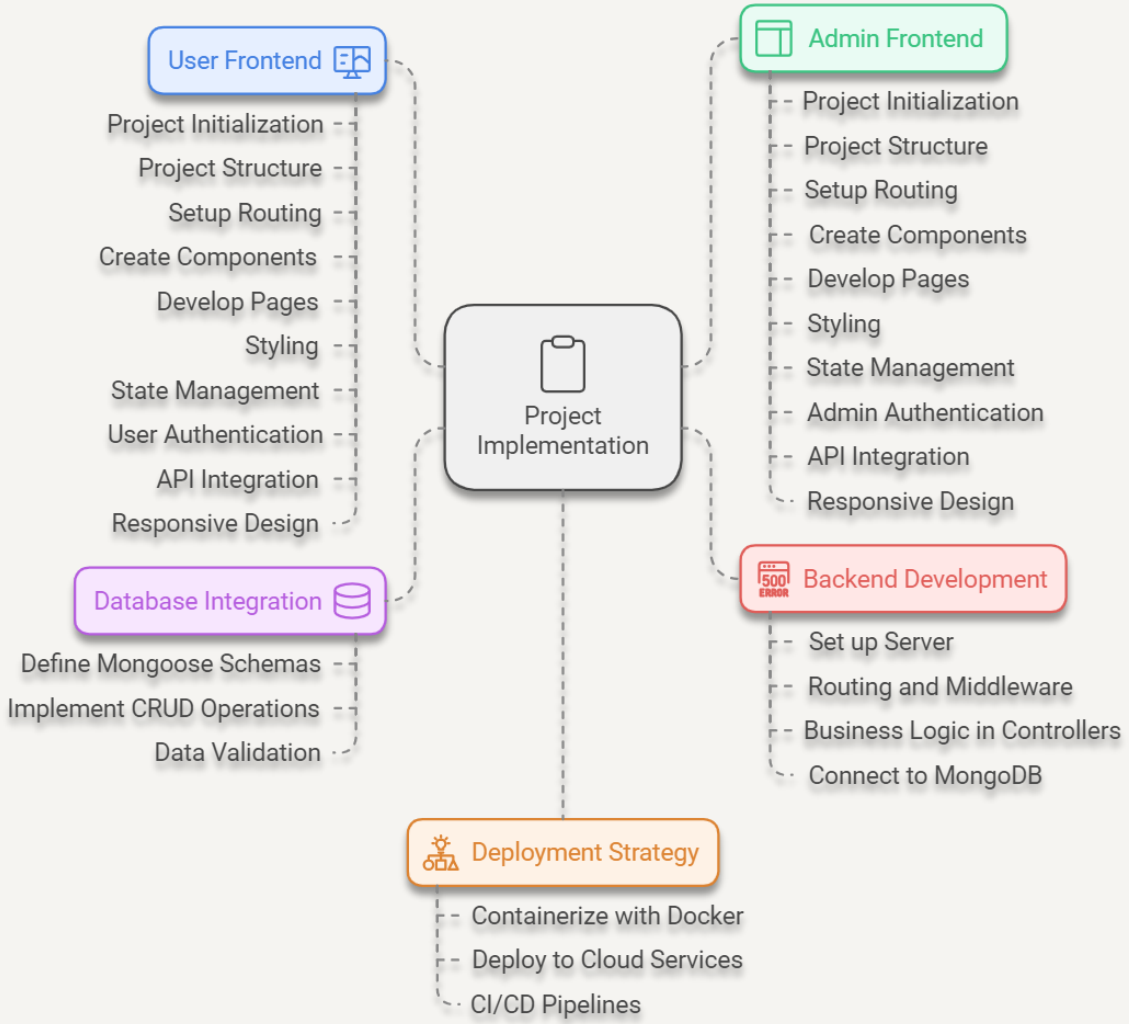


Design of Each Building Block





Implementation



Thank You