



NoCodeJam Challenge Template

Version 2.0 | Last Updated: January 2026

1. Challenge Metadata

Required Fields

- Challenge Title
- Challenge ID (auto-generated)
- Associated Pathway & Module
- Difficulty Level (Beginner / Intermediate / Advanced)
- Estimated Time (mandatory time box in minutes)
- Challenge Type (Build / Modify / Analyse / Deploy / Reflect)
- Recommended Tools (not mandatory)
- XP Reward (system-calculated only)
- Challenge Cover Image (required, 1200×630px recommended)
- Version Number (e.g., 1.0, 1.1)

Technical Prerequisites

- Required tools/accounts (specify versions if critical)
- Installation requirements
- Prior knowledge from previous modules

2. Challenge Purpose

- Skill Focus: What specific capability this challenge develops
- Learning Outcomes Reinforced: Link to pathway learning objectives
- Real-World Application: Why this skill matters in practice

3. Challenge Brief (User-Facing)

- Short Scenario: Context that makes the challenge relatable (2-3 sentences)
- Clear Goal Statement: What the learner will build or accomplish
- Success Definition: Plain-English criteria for completion

4. Constraints & Rules

Must-Do Requirements

Example: 'Must deploy to a live URL', 'Must include error handling for invalid inputs'

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<https://github.com/ThunderOpsAI>

Optional Elements

Example: 'Custom styling is optional', 'Database integration is a bonus'

Out of Scope

Example: 'Authentication not required', 'No need for mobile responsiveness'

Tool Guidance

Recommended tools with alternatives clearly stated

5. Step-by-Step Guidance

Provide ordered steps using clear action verbs (e.g., Create, Configure, Test, Deploy).

Level of guidance should match difficulty:

- Beginner: Detailed steps with screenshots
- Intermediate: High-level steps with key decision points
- Advanced: Outcome-focused with minimal guidance

Important: No assumed knowledge beyond stated prerequisites.

6. Expected Output / Deliverables

What to Submit

- Acceptable formats: links, screenshots, text descriptions, files
- File size limits (if applicable)

Verification Criteria

- How completion will be verified (automated tests, manual review, self-assessment)

7. Validation Checklist (Self-Check)

Provide challenge-specific validation points. Examples:

- ☐ Application loads without errors
- ☐ API returns valid JSON response
- ☐ User can complete the primary workflow
- ☐ Code follows recommended best practices
- ☐ Time box respected (within $\pm 20\%$)

8. Reflection (Mandatory)

Recommended length: 150-300 words. Address these prompts:

- What did you build? (Brief description)
- What tools did you use and why?
- Time spent vs. recommended (and why if significantly different)
- What was the hardest part and how did you solve it?

- What would you improve if you had more time?
- What did you learn that surprised you?

Note: Reflections are required for challenge completion but do not award additional XP.

9. Common Pitfalls & Hints

Known Mistakes

List 3-5 common errors learners make in this challenge

Misconceptions

Address typical misunderstandings about the concepts involved

Optional Hints

Progressive hints that don't give away the complete solution

10. Completion Rules

- Reflection Required: Yes (mandatory for all challenges)
- Partial Completion: Define what constitutes partial vs. full completion
- Partial Completion XP: Specify if partial completion awards reduced XP
- Retry Rules: Unlimited retries allowed, XP awarded once only
- Unlock Conditions: Requirements to proceed to next module

11. Extension (Optional)

- Stretch Goal: Additional feature to implement
- Variation: Alternative approach to try
- Real-World Adaptation: How to apply this to a real project

12. Images & Media

Image Requirements

- Cover/thumbnail image: Required, 1200×630px, max 500KB
- Step screenshots: Optional but recommended for Beginner challenges
- Final outcome preview: Optional, helps learners visualize the goal

Accessibility

- All images must include descriptive alt text
- Alt text should describe the function, not just the content
- No screenshots containing personal identifiable information

13. Accessibility Considerations

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- Screen reader compatibility verified
- Keyboard navigation works for all interactions
- Color contrast meets WCAG 2.1 AA standards
- Text alternatives provided for visual outputs

14. Internal Review & Moderation

Content Validation

- Difficulty accurately reflects content complexity
- Time-box validated by 3+ test users (acceptable variance: $\pm 20\%$)
- XP calculation verified against formula
- Tool recommendations current and accessible

Quality Checks

- Technical accuracy verified by domain expert
- Instructions tested by target audience (beginner/intermediate/advanced)
- Links and resources verified as active
- Language is clear, inclusive, and free from jargon (unless defined)

Safety & Content Policy

- No requests for personal/sensitive information
- Content appropriate for educational context
- AI safety considerations reviewed (if applicable)

Appendix: Quick Reference

Difficulty Guidelines

- Beginner: New to concept, needs detailed guidance, 30-60 minutes
- Intermediate: Familiar with basics, can work independently, 60-120 minutes
- Advanced: Experienced, minimal guidance needed, 90-180 minutes

Challenge Type Definitions

- Build: Create something new from scratch
- Modify: Improve or extend existing code/project
- Analyse: Evaluate, debug, or understand existing work
- Deploy: Publish or configure for production
- Reflect: Critically assess learning or process

Version History

- v2.0 (January 2026): Added accessibility, technical prerequisites, enhanced validation checklist
- v1.0 (Original): Initial template structure