

# 6-Month MERN Stack Full-Stack Project Roadmap

**Prepared for:** Internship & Skill Development

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## Objective

To build a strong, professional portfolio as a beginner MERN stack developer by completing 2 full-stack projects and 1 mini MVP project within 6 months, demonstrating end-to-end development skills suitable for internship applications.

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## Project Lineup

Project	Type	Focus Areas	Time Allocation
Mini Banking Application	Full Project	User authentication, accounts, transactions, dashboard, security	7 weeks
E-commerce Site	Full Project	Products, cart, checkout, payment integration, admin panel	6 weeks
Mini Chat / SaaS MVP	Mini Project	Real-time chat OR SaaS feature (gym passes), payment integration, dashboard	5-6 weeks
Portfolio & Project Polish	-	Deployment, README, documentation, screenshots, demo links	1-2 weeks

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## Detailed Weekly Roadmap

### 1. Mini Banking Application (7 Weeks)

Week	Tasks
1	Setup project: Node.js, Express, MongoDB, React; configure folder structure
2	Implement user authentication: signup/login, JWT, password hashing
3	Account management: create/check balances, transaction history
4	Transactions: deposit, withdraw, transfer between users

Week	Tasks
5	Dashboard UI: React components, charts, account overview
6	Security & validation: input validation, route protection, error handling
7	Testing, bug fixes, deployment (backend + frontend), documentation, screenshots

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## 2. E-commerce Site (6 Weeks)

Week	Tasks
8	Setup project structure, MongoDB collections for products, users, orders
9	Product listing, product details, search/filter functionality
10	Shopping cart functionality (React state or Redux)
11	Checkout & payment integration (Stripe or PayPal sandbox)
12	Admin panel: add/update/delete products, view/manage orders
13	Testing, bug fixes, deployment, GitHub documentation

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## 3. Mini Project / MVP (5–6 Weeks)

### Option A – Anonymous Chat App

Week	Tasks
14	Setup project with Node.js, Express, React
15	Implement Socket.io for real-time messaging
16	Implement anonymous usernames / chat rooms
17	Save chat history in MongoDB
18	UI polish, testing, deployment

### Option B – SaaS MVP (PassThePal)

Week	Tasks
14	Setup project and user authentication
15	CRUD operations for "Gym Passes"
16	Payment integration (Stripe subscriptions / one-time)

Week	Tasks
17	Dashboard to view purchased passes
18	Testing, deployment, documentation

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#### 4. Portfolio & Project Polish (1-2 Weeks)

Tasks
Build a portfolio website to showcase all projects
Add project descriptions, screenshots, and live/demo links
Ensure GitHub repositories are clean and well-documented
Prepare project explanation for internship interviews

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### Time Allocation Summary

Project	Duration
Mini Banking App	7 weeks
E-commerce Site	6 weeks
Mini Chat/SaaS MVP	5-6 weeks
Portfolio & Documentation	1-2 weeks

**Total Duration:** 23-24 weeks (~6 months)

**Note:** This plan assumes 15-20 hours/week of dedicated work. Focus on completion and quality over adding too many features.

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### Expected Outcomes

- Strong portfolio of professional-quality projects
- Demonstrated ability to build full-stack applications using MERN
- Internship-ready with real-world projects showcasing authentication, payments, real-time features, and dashboard creation
- Experience with deployment, documentation, and project presentation