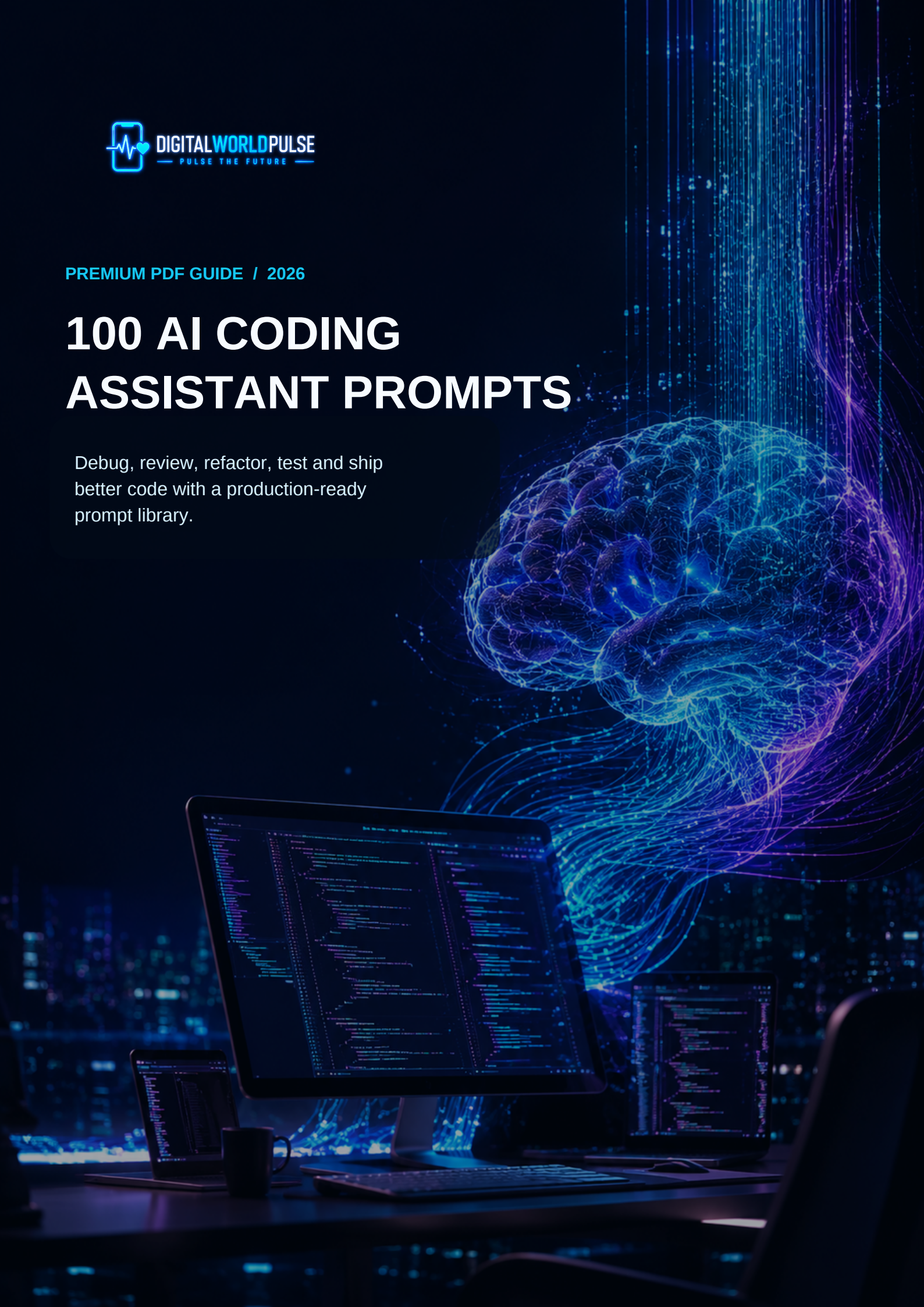


PREMIUM PDF GUIDE / 2026

100 AI CODING ASSISTANT PROMPTS

Debug, review, refactor, test and ship
better code with a production-ready
prompt library.



START HERE

HOW TO USE THIS GUIDE

Use these prompts as engineering briefs, not as an excuse to skip review. Replace bracketed placeholders with real project context. Validate every output, test changes in a safe environment, and never paste credentials, customer data or private code into a tool unless your organization has approved it.

DEBUGGING & ERROR ANALYSIS

1

Act as a senior engineer. For Python API returning 500 errors, reproduce the bug, isolate likely causes, explain the fix and provide a minimal patch. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for Python API returning 500 errors. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze Python API returning 500 errors. reproduce the bug, isolate likely causes, explain the fix and provide a minimal patch. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through Python API returning 500 errors. reproduce the bug, isolate likely causes, explain the fix and provide a minimal patch. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn Python API returning 500 errors into an engineering checklist. reproduce the bug, isolate likely causes, explain the fix and provide a minimal patch. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

CODE REVIEW

1

Act as a senior engineer. For pull request that adds [FEATURE], review correctness, security, readability, edge cases and test gaps. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for pull request that adds [FEATURE]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze pull request that adds [FEATURE]. review correctness, security, readability, edge cases and test gaps. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through pull request that adds [FEATURE]. review correctness, security, readability, edge cases and test gaps. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn pull request that adds [FEATURE] into an engineering checklist. review correctness, security, readability, edge cases and test gaps. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

REFACTORING

1

Act as a senior engineer. For legacy [LANGUAGE] module, propose an incremental refactor with no behavior change and a rollback plan. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for legacy [LANGUAGE] module. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze legacy [LANGUAGE] module. propose an incremental refactor with no behavior change and a rollback plan. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through legacy [LANGUAGE] module. propose an incremental refactor with no behavior change and a rollback plan. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn legacy [LANGUAGE] module into an engineering checklist. propose an incremental refactor with no behavior change and a rollback plan. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

UNIT TESTING

1

Act as a senior engineer. For function [FUNCTION NAME], write a test plan covering happy path, boundaries, invalid input and regressions. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for function [FUNCTION NAME]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze function [FUNCTION NAME]. write a test plan covering happy path, boundaries, invalid input and regressions. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through function [FUNCTION NAME]. write a test plan covering happy path, boundaries, invalid input and regressions. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn function [FUNCTION NAME] into an engineering checklist. write a test plan covering happy path, boundaries, invalid input and regressions. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

API DEVELOPMENT

1

Act as a senior engineer. For REST endpoint for [RESOURCE], design request validation, response schema, errors, auth and tests. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for REST endpoint for [RESOURCE]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze REST endpoint for [RESOURCE]. design request validation, response schema, errors, auth and tests. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through REST endpoint for [RESOURCE]. design request validation, response schema, errors, auth and tests. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn REST endpoint for [RESOURCE] into an engineering checklist. design request validation, response schema, errors, auth and tests. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

DATABASE & SQL

1

Act as a senior engineer. For database query for [USE CASE], improve performance, indexes, query safety and explain the tradeoffs. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for database query for [USE CASE]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze database query for [USE CASE]. improve performance, indexes, query safety and explain the tradeoffs. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through database query for [USE CASE]. improve performance, indexes, query safety and explain the tradeoffs. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn database query for [USE CASE] into an engineering checklist. improve performance, indexes, query safety and explain the tradeoffs. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

FRONTEND COMPONENTS

1

Act as a senior engineer. For responsive [COMPONENT] in [FRAMEWORK], plan accessible states, loading, error handling and clean component structure. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for responsive [COMPONENT] in [FRAMEWORK]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze responsive [COMPONENT] in [FRAMEWORK]. plan accessible states, loading, error handling and clean component structure. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through responsive [COMPONENT] in [FRAMEWORK]. plan accessible states, loading, error handling and clean component structure. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn responsive [COMPONENT] in [FRAMEWORK] into an engineering checklist. plan accessible states, loading, error handling and clean component structure. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

BACKEND SERVICES

1

Act as a senior engineer. For service that handles [WORKFLOW], define responsibilities, idempotency, logging, retries and failure handling. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for service that handles [WORKFLOW]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze service that handles [WORKFLOW]. define responsibilities, idempotency, logging, retries and failure handling. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through service that handles [WORKFLOW]. define responsibilities, idempotency, logging, retries and failure handling. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn service that handles [WORKFLOW] into an engineering checklist. define responsibilities, idempotency, logging, retries and failure handling. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

SECURITY REVIEW

1

Act as a senior engineer. For authentication flow for [APP], identify threats, validate inputs, protect secrets and propose safe defaults. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for authentication flow for [APP]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze authentication flow for [APP]. identify threats, validate inputs, protect secrets and propose safe defaults. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through authentication flow for [APP]. identify threats, validate inputs, protect secrets and propose safe defaults. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn authentication flow for [APP] into an engineering checklist. identify threats, validate inputs, protect secrets and propose safe defaults. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

PERFORMANCE OPTIMIZATION

1

Act as a senior engineer. For slow [PAGE OR PROCESS], profile likely bottlenecks, prioritize fixes and define measurable success criteria. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for slow [PAGE OR PROCESS]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze slow [PAGE OR PROCESS]. profile likely bottlenecks, prioritize fixes and define measurable success criteria. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through slow [PAGE OR PROCESS]. profile likely bottlenecks, prioritize fixes and define measurable success criteria. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn slow [PAGE OR PROCESS] into an engineering checklist. profile likely bottlenecks, prioritize fixes and define measurable success criteria. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

DOCUMENTATION

1

Act as a senior engineer. For [PROJECT OR FEATURE], create concise developer documentation with setup, example usage and troubleshooting. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for [PROJECT OR FEATURE]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze [PROJECT OR FEATURE]. create concise developer documentation with setup, example usage and troubleshooting. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through [PROJECT OR FEATURE]. create concise developer documentation with setup, example usage and troubleshooting. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn [PROJECT OR FEATURE] into an engineering checklist. create concise developer documentation with setup, example usage and troubleshooting. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

GIT & PULL REQUESTS

1

Act as a senior engineer. For feature branch for [FEATURE], suggest a clean commit plan, PR summary, test evidence and reviewer checklist. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for feature branch for [FEATURE]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze feature branch for [FEATURE]. suggest a clean commit plan, PR summary, test evidence and reviewer checklist. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through feature branch for [FEATURE]. suggest a clean commit plan, PR summary, test evidence and reviewer checklist. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn feature branch for [FEATURE] into an engineering checklist. suggest a clean commit plan, PR summary, test evidence and reviewer checklist. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

REGEX & DATA PARSING

1

Act as a senior engineer. For unstructured [DATA TYPE], create a safe parsing approach, test cases and graceful handling for malformed data. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for unstructured [DATA TYPE]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze unstructured [DATA TYPE]. create a safe parsing approach, test cases and graceful handling for malformed data. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through unstructured [DATA TYPE]. create a safe parsing approach, test cases and graceful handling for malformed data. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn unstructured [DATA TYPE] into an engineering checklist. create a safe parsing approach, test cases and graceful handling for malformed data. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

AUTOMATION SCRIPTS

1

Act as a senior engineer. For repetitive task: [TASK], design a reliable script with configuration, dry-run mode, logs and safe failure behavior. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for repetitive task: [TASK]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze repetitive task: [TASK]. design a reliable script with configuration, dry-run mode, logs and safe failure behavior. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through repetitive task: [TASK]. design a reliable script with configuration, dry-run mode, logs and safe failure behavior. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn repetitive task: [TASK] into an engineering checklist. design a reliable script with configuration, dry-run mode, logs and safe failure behavior. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

DEVOPS & CI/CD

1

Act as a senior engineer. For deployment pipeline for [APP], create a staged plan with checks, secrets handling, rollback and monitoring. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for deployment pipeline for [APP]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze deployment pipeline for [APP]. create a staged plan with checks, secrets handling, rollback and monitoring. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through deployment pipeline for [APP]. create a staged plan with checks, secrets handling, rollback and monitoring. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn deployment pipeline for [APP] into an engineering checklist. create a staged plan with checks, secrets handling, rollback and monitoring. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

DATA STRUCTURES & ALGORITHMS

1

Act as a senior engineer. For problem: [PROBLEM], compare simple and optimized approaches, analyze complexity and implement readable code. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for problem: [PROBLEM]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze problem: [PROBLEM]. compare simple and optimized approaches, analyze complexity and implement readable code. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through problem: [PROBLEM]. compare simple and optimized approaches, analyze complexity and implement readable code. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn problem: [PROBLEM] into an engineering checklist. compare simple and optimized approaches, analyze complexity and implement readable code. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

LEARNING & EXPLANATIONS

1

Act as a senior engineer. For concept: [PROGRAMMING CONCEPT], explain it with an analogy, a minimal example, common mistakes and practice task. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for concept: [PROGRAMMING CONCEPT]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze concept: [PROGRAMMING CONCEPT]. explain it with an analogy, a minimal example, common mistakes and practice task. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through concept: [PROGRAMMING CONCEPT]. explain it with an analogy, a minimal example, common mistakes and practice task. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn concept: [PROGRAMMING CONCEPT] into an engineering checklist. explain it with an analogy, a minimal example, common mistakes and practice task. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

MIGRATION PLANNING

1

Act as a senior engineer. For migrate [SYSTEM] to [TARGET], map dependencies, data migration, testing, release steps and rollback criteria. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for migrate [SYSTEM] to [TARGET]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze migrate [SYSTEM] to [TARGET]. map dependencies, data migration, testing, release steps and rollback criteria. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through migrate [SYSTEM] to [TARGET]. map dependencies, data migration, testing, release steps and rollback criteria. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn migrate [SYSTEM] to [TARGET] into an engineering checklist. map dependencies, data migration, testing, release steps and rollback criteria. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

PRODUCT FEATURES

1

Act as a senior engineer. For feature idea: [IDEA], turn it into technical requirements, acceptance criteria, edge cases and implementation tasks. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for feature idea: [IDEA]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze feature idea: [IDEA]. turn it into technical requirements, acceptance criteria, edge cases and implementation tasks. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through feature idea: [IDEA]. turn it into technical requirements, acceptance criteria, edge cases and implementation tasks. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn feature idea: [IDEA] into an engineering checklist. turn it into technical requirements, acceptance criteria, edge cases and implementation tasks. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

PRODUCTION INCIDENTS

1

Act as a senior engineer. For incident: [SYMPTOM], build an investigation checklist, mitigation plan, root-cause questions and follow-up actions. Ask up to three essential clarifying questions first. Then give a practical step-by-step plan. Do not invent project facts.

2

Create a production-ready approach for incident: [SYMPTOM]. Include assumptions, risks, validation steps, and a small example in [LANGUAGE]. Keep names generic and avoid exposing secrets.

3

Analyze incident: [SYMPTOM]. build an investigation checklist, mitigation plan, root-cause questions and follow-up actions. Return: diagnosis, recommended solution, alternatives, tests to run, and the smallest safe next change.

4

Help me work through incident: [SYMPTOM]. build an investigation checklist, mitigation plan, root-cause questions and follow-up actions. Explain the reasoning before code, keep the code minimal, and flag anything that needs a human security or architecture review.

5

Turn incident: [SYMPTOM] into an engineering checklist. build an investigation checklist, mitigation plan, root-cause questions and follow-up actions. Include acceptance criteria, observability, documentation and a rollback or recovery step where relevant.

DISCLOSURE & RESPONSIBLE USE

This educational guide is provided by Digital World Pulse. AI coding tools can produce insecure, inaccurate, outdated or incomplete code. Review, test, license and secure every output before use. Never share secrets, private keys, personal data or confidential source code without authorization.

VERIFY BEFORE SHIPPING

Test changes, review dependencies and validate security before production.

HUMAN APPROVAL

You remain responsible for technical, legal and ethical decisions.

INDEPENDENT GUIDE

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