

# Admin Dashboard Development

## Admin Dashboard for Farming Applications

Duration: Aug 8 – Oct 10, 2025

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### 1 Project Overview

- **Objective:** Design and develop an Admin Dashboard for **Farming Applications** to manage crops and associated data, subscriptions, and customized push notifications for end-user apps.
- **Scope:** End-to-end development: Figma design → Frontend + Backend → Deployment → Documentation.
- **Weekly Progress Format:** A voice-over PowerPoint must be submitted every Friday by 5:00 PM IST.
- **Total Duration:** August 8 – October 10, 2025 (9 Weeks)

### 2 Technology Stack

Frontend	React.js with Tailwind CSS
Backend	Django
Database	PostgreSQL (primary) / Redis (caching)
Design	Figma (Wireframes and Prototypes) and other Design Elements
Auth & Roles	JWT / OAuth2 with RBAC
Notifications	FCM / OneSignal (push), Email/SMS gateway
Payments	Razorpay (subscriptions)
Hosting	Vercel (FE) / Render or Firebase (BE)
Docs & Reports	Overleaf (LaTeX) + Weekly PPT (voice-over)

### 3 Core Modules (Farming Applications)

- **Crops & Associated Data:** CRUD for crops, varieties, seasons, regions; associate practices (sowing dates, irrigation schedules), pests/diseases, recommended inputs, media (images/PDFs/videos).
- **Subscription Maintenance:** Plan creation (Free/Pro/Enterprise), pricing, trials, renewals, invoices, refunds, usage limits (e.g., notification quota), plan-based feature toggles.

- **Customized Push Notifications:** Segmented and scheduled campaigns by crop, region, season, language; templates with placeholders; real-time delivery analytics; emergency advisories.
- **User & Role Management:** Admins, agronomists, support; RBAC; audit logs.
- **Analytics & Reports:** Crop content usage, notification reach/clicks, subscriber growth, churn, revenue dashboard.
- **Settings:** Branding, locales, content taxonomy, API keys.

## 4 Weekly Timeline

### Week 1: Requirement Analysis

**Dates:** Aug 8 (Fri) – Aug 15 (Fri)

**Upload Deadline:** Friday, Aug 15, 2025 – 5:00 PM IST

- Finalize admin roles (Super Admin, Admin, Agronomist, Support).
- Define core data model for crops, varieties, practices, media attachments.
- Map subscription workflows (purchase, renewal, cancellation, refunds).
- Outline notification flows (segments, templates, schedules).
- Draft sitemap, user flows, and high-level ERD.

### Week 2: Wireframes and UI Kit

**Dates:** Aug 16 (Sat) – Aug 22 (Fri)

**Upload Deadline:** Friday, Aug 22, 2025 – 5:00 PM IST

- Wireframes: Dashboard, Crops, Subscriptions, Notifications, Analytics, Users.
- Design UI kit: forms, tables, filters, uploaders, tag chips, wizards.
- Define navigation (sidebar) and responsive grid.

### Week 3: High-Fidelity Figma Prototypes

**Dates:** Aug 23 (Sat) – Aug 29 (Fri)

**Upload Deadline:** Friday, Aug 29, 2025 – 5:00 PM IST

- Convert wireframes into interactive, pixel-perfect prototypes.
- States: empty/loading/error; validation patterns; accessibility checks.
- Handoff specs (tokens, spacing, assets).

**Week 4: Project Setup and Layout Implementation****Dates:** Aug 30 (Sat) – Sep 5 (Fri)**Upload Deadline:** Friday, Sep 5, 2025 – 5:00 PM IST

- Initialize repo, CI, environment configs, base RBAC guards.
- Implement layout: sidebar, topbar, breadcrumbs, protected routes.
- Build shared components: DataTable, FormBuilder, MediaUploader, Toast.

**Week 5: Crops & Associated Data****Dates:** Sep 6 (Sat) – Sep 12 (Fri)**Upload Deadline:** Friday, Sep 12, 2025 – 5:00 PM IST

- Backend: Schemas (Crop, Variety, Season, Region, Practice, Media).
- APIs: CRUD with search, filters (crop, region, season), pagination.
- Frontend: Crop list/detail; forms for practices and attachments.

**Week 6: Subscription Maintenance****Dates:** Sep 13 (Sat) – Sep 19 (Fri)**Upload Deadline:** Friday, Sep 19, 2025 – 5:00 PM IST

- Plans & pricing (create/update), coupons, trials; webhooks for payment status.
- Subscriber management: activate/suspend, refunds, invoices.
- Usage limits: enforce notification quota/feature gates by plan.

**Week 7: Customized Notification Push****Dates:** Sep 20 (Sat) – Sep 26 (Fri)**Upload Deadline:** Friday, Sep 26, 2025 – 5:00 PM IST

- Segmentation: crop, region, season, language; saved audiences.
- Templates: variables ({crop}, {region}, {date}); preview and test-send.
- Scheduling: immediate, windowed, recurring; delivery/engagement analytics.

**Week 8: QA, Performance & UI Polish****Dates:** Sep 27 (Sat) – Oct 3 (Fri)**Upload Deadline:** Friday, Oct 3, 2025 – 5:00 PM IST

- Functional tests; role-permission checks; data integrity.
- Optimize queries; server-side pagination; cache hot lookups.
- UI polish; accessibility; localization checks.

**Week 9: Deployment and Documentation****Dates:** Oct 4 (Sat) – Oct 10 (Fri)**Upload Deadline:** Friday, Oct 10, 2025 – 5:00 PM IST

- Deploy FE/BE; set domains, SSL, env secrets.
- Payment webhooks, push notification keys, cron/schedulers.
- Overleaf documentation and final voice-over PPT.

**5 Final Deliverables**

- Deployed Admin Dashboard (Farming Applications)
- GitHub repository with source code (frontend & backend)
- Figma Design Files (Wireframes + High-Fidelity Prototype)
- 9 Weekly voice-over PPTs
- Overleaf ‘.tex’ + compiled PDF
- Admin Guide: crops, subscriptions, notifications, analytics