

# React Native & Full-Stack Mentorship

## Student-Facing Syllabus (6 Months)

Welcome to the **React Native Mobile App Development Mentorship Program**. This mentorship is designed for motivated learners who want to **build real mobile and web applications**, gain **strong technical foundations**, and develop the mindset needed to succeed as a developer, freelancer, or startup founder.

**Core Principle:** You will learn by building **your own app idea**. Every concept, tool, and workflow is applied directly to a real project.

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## Program Structure Overview

- **Duration:** 6 Months
  - **Format:** Live online sessions + hands-on projects
  - **Focus:** Fundamentals → Core concepts → Real-world tooling → AI-assisted development → Product & monetization
  - **Outcome:** Build, publish, and prepare to monetize a real app
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## Phase 0: Orientation & App Idea Formation (Weeks 1–2)

### What You Will Learn

- How the mentorship works and what is expected from you
- How successful developers learn and stay consistent
- How to think in problems, not just features

### Key Activities

- Mentorship onboarding
- App idea brainstorming and refinement
- Problem–solution mapping
- Introduction to market validation using AppBrain
- Personal learning plan creation

### Deliverables

- A clearly defined app idea or problem statement
  - A simple feature list for your app
  - Development environment readiness checklist
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## **Phase 1: Technology Fundamentals (Month 1)**

### **Technologies Covered**

- JavaScript fundamentals (as needed)
- Node.js basics and ecosystem
- React fundamentals
- React Native overview
- Expo ecosystem introduction
- Firebase overview
- Git & GitHub fundamentals

### **Tools & Setup**

- VS Code / Antigravity / Kiro IDE
- Android Studio installation
- Emulator setup
- Gradle basics
- GitHub repository creation

### **What You Will Be Able To Do**

- Understand the role of each technology in app development
  - Set up a professional development environment
  - Use Git and GitHub for version control
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## **Phase 2: Core Concepts Deep Dive (Month 2-3)**

### **Node.js Core Concepts**

- Node.js fundamentals and architecture
- APIs and backend basics
- Environment variables and project structure

### **React Core Concepts**

- Component-based thinking
- State and props
- Hooks:
  - useState
  - useEffect
  - useMemo
  - useContext
  - useRef
- Performance basics

## React Native Core Concepts

- Core components (View, Text, ScrollView, etc.)
- Styling and layout
- Core APIs
- Platform-specific behavior

## Essential React Native Libraries

- Axios (API requests)
- Firebase (Authentication, Firestore, Storage)
- Expo Notifications
- React Navigation (Stack, Bottom Tabs, Drawer)
- Async Storage
- React Native Paper (UI components)
- react-native-edge-to-edge
- react-native-google-ads

## What You Will Be Able To Do

- Build functional mobile app screens
  - Manage state and data flow correctly
  - Integrate essential third-party libraries
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# Phase 3: Workflow, Tooling & Infrastructure (Month 4)

## React Native Workflows

- Why workflows matter
- Expo (Managed Workflow)
- Expo Prebuild
- Development Build
- Bare Workflow
- Choosing the right workflow for your project

## Tooling & Infrastructure

- Git/GitHub best practices
- CI/CD concepts
- Firebase project setup
- Google Play Console setup
- App signing basics

## What You Will Be Able To Do

- Choose and configure the correct React Native workflow
- Prepare apps for production environments

- Understand publishing requirements
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## **Phase 4: AI-Assisted Development (Month 5)**

### **Topics Covered**

- Using free AI tools responsibly
- Prompting techniques for development
- Debugging and refactoring with AI
- Agentic tools for feature planning and code generation

### **Design & Resources**

- UI/UX inspiration sources
- Open-source templates
- Component libraries
- Best places to find starter projects

### **What You Will Be Able To Do**

- Speed up development using AI tools
  - Design clean and usable UI
  - Improve productivity without losing understanding
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## **Phase 5: Product Thinking, Monetization & Launch (Month 6)**

### **Topics Covered**

- Market research using AppBrain statistics
- Competitor analysis
- Monetization strategies (ads, subscriptions, freemium)
- App performance optimization
- Security and vulnerability awareness
- Launch strategy

### **Capstone Project**

- Build and finalize your app
- Prepare for publishing
- Present your project
- Receive mentor feedback

### **What You Will Be Able To Do**

- Launch or prepare a real app

- Understand how apps make money
  - Plan post-launch improvements
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## Mentorship Support System

- Weekly live sessions
  - Hands-on assignments
  - Code reviews
  - Telegram group support
  - Accountability check-ins
  - Performance-based rewards
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## Monthly Outcomes Map

### Month 1 – Foundations

**Outcome:** - Development environment fully set up - GitHub-ready workflow - Clear understanding of core technologies - App idea defined and validated

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### Month 2 – Core Development Skills

**Outcome:** - Ability to build basic app screens - Strong understanding of React & React Native fundamentals - First version of app UI implemented

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### Month 3 – Feature Development

**Outcome:** - App connected to backend or Firebase - Authentication and data handling working - Navigation and storage implemented

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### Month 4 – Production Readiness

**Outcome:** - Correct workflow selected (Expo/Bare/etc.) - App configured for production - Publishing requirements understood

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## Month 5 – AI & Productivity

**Outcome:** - Faster development using AI tools - Improved UI/UX design - Feature refinement and optimization

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## Month 6 – Launch & Growth

**Outcome:** - App published or ready for publishing - Monetization strategy defined - Portfolio-ready project - Clear next career steps (freelancing, job, or startup)

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## Final Result

By the end of this mentorship, you will: - Think like a developer - Build and ship real applications - Understand modern app development workflows - Be prepared for real-world opportunities

**You are not just learning code — you are building your future.**