INSY7315 / WIL

[Braydon ST10394807] Submitting User Roles & User Stories

Group Name: 'a team'

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<mark>*Task: "Write User Roles: List & describe all roles (Admin, Client, Contractor, etc.)."*</mark>

<mark>*Task: "Write User Stories & User Story Backlog Table"*</mark>

Functional Notes Across Roles

- **Document Management Security:** All uploads (blueprints, contracts, site reports) have role-based secure access. Downloads are logged with time, user, and file name.

- **Communication & Notifications:** Messaging is available between Admin ↔ Project Manager ↔ Contractor ↔ Client. Email/SMS alerts trigger for project milestones, overdue tasks, and important updates.

- **Reporting & Dashboards:** Displays KPIs like budget vs actual spend and real-time project status. Visuals include Gantt, Pie, Bar, and Line charts.

User Roles

1. Administrator (Admin)

Oversees the entire platform's operation, ensuring smooth workflows and system compliance.

Key CRUD Tasks:

- **Create:** User accounts, role permissions, system configurations.

- **Read:** All communication logs, reports, documents, project statuses.

- **Update:** User permissions, notifications, system settings.

- **Delete:** Remove outdated records, deactivated users, or invalid documents.

Notes:

- Has direct messaging ability with Project Managers when necessary.

- Oversees all communication logs and can initiate conversations if needed.

- Approves quotations in workflow; client must accept final quote before invoice generation.

- Monitors notifications and ensures SMS/email/app alerts reach the right stakeholders.

UI screens:

- Admin Dashboard
- Messaging
- Reports Panel
- Assignment Manager

Stories:

- As an Admin, I want to create and manage user accounts so that each user has the correct role permissions.
- As an Admin, I want to view all communication logs so that I can oversee and ensure compliance.
- As an Admin, I want to approve quotations in the workflow so that the client can give final acceptance.
- As an Admin, I want to monitor system notifications so that alerts reach the correct stakeholders.

2. Project Manager

Manages construction projects from creation to completion, ensuring delivery within budget and timelines.

Key CRUD Tasks:

- Create: New construction projects with budgets, phases, deadlines.
- Read: Project status, budget vs actual reports, contractor updates.
- Update: Resource allocations, task assignments, document approvals, progress reports.
- Delete: Cancel projects or remove incorrect data.

Notes:

- Sole role that creates projects (admins do not).
- Assigns contractors to tasks and approves documents.
- Uses AI-generated quotes for cost planning but does not approve quotes.
- Communicates actively with contractors and clients for updates and clarifications.

UI Screens:

- PM Dashboard
- Timeline View
- Contractor Tracker
- File
- Review Screen

Stories:

- As a Project Manager, I want to create construction projects with budgets, phases, and deadlines so that work is planned effectively.
- As a Project Manager, I want to assign contractors to specific tasks so that work is completed on time.
- As a Project Manager, I want to approve documents so that only verified files are used.
- As a Project Manager, I want to use AI-generated quotes for planning so that I can manage project costs.

3. Contractor

The Contractor executes assigned tasks on projects or maintenance jobs.

Key CRUD Tasks:

- Create: Task completion updates, upload completion photos/reports.

- Read: Assigned tasks, deadlines, instructions.

- Update: Task progress, status changes (Pending → In Progress → Completed).

- Delete: Remove incorrect (their own) submissions before final approval.

Notes:

- Works only on tasks assigned by Project Managers.

- Communicates progress to Project Managers via messaging.

- Cannot approve quotes or create projects.

UI Screens

- Task List
- Upload Centre
- Completion Report Form

Stories:

- As a Contractor, I want to view assigned tasks so that I know my responsibilities.
- As a Contractor, I want to update task progress so that the Project Manager is informed.
- As a Contractor, I want to upload completion photos so that task verification is easier.

4. Client

Requests maintenance, receives project updates, and approves final quotations.

Key CRUD Tasks:

- Create: Maintenance requests with descriptions/images.
- Read: Progress tracking, quotations, invoices, reports.
- Update: Approve/reject quotations, confirm completion of maintenance.
- Delete: Cancel pending maintenance requests before work starts.

Notes:

- Only role that can approve/reject quotations before invoice generation.
- Communicates with Project Managers and Contractors for status and clarifications.
- Receives automated alerts for every project/maintenance stage.

UI Screens

- Client Dashboard
- Request
- Form
- Notification Panel

Stories:

- As a Client, I want to submit maintenance requests with descriptions and images so that issues can be addressed.

- As a Client, I want to track the status of my requests so that I know when they will be resolved.

- As a Client, I want to approve or reject quotations so that only agreed work is billed.

User Story Backlog Table:

ID	User Story	Priority	Module/Feature
US-01	As an Admin, I want to create and manage user accounts so that each user has correct access.	High	User Management
US-02	As an Admin, I want to view all communication logs so that I can ensure compliance.	High	Communication & Notifications
US-03	As an Admin, I want to approve quotations in the workflow so that the client can accept them.	High	Quotation Management
US-04	As an Admin, I want to monitor system notifications so alerts reach correct stakeholders.	Medium	Communication & Notifications
US-05	As a Project Manager, I want to create construction projects with budgets and deadlines.	High	Project Management
US-06	As a Project Manager, I want to assign contractors to tasks so that work is completed on time.	High	Project Management
US-07	As a Project Manager, I want to approve documents so that only verified files are used.	High	Document Management
US-08	As a Project Manager, I want to use AI-generated quotes for planning so I can manage costs.	Medium	AI-Powered Estimation
US-09	As a Contractor, I want to view assigned tasks so that I know my responsibilities.	High	Contractor Portal
US-10	As a Contractor, I want to update task progress so that the Project Manager is informed.	High	Contractor Portal
US-11	As a Contractor, I want to upload completion photos so that task verification is easier.	Medium	Contractor Portal
US-12	As a Client, I want to submit maintenance requests so that issues can be addressed.	High	Maintenance Request Management
US-13	As a Client, I want to track the status of my requests so that I know when they'll be resolved.	High	Maintenance Request Management
US-14	As a Client, I want to approve or reject quotations so that only agreed work is billed.	High	Quotation Management