# Manual Static Testing

## What is Manual Static Testing

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

**Manual Static Testing** is a **static testing** approach where reviews and analysis are done **by humans** without using automated tools — meaning testers, developers, or stakeholders manually inspect documents, code, or designs to find defects **before execution**.

## **Key Idea**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

Instead of running the software, you **manually review artifacts** to detect:

* Missing requirements
* Ambiguities
* Logical errors
* Non-compliance with standards

## **Main Forms of Manual Static Testing**

### **1. Informal Review**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* Most basic form — no strict process.
* Done by colleagues, peers, or team members.
* Example: A developer asking a teammate to skim through their code.

### **2. Walkthrough**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* The author of the work product **explains it step-by-step** to the team.
* Objective: Get feedback, clarify doubts, and discover defects.
* Usually less formal than inspections.
* Example: A business analyst walks the QA team through a new requirement document.

### **3. Technical Review**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* Focuses on technical aspects (code logic, architecture, algorithms).
* Performed by peers with technical expertise.
* Example: Reviewing database query efficiency or API design.

### **4. Inspection**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* Most formal type of manual static testing.
* Uses checklists, roles (moderator, recorder), and a documented process.
* Highly effective in finding defects early.
* Example: Formal review of safety-critical software for aviation systems.

## **Examples of Artifacts Checked**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* Requirements specifications
* Test cases
* Design diagrams
* Source code
* User manuals

## **Benefits**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* **Early defect detection** (before execution phase).
* **Cost saving** — cheaper than fixing defects after testing or deployment.
* Improves **team understanding** and reduces misunderstandings.

💡 **Analogy:** Manual static testing is like a group of editors proofreading a book before printing — no computer is needed, just eyes, brains, and a red pen.

## Manual review of artifacts

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

**Manual review of artifacts** means **examining project deliverables (artifacts) by hand — without using automated tools — to find errors, inconsistencies, or gaps** before moving forward in the software development process.

It’s part of **manual static testing**, because you’re not running the code; you’re just reviewing the written or designed work.

### How it works

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

1. **Select the artifact to review** Examples:  
   * Requirements specification (SRS)
   * Design documents
   * Test plans
   * Test cases
   * User manuals
2. **Read and analyze it manually** The reviewer checks for:  
   * Missing information
   * Ambiguities
   * Logical errors
   * Non-compliance with standards
3. **Record findings** Defects or improvement suggestions are logged.
4. **Discuss and correct** The team addresses the issues before proceeding to the next stage.

### Examples

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* Reading a **requirements document** to ensure all functional requirements are clearly stated.
* Checking a **test case** to confirm it covers the intended test condition and is written clearly.
* Reviewing a **UML diagram** to verify it matches the requirements.

### Benefits

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* **Finds defects early** (before coding starts)
* **Reduces cost of fixing defects**
* **Improves clarity** and communication between team members

💡 **Analogy:** It’s like proofreading a book before printing — you look for typos, formatting errors, and inconsistencies without actually "running" the story.

### Types of manual artifact reviews

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

Alright — here are the **4 main types of manual artifact reviews** as defined in **ISTQB**, going from least formal to most formal:

#### 1. Informal Review

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* **Definition:** Quick, unstructured check of an artifact without a formal process.
* **Who participates:** Often just the author and maybe one or two colleagues.
* **Goal:** Spot obvious mistakes or missing information.
* **Example:** A tester glances over a new test case document and points out that one step is missing.

#### 2. Walkthrough

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* **Definition:** The **author** of the artifact leads a group through it, explaining the content and answering questions.
* **Who participates:** Author, peers, maybe stakeholders.
* **Goal:** Share understanding, gather feedback, and identify issues.
* **Example:** A business analyst walks the dev and QA team through a requirements document to confirm understanding.

#### 3. Technical Review

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* **Definition:** A structured review focused on **technical accuracy** of the artifact.
* **Who participates:** Peers with technical expertise (e.g., developers, architects, testers).
* **Goal:** Detect defects in logic, design, or technical standards compliance.
* **Example:** Reviewing an API specification to ensure it matches the integration design and meets performance standards.

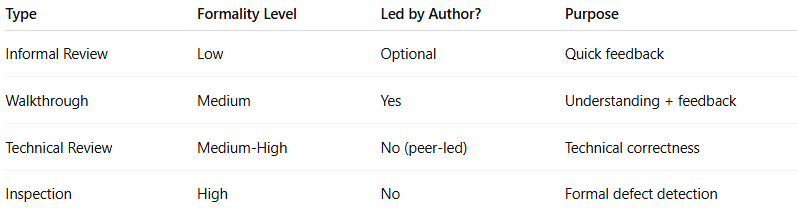
#### 4. Inspection

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

* **Definition:** The most **formal and rigorous** type of review, following a defined process with specific roles (e.g., moderator, reader, recorder).
* **Who participates:** Assigned review team with clear roles.
* **Goal:** Detect defects systematically, ensure compliance with standards, and log issues formally.
* **Example:** Inspecting a test plan against IEEE 829 standard before test execution starts.

#### Quick Comparison Table

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**



| **Type** | **Formality Level** | **Led by Author?** | **Purpose** |
| --- | --- | --- | --- |
| Informal Review | Low | Optional | Quick feedback |
| Walkthrough | Medium | Yes | Understanding + feedback |
| Technical Review | Medium-High | No (peer-led) | Technical correctness |
| Inspection | High | No | Formal defect detection |

💡 **Key Point:** All of these are **manual reviews of artifacts** — the difference is in how formal and structured they are.

#### Diagram showing these 4 review types on a formality scale

**# Source**: **Chatgpt (GPT-5-Standard) at [8/14/2025]**

