Coding & Development Prompts

Transform raw project details into structured, professional-grade documentation including setup guides, API references, architecture explanations, onboarding instructions, and deployment workflows.
Difficulty: Beginner
Model: ChatGPT / Claude
Use Case: Documentation & Developer Experience
Updated: May 2026
Why This Prompt Exists
Most software projects fail to scale not because of bad code — but because of bad documentation.

Developers struggle when they encounter:

- unclear setup instructions
- missing environment variables
- poor onboarding guidance
- undocumented APIs
- confusing architecture decisions
- inconsistent formatting

This leads to:
– slower onboarding
– increased support requests
– fragile collaboration
– reduced adoption
– higher maintenance costs

Good documentation is not optional. It is infrastructure.

This prompt ensures that even messy or incomplete project notes can be transformed into clean, structured, developer-ready documentation.

The Prompt

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Assume the role of a senior technical writer and software engineer specializing in developer experience (DX), API documentation, system architecture clarity, and onboarding optimization.

Your task is to convert raw project information into a structured, professional-grade README and documentation set.

Before generating the documentation, analyze:
- project purpose and scope
- system architecture
- dependencies and setup complexity
- developer onboarding friction points
- API structure and endpoints
- configuration requirements
- deployment environment
- potential confusion areas for new developers

Then generate the following sections:

1. Project Overview
2. Key Features
3. Tech Stack
4. System Architecture Explanation
5. Installation Instructions
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6. Environment Variables Setup
7. Local Development Guide
8. API Documentation (if applicable)
9. Folder Structure Breakdown
10. Authentication & Permissions (if applicable)
11. Deployment Instructions
12. Common Issues & Troubleshooting
13. Contribution Guidelines
14. Future Improvements
15. License & Maintenance Notes

INPUTS:

Project Name:
[INSERT NAME]

Project Description:
[INSERT DESCRIPTION]

Tech Stack:
[INSERT STACK]

Deployment Target:
[LOCAL / VERCEL / AWS / DIGITAL OCEAN / OTHER]

API Type:
[REST / GRAPHQL / NONE]

Database:

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[INSERT DATABASE]

Special Requirements:
[INSERT REQUIREMENTS]

RULES:
- Prioritize clarity over technical complexity
- Write for both junior and senior developers
- Avoid missing setup steps
- Use structured, readable formatting
- Eliminate ambiguity wherever possible
- Focus on reducing onboarding friction
- Ensure documentation is production-ready
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How To Use It

- Always include environment variables — missing config is the #1 onboarding failure point.
- Test the documentation by imagining a developer seeing the project for the first time.
- Use the output as a living document, not a one-time export.
- Update documentation whenever architecture changes.
- Pair this prompt with a refactoring and feature planning workflow for full lifecycle coverage.

Example Input

Project Name: TaskFlow API

Project Description: A task management API for teams with authentication, project boards, and real-time updates

Tech Stack: Node.js, Express, PostgreSQL, Prisma

Deployment Target: AWS

API Type: REST

Database: PostgreSQL

Why It Works
Most documentation fails because it is written after the fact, with too much assumed knowledge.

This framework improves outcomes by forcing:

- structured onboarding design
- clear system explanation
- complete setup coverage
- developer-first thinking
- reduced ambiguity in configuration and usage

Strong documentation does not describe the system.

It makes the system usable.

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