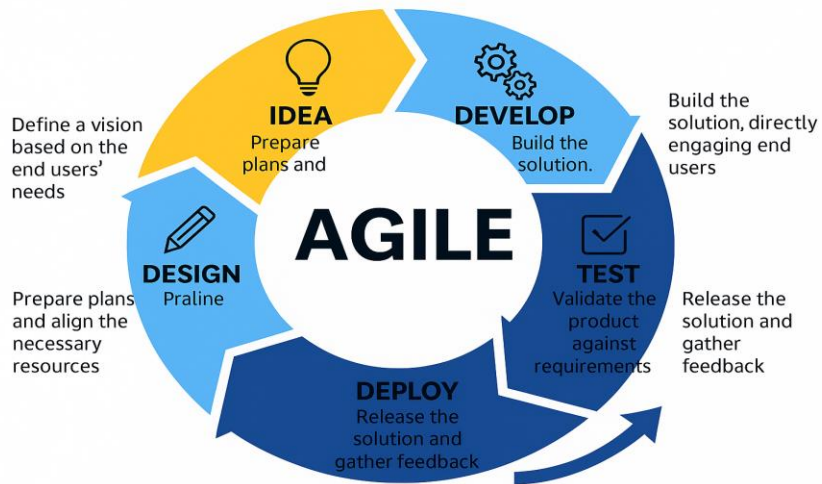
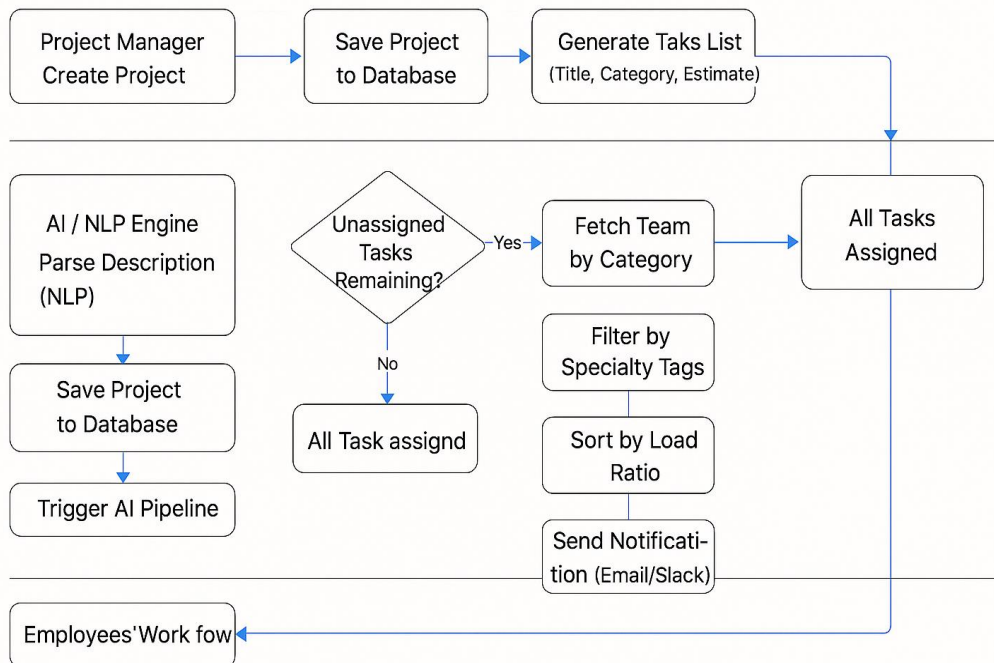


SMART AI TASK ASSIGNMENT

AGILE MODEL:



FLOW CHART DIAGRAM:



Content:

Key Modules

1. Project Creation (by Project Manager)

- Frontend Form:
 - Project Title
 - Description (detailed goals, features, deliverables)
 - Deadline (optional)
 - Priority Level (High, Medium, Low)
 - Backend Workflow:
 - Save project to DB
 - Trigger task analysis module
 - Status: "Processing"
-

2. AI-Based Task Breakdown

AI Process:

- Step 1: NLP Parsing
 - Will use NLP models (OpenAI/GPT or custom-trained transformers)
 - Parse project description and identify actionable items
- Step 2: Task Classification
 - Categorize tasks into:
 - UI/UX Design
 - Frontend Development
 - Backend/API Development
 - DevOps/Deployment
 - QA/Testing

- Step 3: Task Structuring
 - Each task includes:
 - Title
 - Description
 - Category
 - Estimated time (complexity)
 - Dependencies (if any)

3. Team Member Profiling

Each user has:

- Role (Designer, Frontend Dev, Backend Dev, QA)
- Skills (React, Node.js, UI, Illustration, etc.)
- Specialty tags
- Max Weekly Load (e.g. 40h/week)
- Current Load (updated dynamically)

Store this in a UserProfile or TeamMember table.

4. Smart Task Assignment Engine

Workflow:

For each task:

1. Filter users by task.category
2. Match task tags with user specialties
3. Sort users by lowest (current_load / max_load) ratio
4. Assign to best-fit user
5. Update user load
6. Send notification

Load Balancing:

- If task is estimated at 10+ hours, AI splits it into subtasks
 - Example: “Design 10-screen UI” → Split into 3–4 screens each across multiple designers
-

5. Notifications System

Notify users upon assignment:

- Via email, in-app, or Slack integration
 - Message example:
“You’ve been assigned a new task: ‘Implement login form’ (Est: 3h). Due: 3 days from now.”
-

6. Employee Task Dashboard

Each user sees:

- Assigned tasks
 - Priority, Deadline, Estimated Time
 - Status (To Do, In Progress, Done)
 - Time spent vs estimated
-

7. Project Monitoring (PM Dashboard)

Project Manager sees:

- Progress per category (Design, Dev, etc.)
- Assigned team members
- Burndown chart
- Bottlenecks (e.g. overloaded members)
- Option to reassign or update priority

Key Modules

