

## **Viewesta Two-Month Deep Coding Workflow**

Duration: 8 Weeks ( $\approx$  60 days)

Frameworks: React (Web) + React Native (Mobile) + Node.js/Express + PostgreSQL

Infrastructure: AWS (RDS, S3, CloudWatch, SES) + GitHub + CI/CD

Workflow: Agile style — daily stand-ups and weekly sprints

### **Phase 1 — Environment & Foundation (Week 1)**

- Day 1: Create GitHub repo (backend, frontend, mobile). Setup folder structure. Initialize Node.js + React projects.
- Day 2: Set up PostgreSQL (local + AWS RDS). Create .env files and connection test.
- Day 3: Setup authentication skeleton (JWT, bcrypt, user model).
- Day 4: Configure AWS S3 for movie storage + test upload from backend.
- Day 5: Integrate SendGrid (email verification + password reset templates).
- Day 6: Setup Git branching, CI/CD workflow (auto deploy dev branch).
- Day 7: Testing, documentation, environment clean-up.

### **Phase 2 — Core Frontend Base (Week 2)**

- Day 8–9: Setup routing (React Router / React Navigation). Implement layout (Header, Footer, Sidebar).
- Day 10–11: Build pages: Home, Movies, About, Login, Register.
- Day 12–13: Connect to mock APIs and render movie lists.
- Day 14: Test responsiveness + dark mode + initial design cleanup.

### **Phase 3 — Backend Movie & User System (Weeks 3–4)**

- Week 3:
- Day 15–16: Create movie model (title, genre, price, etc.) and CRUD endpoints.
- Day 17: Create user model + authentication endpoints.
- Day 18–19: Integrate upload route with S3 for movies/trailers.
- Day 20–21: Build watchlist and comment endpoints (add, delete, list).
- Week 4:
- Day 22–23: Implement rating system + reviews API.
- Day 24–25: Add payment endpoints (MTN, Airtel, Visa, test sandbox).
- Day 26–27: Connect subscriptions + transaction history logic.
- Day 28: Backend testing and bug fixes.

### **Phase 4 — Frontend & Backend Integration (Weeks 5–6)**

- Week 5:
- Day 29–30: Connect frontend login/signup with backend API.
- Day 31–32: Display movie list from backend, with genres and filters.

- Day 33–34: Implement “Add to Watchlist,” “Rate Movie,” “Comment.”
- Day 35: Test user journeys (browse → buy → watch).
- Week 6:
- Day 36–37: Build creator upload dashboard (upload movie, edit, set price).
- Day 38–39: Integrate creator revenue dashboard + withdrawal logic.
- Day 40–41: Connect admin dashboard (approve movies, manage users).
- Day 42: Conduct internal testing for all major flows.

### **Phase 5 — Mobile App (Week 7)**

- Day 43–44: Initialize React Native App. Implement login & registration.
- Day 45–46: Show movie list + details + watch trailer.
- Day 47–48: Implement movie download (with 7-day local expiry).
- Day 49: Add push notifications (new movies, purchases).
- Day 50: Testing and syncing mobile with web backend.

### **Phase 6 — Testing, Optimization & Launch (Week 8)**

- Day 51–52: Test all endpoints, fix bugs, optimize backend queries.
- Day 53–54: Test UI/UX for both mobile and web.
- Day 55–56: Set up analytics, logging, and security hardening.
- Day 57–58: Final deployment on AWS (EC2, S3, RDS) + DNS setup.
- Day 59–60: Documentation, user manuals, and internal demo launch.