

## Game Design Document (GDD) Template – Simulation Project

This Game Design Document (GDD) is used to plan and document your simulation project. All sections should be completed clearly and professionally. Include a project tagline and concept art on the first page to visually and verbally capture your idea.

### 1. Project Title & Team Info

Include your simulation title, team name, and each team member's name and role.

### 2. Project Tagline

Write a short, memorable tagline that describes your simulation.

*Example: "Scan. Tap. Save the Lab."*

### 3. Concept Art

Insert a sketch, image, or digital rendering of what the simulation or key interaction will look like. This does **not** need to be high-end art; rough sketches are fine as long as they **clearly communicate** your idea. Any "borrowed" concepts must be clearly cited and carry a Creative-Commons license.

### 4. Simulation Overview and Target Learners

Summarize what your simulation teaches or trains and why it is valuable to the client or user.

Identify your **target learners** (for example, novice technicians, engineering students, new hires in a plant).

Note any factors that might make this audience vulnerable or the topic sensitive (for example, high-risk safety procedures, health-related content) and briefly describe how that will affect your design choices.

### 5. Learning Objectives

List 2–4 learning goals for the user.

What should the user understand or be able to do after completing the simulation?

### 6. Tutorial Storyboard Summary

Summarize each step from your tutorial video draft. Use bullet points or a short narrative that walks through the beginning, middle, and end of the tutorial.

### 7. (XR) Interaction Plan and Core Mechanics

Describe each major user action and the corresponding system response.

Keep it sequential and clear:

- a. What does the user do?
- b. What does the system show or change in response?
- c. How does this support a learning objective?

What are the game's time and space (2D/3D/continuous/static) constraints?

Detail any chance or skill mechanics (e.g. spawn percentages, level-up requirements)

**8. Quiz Plan**

List 3–5 True/False or Multiple Choice questions.

For each question, include the learning objective it supports.

**9. Content Sources and Grounding**

List the main content sources you will use to make sure your simulation is accurate (for example, safety manuals, course notes, standards, checklists, or subject matter experts).

Briefly explain how these sources support your learning objectives or scenario.

**10. Technical Details**

Note what hardware (for example, Meta Quest 3, Android phone) and software (for example, Unity, XR Interaction Toolkit, Vuforia) you'll use.

Mention any major technical constraints or risks you already know about.

**11. UI Sketches or Screens**

Include early mockups or sketches of user interface elements if relevant to your team's area (for example, menus, tooltips, error messages, progress indicators).

**12. Group Roles and Timeline**

List what each member is responsible for and the estimated timeline for deliverables.

- a. Example roles: client liaison/project manager, lead programmer, interaction/UI designer, art/audio/environment lead, documentation/GDD lead.
- b. You may combine or rotate roles as long as responsibilities are clearly assigned.
- c. Include a simple timeline (with weeks or dates) showing when major tasks such as prototype, first playable, playtest, and polish should be completed.