



Flutter App — Full Documentation

Project Management & Task Tracking System. A design-only Flutter application with 39 screens, role-based navigation for 7 user roles, BLoC state management, and bilingual (English / Arabic) support.

Flutter

Dart

BLoC

Material 3

7 Roles

39 Screens

EN / AR

Responsive



Architecture Overview

State Management

flutter_bloc — each feature has a dedicated Bloc (or Cubit) with Events, States, and a Bloc class. Navigation state is also a Bloc.

Navigation

IndexedStack with per-tab Navigator keys. Role switching resets all navigator keys so each role starts with a clean back-stack.

Data Layer

Mock data only —
lib/data/mock_data.dart supplies lists of projects, tasks, users, leads, notifications, and work logs.

Theming

Material 3 with a custom AppColors palette. All color references go through the palette; no hardcoded hex values in widgets.

Localisation

LocaleCubit drives EN ↔ AR switching. All strings are in app_strings.dart. RTL layout flips automatically.

Responsiveness

Responsive utility: <600 px → mobile (bottom NavigationBar), 600–900 px → NavigationRail compact, >900 px → NavigationRail extended.



This is a **design-only** prototype. All authentication calls resolve instantly from mock data. No real network requests are made.



Navigation by Role

Each user role gets a different set of 5 bottom-nav tabs. Users with multiple roles see a role-switcher chip in the AppBar.

Role	Tab 1	Tab 2	Tab 3	Tab 4	Tab 5
ADMIN	Dashboard	Projects	Task Board	Reports	More (Admin)

Role	Tab 1	Tab 2	Tab 3	Tab 4	Tab 5
PLANNER	Dashboard	Projects	Task Board	Approvals	More (Planner)
SALES	Dashboard	Leads	Projects	Notifications	Profile
ANALYST	Dashboard	Projects	Requirements	Reports	Profile
IMPLEMENTER	Dashboard	Projects	Documents	Notifications	Profile
DEVELOPER	Dashboard	My Tasks	Work Log	Notifications	Profile
TESTER					



Dashboard and Projects filter data automatically based on the active role — an Admin sees everything, a Sales user only sees their own projects and leads.



Colors & Theme

primary #1565C0	primaryDark #0D47A1	accent #FF6F00	error #C62828
taskCompleted #2E7D32	taskInProgress #1565C0	taskReopened #E65100	background #F8FAFC

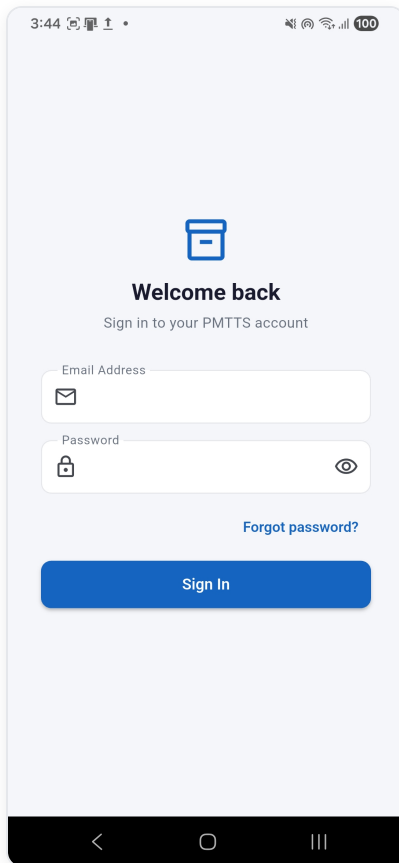


Auth Screens



Login Screen

screens/auth/login_screen.dart



Split-panel layout on wide screens: decorative gradient left panel + login form on the right. Stacks vertically on mobile.

- Email + password fields with validation
- Password visibility toggle
- Forgot Password link → ForgotPasswordScreen
- Loading spinner during auth (AuthLoading state)
- Snackbar on AuthFailure
- Navigates to MainScreen on AuthAuthenticated
- Left panel highlights: Tasks, Collaboration, Dashboards, Notifications

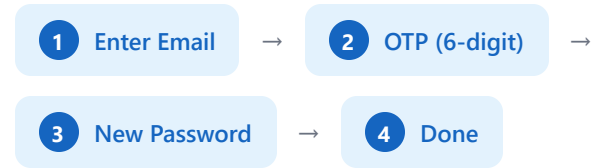
ALL ROLES



Forgot Password Screen

screens/auth/forgot_password_screen.dart

Four-step password recovery flow with a step indicator at the top and AnimatedSwitcher transitions between steps.



- OTP input: 6 individual boxes with auto-focus advance
- Password rules: min 8 chars, uppercase, number, special char
- Resend OTP action
- Success confirmation with green check circle

ALL ROLES

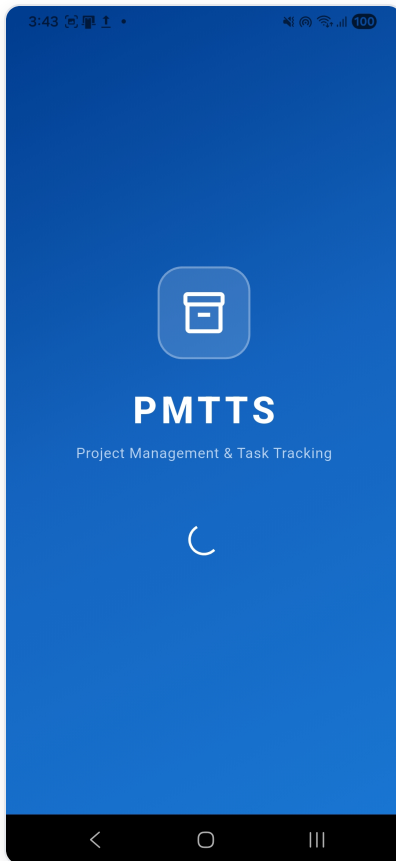


Splash Screen



Splash Screen

screens/splash/splash_screen.dart



Initial launch screen shown before auth check completes. Displays the app logo and name, then routes to Login or MainScreen depending on auth state.

ALL ROLES

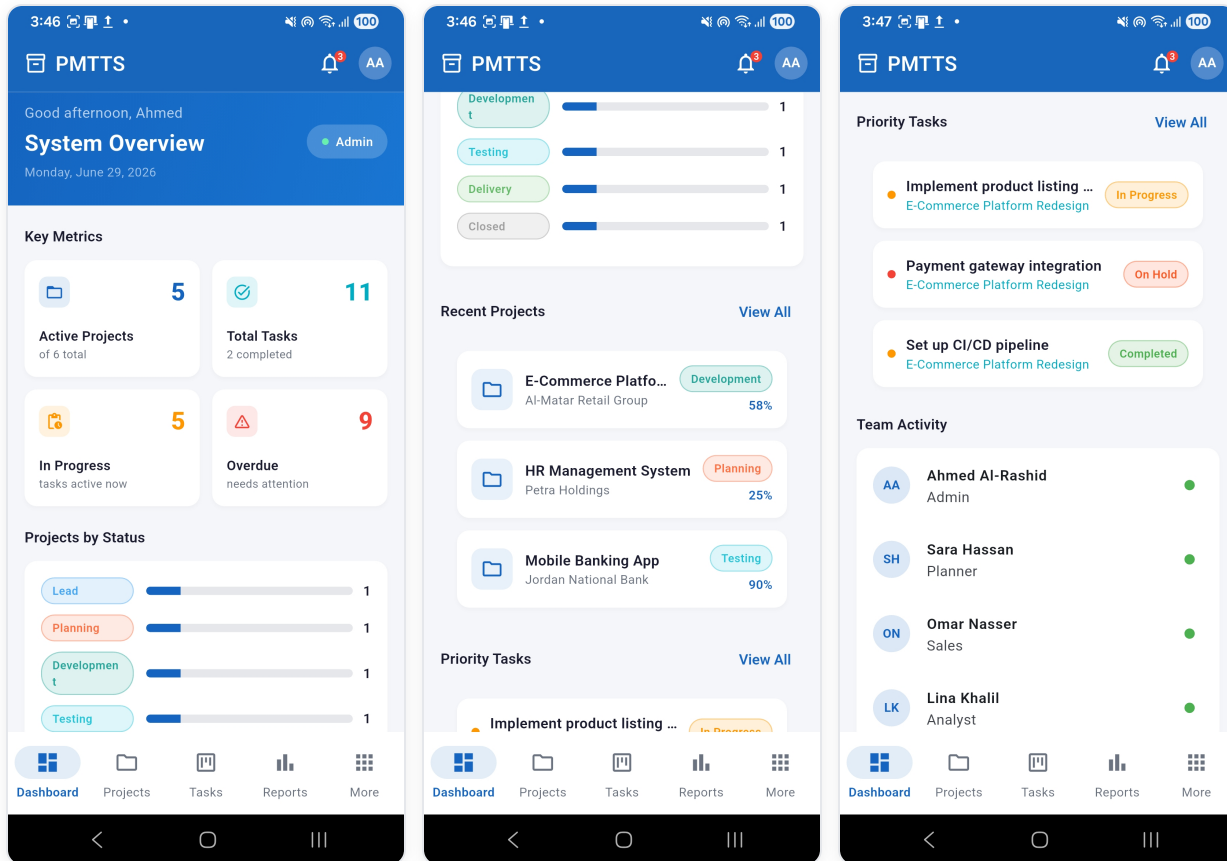


Dashboard Screen



Dashboard Screen

screens/dashboard/dashboard_screen.dart



First tab for every role. Shows role-filtered KPIs and lists — data is scoped to what the authenticated user is assigned to.

- **Stats row:** Active Projects, Total Tasks, In-Progress Tasks, Overdue Tasks
- Tapping each stat card opens a filtered detail screen
- Recent active projects list with tappable ProjectCard
- Recent tasks with StatusChip and PriorityBadge
- Role-based data filtering: Admin sees all, others see only assigned items
- Wide layout uses a grid for stats; mobile stacks them

ADMIN

PLANNER

SALES

ANALYST

DEVELOPER

TESTER

IMPLEMENTER

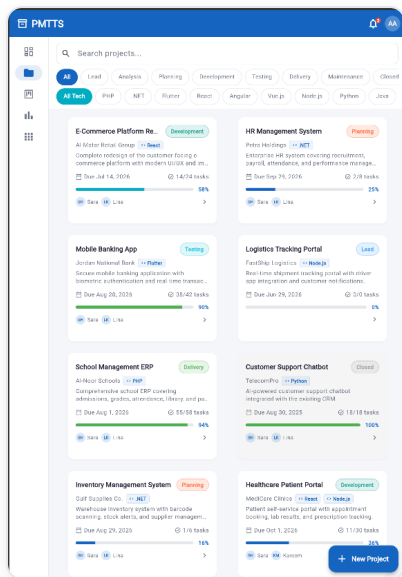


Project Screens (4)



Projects Screen

screens/projects/projects_screen.dart



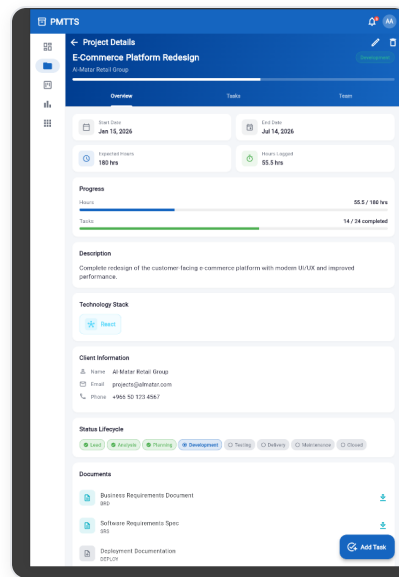
Searchable, filterable list of projects. Role-filtered — each user only sees their assigned projects.

- Live search by project name
- Status filter chips (Open, In Progress, Closed, Archived...)
- Technology filter chips
- ProjectCard widget per item
- FAB to create project (Admin/Planner only)
- Taps open ProjectDetailScreen



Project Detail Screen

screens/projects/project_detail_screen.dart



Full project overview with tabbed sections for tasks, team, and documents.

- Header with project status, dates, progress bar
- Assigned team members (Sales, Planner, Analyst, Tester, Developers)
- Task list filtered to this project
- Edit button (role-gated)



Create Project Screen

screens/projects/create_project_screen.dart

Form to create a new project with all required fields and team assignment.

- Name, description, technology selection
- Start/end date pickers
- Assign Sales, Planner, Analyst, Tester roles
- Status selection



Edit Project Screen

screens/projects/edit_project_screen.dart

Same form as Create, pre-populated with existing project data.

- Pre-fills all fields from ProjectModel
- Save dispatches update event to ProjectBloc

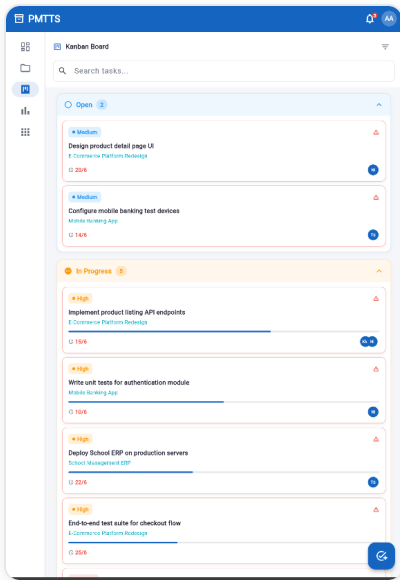


Task Screens (4)



Task Board Screen

screens/tasks/task_board_screen.dart



Kanban-style board view for Admin and Planner roles. Tasks are grouped by status in horizontal columns.

- Columns: New, In Progress, On Hold, Completed, Reopened
- Drag & drop (mock) between columns
- Filter by project
- FAB to create task

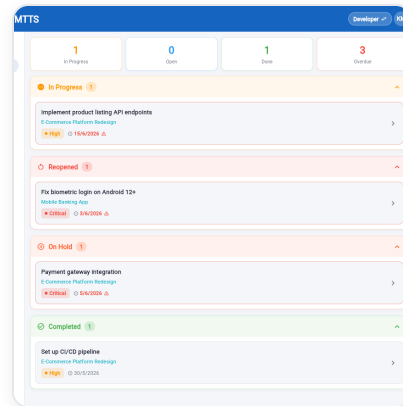
ADMIN

PLANNER



My Tasks Screen

screens/tasks/my_tasks_screen.dart



Personal task list for Developer and Tester roles. Filtered to only show tasks assigned to the current user.

- Grouped by status with status header rows
- Priority badge on each task card
- Tap to open TaskDetailScreen
- Search by task name

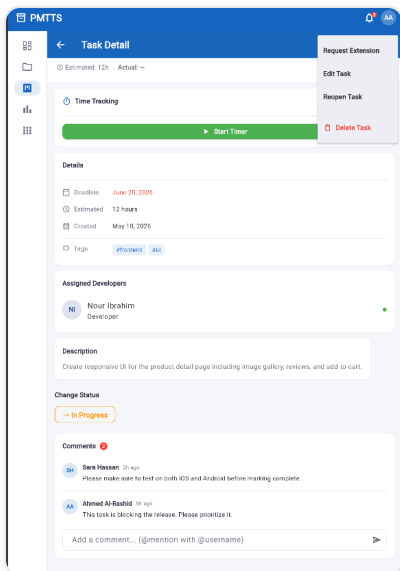
DEVELOPER

TESTER



Task Detail Screen

screens/tasks/task_detail_screen.dart



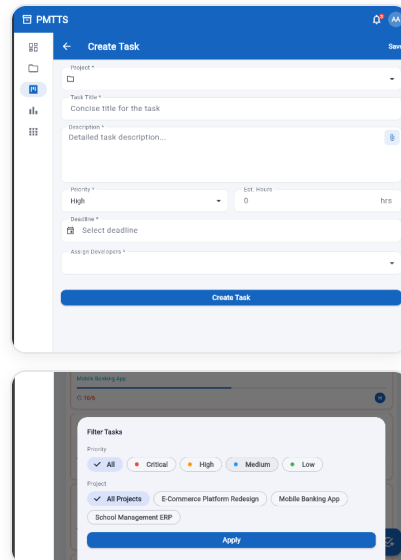
Full task view with all metadata, assigned developers, and status actions.

- Title, description, project link
- Status chip + priority badge
- Assigned developers list
- Due date with overdue highlight
- Status-change actions (role-gated)



Create / Edit Task Screens

screens/tasks/create_task_screen.dart
screens/tasks/edit_task_screen.dart



Form-based screens for creating and editing tasks.

- Title, description, priority selector
- Project assignment dropdown
- Multi-select developer assignment
- Start/due date pickers

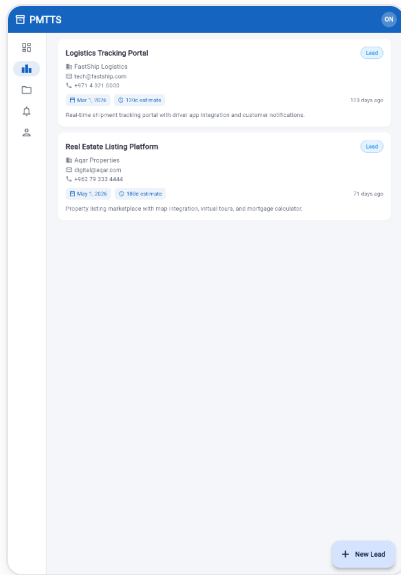


Lead Screens (4)



Leads Screen

screens/leads/leads_screen.dart



CRM-style leads list exclusive to the Sales role. Shows potential clients and their pipeline status.

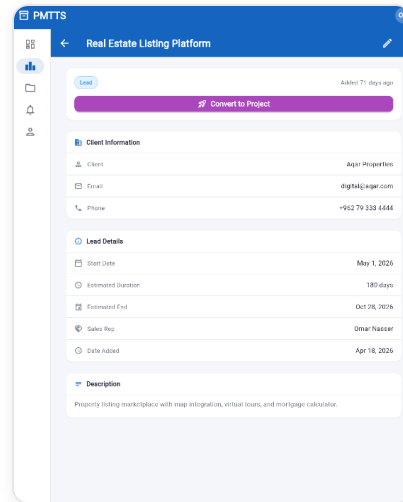
- Lead cards with company, contact, status
- Search and filter by lead status
- FAB to create new lead
- Tap to view LeadDetailScreen

SALES



Lead Detail Screen

screens/leads/lead_detail_screen.dart



Full lead record with contact info, status timeline, and notes.

- Company name, contact person, email, phone
- Lead status with visual indicator
- Notes section
- Edit / delete actions

SALES



Create / Edit Lead Screens

screens/leads/create_lead_screen.dart

screens/leads/edit_lead_screen.dart

Forms for creating and editing lead records.

- Company, contact, email, phone fields
- Lead status selector
- Notes text area

SALES

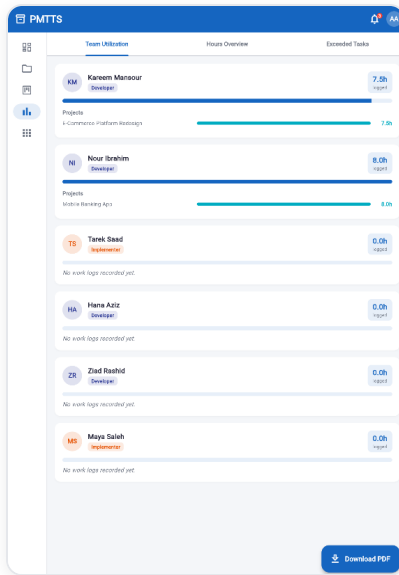


Reports Screen



Reports Screen

screens/reports/reports_screen.dart



Analytics and reporting view for Admin and Analyst roles. Provides aggregated views of project and task data.

- Task completion stats by project
- Overdue task counts
- Status distribution charts

ADMIN

ANALYST

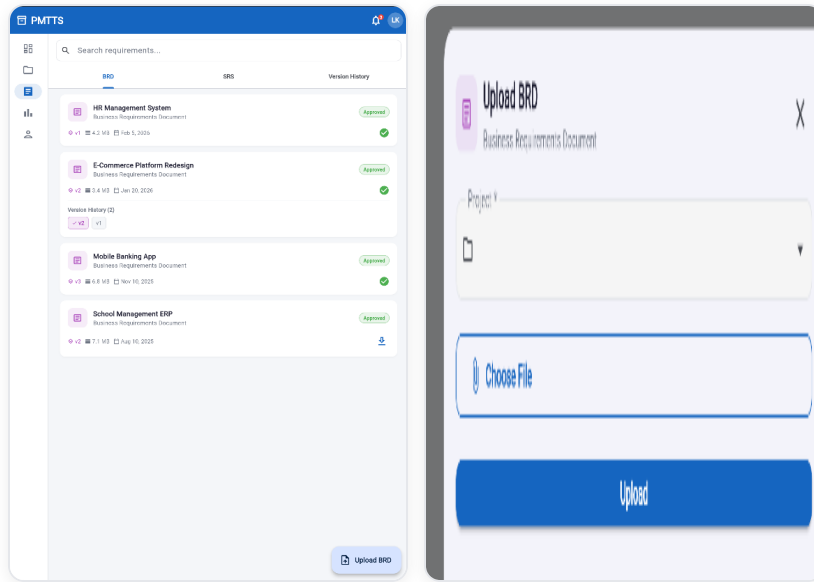


Requirements Screen



Requirements Screen

screens/requirements/requirements_screen.dart



Project requirements management view for Analysts. List and detail view for business and technical requirements.

- Requirements list per project
- Priority and status indicators
- Create / edit requirements

ANALYST

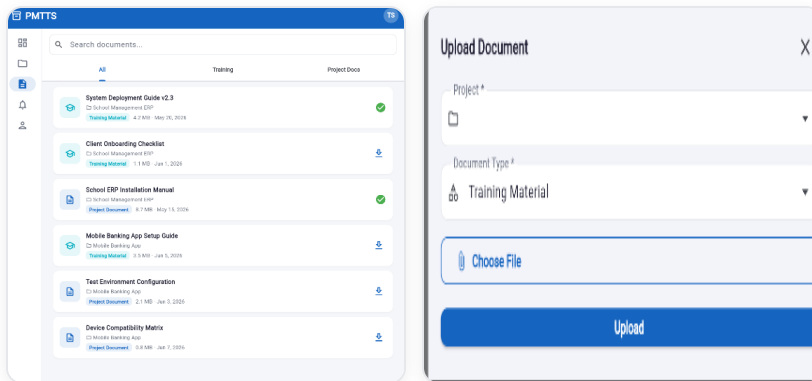


Documents Screen



Documents Screen

screens/documents/documents_screen.dart



Document library for Implementers. Browse and view project-related documents such as specs, guides, and deliverables.

- Grouped by project
- Document type icon and file name
- Tap to open / preview

IMPLEMENTER

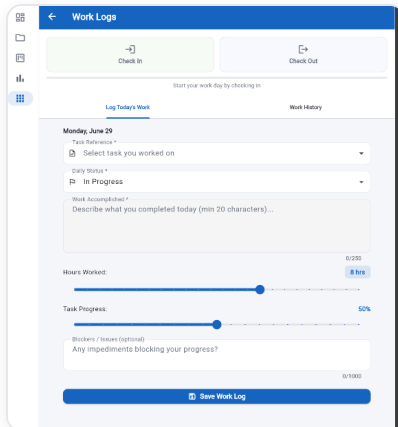


Work Log Screen



Work Log Screen

screens/work_log/work_log_screen.dart



Time-tracking log for Developers. Also accessible to Admins from the Admin More menu.

- Log entries with task, date, hours, and notes
- Grouped by date
- Add new log entry
- Total hours summary

DEVELOPER

ADMIN (VIA MORE)

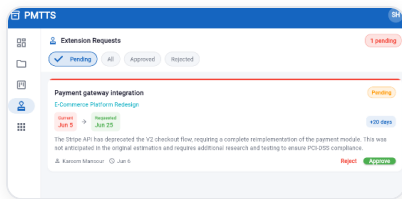


Planner Screens (2)



Approvals Screen

screens/planner/approvals_screen.dart



Approval queue for Planners. Lists pending requests that require planner sign-off.

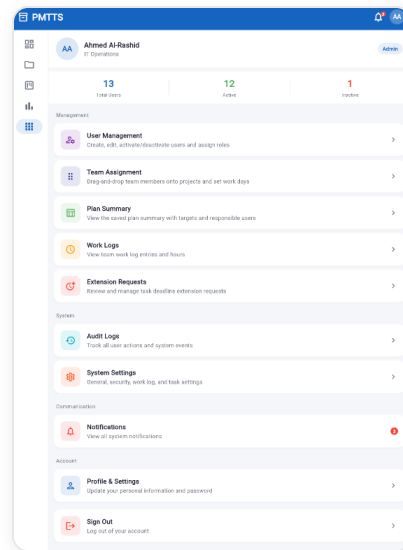
- Extension requests awaiting approval
- Change requests awaiting approval
- Approve / Reject actions per item
- Empty state illustration when queue is clear

PLANNER



More Screen (Planner)

screens/planner/more_screen.dart



Planner's "More" tab with quick links to secondary screens.

- Profile link
- Team Assignment access
- Notifications link
- Sign out with confirmation dialog

PLANNER

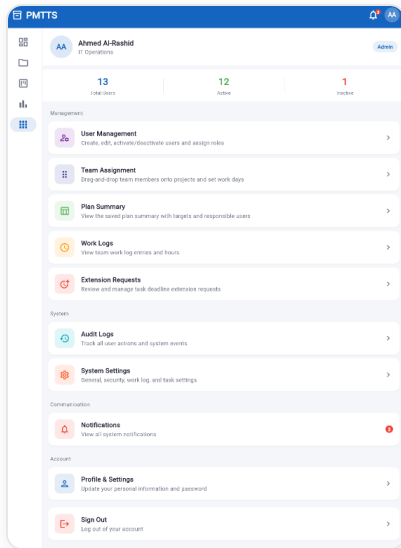


Admin Screens (3)



Admin More Screen

screens/admin/admin_more_screen.dart



The Admin's 5th tab — a hub giving access to all administrative features, sectioned into Management, System, Communication, and Account.

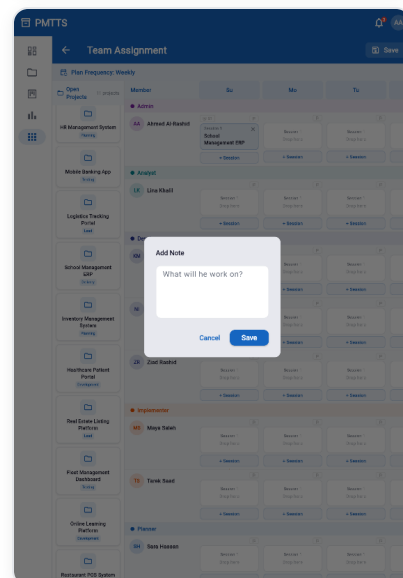
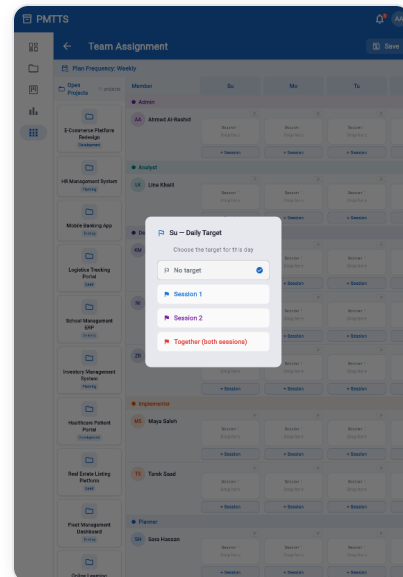
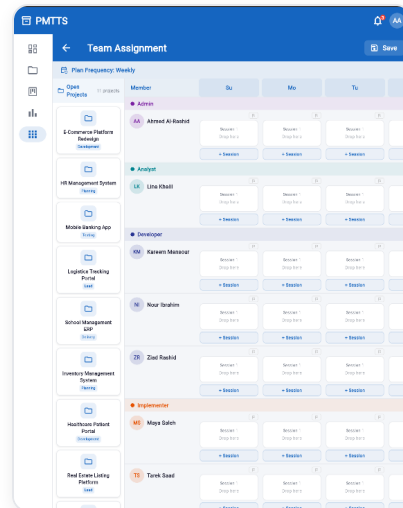
- **Identity card:** name, department, role chip
- **Stats strip:** Total Users / Active / Inactive
- User Management → UsersScreen
- Team Assignment → TeamAssignmentScreen
- Plan Summary → PlanSummaryScreen (requires saved plan)
- Work Logs, Extension Requests
- Audit Logs, System Settings
- Notifications (with unread badge)
- Edit Profile, Sign Out (with dialog)

ADMIN



Team Assignment Screen

screens/admin/team_assignment_screen.dart



Visual planner for assigning team members to projects across a date range. Produces a day-by-day assignment plan stored in `plan_store.dart`.

- Project list with user assignment per day
- Date range selection
- Session label and per-user note fields
- Save plan → stored in `planStore`
- View Summary button → navigates to `PlanSummaryScreen`

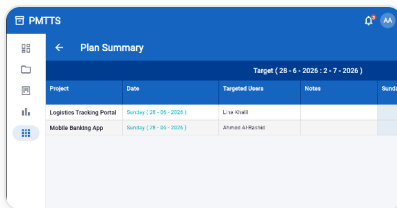
ADMIN

PLANNER



Plan Summary Screen

`screens/admin/plan_summary_screen.dart`



Read-only spreadsheet-style view of the saved assignment plan. Horizontally scrollable to show one column per day in the plan range.

- Header row: full date range label
- Columns: Project, Date, Responsible Users, Notes, + one column per day
- Rows sorted by day index then project name
- Alternating row shading; active-day column highlighted
- Date displayed in orange accent color
- Supports Arabic/English day names via `AppStrings.lang`
- Empty-state icon when no plan has been saved

ADMIN

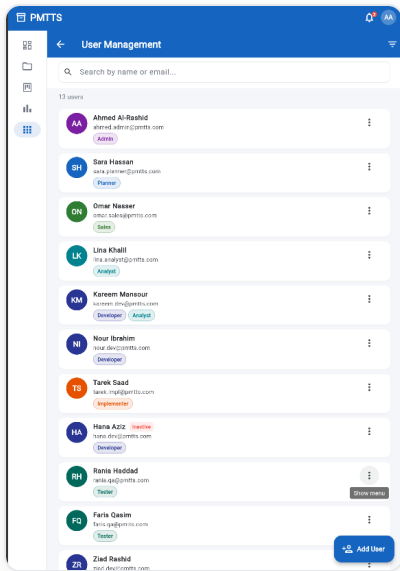


User Management Screens (3)



Users Screen

screens/users/users_screen.dart



Full user directory with search, role filter, and active/inactive toggle.

- User cards with initials avatar, name, role chip, department
- Active/Inactive status badge
- Search by name or email
- Filter by role
- FAB to create new user
- Long-press to deactivate/reactivate

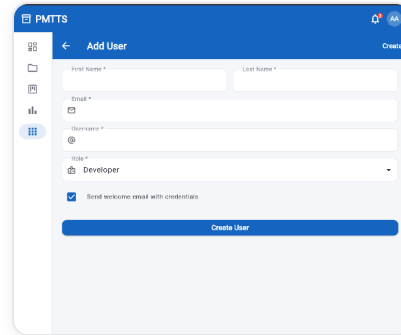
ADMIN



Create / Edit User Screens

screens/users/create_user_screen.dart

screens/users/edit_user_screen.dart



Forms for managing user accounts.

- First name, last name, email, username
- Department field
- Multi-select role assignment (a user can hold multiple roles)
- Active/inactive toggle
- Temporary password for new users

ADMIN



Profile Screens (6)



Profile Screen

screens/profile/profile_screen.dart

Read-only profile summary with links to settings sub-screens. 5th tab for non-admin roles.

- Avatar with initials, full name, role chip, department
- Email and username display
- Links to Edit Profile, Change Password, Audit Log
- Language toggle (EN / AR)
- Sign Out with confirmation dialog

SALES

ANALYST

DEVELOPER

TESTER

IMPLEMENTER



Edit Profile Screen

screens/profile/edit_profile_screen.dart

Edit personal information and optionally change password within the same form.

- Avatar edit with image picker (gallery, max 512×512)
- First name, last name, email, username, department
- International phone number `intl_phone_field` field (
- Optional "Change Password" expandable section
- Password fields: current, new, confirm — with show/hide toggles
- Save dispatches `AuthUserUpdated` event

ALL ROLES



Change Password Screen

screens/profile/change_password_screen.dart

Dedicated change-password flow (separate from edit profile).

- Current password verification
- New password with strength rules
- Confirm new password

ALL ROLES



Audit Log Screen

screens/profile/audit_log_screen.dart

Chronological log of user actions and system events. Read-only.

- Timestamped entries with action type and description
- Filter by action category
- Search by description

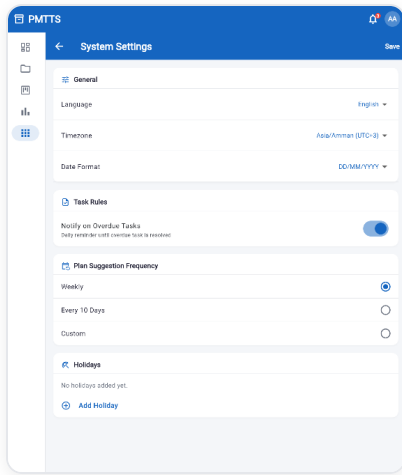
ADMIN

ALL (OWN LOG)



System Settings Screen

screens/profile/system_settings_screen.dart



App-wide configuration settings (Admin only).

- Language selection (EN / AR)
- Date format preference
- Notification defaults
- System-level toggles

ADMIN

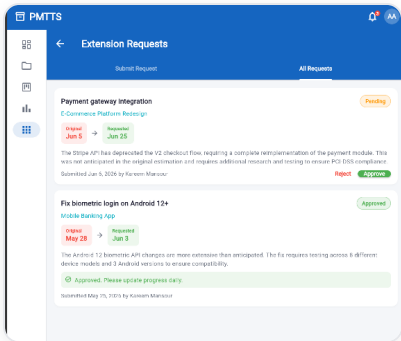
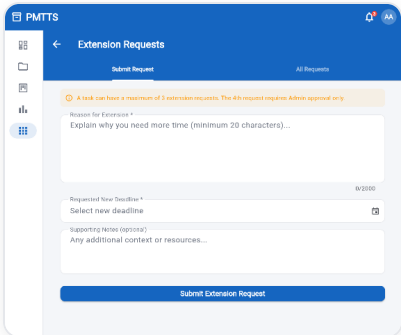


Other Screens (3)



Extension Request Screen

screens/extension_requests/extension_request_sc



Submit and view deadline extension requests for tasks. Requests flow to the Planner's Approvals screen.

- Task selection, new proposed deadline
- Justification text field
- Pending / Approved / Rejected status display

DEVELOPER ADMIN (VIEW ALL)



Change Request Screen

screens/change_requests/change_request_screen.c

Formal change request submission for scope or requirement changes. Routes to Planner approval.

- Project and task reference
- Description of requested change
- Impact assessment field
- Status tracking

ANALYST DEVELOPER



Data Models

UserModel — lib/models/user_model.dart

Field	Type	Notes
id	String	Unique user ID
firstName / lastName	String	Computed: fullName , initials
email / username	String	
role	UserRole	Currently active role
roles	List<UserRole>	All assigned roles; length > 1 shows role switcher

Field	Type	Notes
department	String?	Optional department label
isActive	bool	Default: true

UserRole enum

ADMIN PLANNER SALES ANALYST TESTER IMPLEMENTER DEVELOPER

ProjectModel — lib/models/project_model.dart

Field	Type	Notes
id	String	
name / description	String	
status	ProjectStatus	open, inProgress, closed, archived...
technology	ProjectTechnology	Used for tech-filter chips
startDate / endDate	DateTime	
salesAssignee	String	Full name of assigned Sales user
plannerAssignee	String	Full name of assigned Planner
analystAssignee	String	Full name of assigned Analyst
testerAssignee	String	Full name of assigned Tester

TaskModel — lib/models/task_model.dart

Field	Type	Notes
id	String	
projectId	String	FK → ProjectModel.id
title / description	String	
status	TaskStatus	new, inProgress, onHold, completed, reopened
priority	TaskPriority	low, medium, high, critical
assignedDevelopers	List<String>	Full names of assigned devs
dueDate	DateTime	Computed: isOverdue

BLoC / Cubit	Key Events	Key States
AuthBloc	AuthLoginRequested , AuthLogoutRequested , AuthRoleSwitched , AuthUserUpdated	AuthInitial , AuthLoading , AuthAuthenticated , AuthFailure
NavigationBloc	NavigateToTab(index)	NavigationState(currentTabIndex)
ProjectBloc	LoadProjects , FilterProjects , CreateProject , UpdateProject	ProjectLoading , ProjectLoaded , ProjectError
TaskBloc	LoadTasks , FilterTasks , CreateTask , UpdateTask	TaskLoading , TaskLoaded , TaskError
LocaleCubit	setLocale(Locale)	Locale (en / ar)



All BLoCs are provided at the **MainScreen** level via MultiBlocProvider, making them available to all tabs and their nested navigators without re-creation on tab switch.