Atlas: Feature Outline & Application Flow

This document provides a high-level overview of the features and the primary user flow for the Atlas application.

1. Feature Outline (Concise)

- **User Management:**

    - Login via GitHub/Google.
    - Leads create projects and invite team members.
    - Role-based permissions (e.g., Lead, Developer).

- **AI Project Setup:**

    - Lead defines project scope in a chat with the Atlas AI.
    - AI generates a complete Project Requirements Document (PRD).
    - Lead reviews and approves the PRD to kick off the project.

- **Automated Workflow:**

    - AI automatically assigns tasks based on role and timeline.
    - Developers mark tasks complete in the UI.
    - AI assigns the next task upon completion.
    - AI automatically detects and flags delayed tasks.

- **Communication & Issues:**

    - Integrated real-time chat for teams and DMs.
    - Users report blockers/issues to the AI.
    - AI auto-creates and assigns issue tickets to the correct developer.
    - AI manages the notification loop for issue resolution.

2. Detailed Application Flow Diagram

This diagram illustrates the detailed lifecycle and feature interactions within the Atlas application.

Architecture Overview

Phase 1: Setup & Initiation

Start

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User Authenticated ?

No → Login via GitHub/Google

Yes →

Dashboard

↓

Lead Creates Project

↓

Lead Invites Developers & Assigns Roles

↓

Lead Initiates PRD Generation via AI Chat

Scope/Tech Details

↓

Atlas AI <-> LLM API

Generated PRD

↓

Lead Reviews & Approves PRD

PRD Approved

Phase 2: Execution Loop

Project State: Active

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AI Agent assigns initial tasks based on PRD

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Developer receives task notification

↓

Dev completes work

↓

Dev marks task complete in UI

↓

AI Agent receives completion event

↓

More tasks for this role?

Yes → AI assigns next task

No → Role is idle

Parallel System Flows

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                                    ┌─────────────────────────────┐
                                    │  Developer reports issue via UI │
                                    └─────────────────────────────┘
                                                 │
                                                 ▼
    ┌─────────────────┐           ┌─────────────────────────────┐
    │  Daily Scheduler │           │  AI Agent creates Issue Ticket │
    └─────────────────┘           └─────────────────────────────┘
             │                                   │
             ▼                                   ▼
    ┌─────────────────────┐       ┌───────────────────────────────┐
    │ AI checks for delayed tasks │   │ AI assigns issue to relevant developer │
    └─────────────────────┘       └───────────────────────────────┘
             │                                   │
             ▼                                   │
          ◇ Task                                 ▼
            Overdue? ◇                 ┌──────────────────────┐
             │                         │  Resolver Dev is notified │
           Yes                         └──────────────────────┘
             ▼                                   │
    ┌─────────────────────┐          Marks issue resolved
    │ AI sends delay notification │              ▼
    └─────────────────────┘       ┌──────────────────────┐   ┌────────────────────────────────┐
                                  │ AI notifies original reporter │   │ Users communicate via Team Chat & DMs │
                                  └──────────────────────┘   └────────────────────────────────┘
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