🤖 PM Assistant MVP - User Guide

Overview

The PM Assistant MVP is a **Multi-Agent Program Management system** that uses AI agents to analyze projects, create plans, assess risks, and generate documentation automatically.

🏠 Main Dashboard (`http://localhost:3002`)

What You See:

- 📊 **Quick Stats**: Overview of projects, agents, requirements, and risks
- 🤖 **Multi-Agent System Status**: Shows all 5 AI agents and their current state
- ⚡ **Quick Actions Panel**: Buttons to start common tasks
- 📈 **Project Status Chart**: Visual breakdown of project statuses
- 📋 **Recent Projects**: List of your latest projects

What Each Quick Action Does:

1. **New Project** → Creates a new project (redirects to projects page)
2. **Upload Files** → Process Excel, JIRA, or text files for analysis
3. **Generate Docs** → Create requirements & specifications
4. **Run Multi-Agent Analysis** → Execute the complete AI pipeline

🤖 Multi-Agent System (`/agents`)

The 5 AI Agents:

1. 📋 **Input Parser Agent** (Blue) - Processes and analyzes input data
2. 📅 **Planning Agent** (Green) - Creates project plans and timelines
3. ⚠️ **Risk Assessment Agent** (Red) - Identifies and categorizes risks
4. 📄 **Documentation Agent** (Purple) - Generates requirements and specs
5. ⚙️ **Orchestrator Agent** (Orange) - Coordinates workflows between agents

How to Use the Multi-Agent System:

Step 1: Select a Project

- Use the **project dropdown** in the top-right corner
- If you don't have projects, create them first in the `/projects` page
- The system needs a project context to analyze

Step 2: Run Full Analysis (Recommended)

- Click the big **"Run Full Analysis"** button
- This executes all agents in sequence:
  1. Input Parser analyzes the project

  2. Planning Agent creates tasks and timeline
  3. Risk Assessment identifies potential issues
  4. Documentation Agent generates requirements

- Watch the **Workflow Pipeline** show real-time progress
- Results appear in the **Execution Results** section below

Step 3: Run Individual Agents (Advanced)

- Click **"Run"** button on any individual agent card
- Useful for testing specific agent functions
- Watch the **Execution Log** for real-time feedback

What Happens When You Run Analysis:

- **Database Updates**: Agents create tasks, risks, requirements automatically
- **Real-time Feedback**: Execution log shows progress and results
- **Visual Pipeline**: See which agent is running and their status
- **Detailed Results**: View what each agent accomplished

📊 Other Pages

Projects (`/projects`)

- View all projects and their status
- Create new projects for agent analysis
- Project data feeds the multi-agent system

Requirements (`/requirements`)

- View requirements generated by Documentation Agent
- Manual requirement management
- Filter and organize requirements

Tasks (`/tasks`)

- View tasks created by Planning Agent
- Task timeline and dependencies
- Progress tracking

Risks (`/risks`)

- View risks identified by Risk Assessment Agent
- Risk probability and impact analysis
- Mitigation planning

Analytics (`/analytics`)

- Project performance metrics
- Agent execution statistics
- Trend analysis

Upload (`/upload`)

- Upload Excel, JIRA exports, or text files
- Files get processed by Input Parser Agent

- Extracted data feeds other agents

Settings (`/settings`)

- Configure agent parameters
- System preferences
- Database management

🚀 Getting Started Workflow

First Time Setup:

1. **Visit Dashboard** → Get familiar with the interface
2. **Go to Projects** → Create your first project
3. **Return to Agents** → Select your project from dropdown
4. **Run Full Analysis** → Let AI agents analyze your project
5. **Review Results** → Check generated tasks, risks, requirements
6. **Explore Other Pages** → See what the agents created

Daily Usage:

1. **Upload new files** → Process new project documents
2. **Run targeted agents** → Update specific areas (risks, tasks, etc.)
3. **Review analytics** → Track project progress
4. **Refine requirements** → Adjust generated documentation

🔧 Troubleshooting

"Please select a project first"

- Go to `/projects` page and create a project
- Return to `/agents` and select it from dropdown

"No projects available"

- Database might be empty
- Run: `npm run db:seed` to create sample projects

Agent buttons not responding

- Check browser console for errors
- Ensure project is selected
- Try refreshing the page

Workflow Pipeline stuck

- Individual agent might have failed
- Check Execution Log for error messages
- Try running agents individually

📋 Expected Results

After Running Full Analysis:

- ✅ **3-5 Tasks created** (Project Initialization, Requirements Analysis, etc.)
- ✅ **2-3 Risks identified** (Technical complexity, resource availability)
- ✅ **2-3 Requirements generated** (User authentication, data security)
- ✅ **1 Document created** (Project Requirements Document)
- ✅ **Execution log shows all steps completed**

Where to Find Results:

- **Tasks**: Check `/tasks` page or database
- **Risks**: Check `/risks` page
- **Requirements**: Check `/requirements` page
- **Documents**: Stored in database (view in settings/admin)

🎯 Key Features

Real-time Execution

- Live progress updates during agent runs
- Visual pipeline showing current step
- Detailed execution log with timestamps

Intelligent Coordination

- Orchestrator manages agent dependencies
- Agents share context and build on each other's work
- Automatic error handling and recovery

Comprehensive Analysis

- Planning: Creates realistic timelines and tasks
- Risk Assessment: Identifies technical, resource, and timeline risks
- Documentation: Generates structured requirements
- Data Processing: Handles various input formats

💡 Tips for Best Results

1. **Start with sample projects** from the seed data
2. **Upload relevant documents** before running analysis
3. **Run Full Analysis first**, then individual agents for refinement
4. **Check all result pages** to see what was generated
5. **Review execution logs** to understand what each agent did
6. **Re-run agents** as projects evolve and change

This system demonstrates how AI agents can work together to handle complex program management tasks, providing intelligent analysis and documentation generation for your projects.