On-Set Electrical Safety – Design Process and Prototype Storyboard

A Rapid Prototype built with SAM and Articulate Rise 360

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⚠ This electrical safety prototype is for portfolio purposes only and is not intended as actual on-set electrical safety training.

Design Overview

I created this prototype to showcase my instructional design skills, technical fluency, and ability to quickly learn new subject matter. My goal was to produce a strong first draft that would allow a subject matter expert (SME) and me to quickly align and move forward efficiently.

Approach: Rapid Prototyping with SAM

For this project, I used the Successive Approximation Model (SAM), which emphasizes fast cycles, quick builds, and tangible prototypes that SMEs can respond to immediately.

• Preparation – Researched OSHA, NFPA, and film industry practices. Identified the audience as grips, electricians, and production assistants.
• Iterative Design – Outlined a storyboard flow: awareness → spotting hazards → how power moves → sequencing → hazard controls → wrap-up.
• Prototyping – Built directly in Rise 360 with a rough storyboard, testing how content and interactions played out on screen.

Lesson 1: Why Electrical Safety Matters

Goal: Emphasize the importance of electrical safety on set and set context.
Flow: Simple text and image block.
On-Screen Text: Electricity powers every production, but it also poses serious risks. Understanding the importance of safety is the first step toward protecting crew, talent, and equipment.
Visuals: Background image of stage lighting or set equipment.

Lesson 2: How to Use This Course

Goal: Orient the learner to navigation and interactions.
Flow: Stepped interaction block.
On-Screen Text: Step 1: Navigate – Use the arrows or menu to move forward and back.
Step 2: Interact – Expand accordions, follow process steps, explore images.

Step 3: Learn at Your Own Pace – Move through in order or jump back to review.
Visuals: Icons or images for navigation, interaction, and pacing.

Lesson 3: Spot the Hazards

Goal: Build awareness of set hazards.
Flow: Labeled graphic with clickable hotspots.
On-Screen Text: Hazards aren't always obvious. Scan the set for risks like exposed cables, overloaded circuits, or wet conditions.
Visuals: Film set photo with clickable areas highlighting hazards.

Lesson 4: How Power Moves on Set

Goal: Explain the path of temporary power distribution.
Flow: Accordion block with 5 sections.
On-Screen Text: Generator → Feeder Cables → Main Distro → Lunchboxes → Stingers. Best Practice notes included for each.
Visuals: Reference photos of generator, feeder bundle, main distro, lunchbox distro, and stingers.

Lesson 5: Sequencing Awareness

Goal: Teach the correct order for connecting and disconnecting feeder cables.
Flow: Two process blocks (Connecting, Disconnecting).
On-Screen Text: Ground first, Neutral second, Hots last (connecting). Reverse for disconnecting.
Closing: Ground = First On, Last Off.
Visuals: Cam-Lok connectors in green, white, red, blue, black.

Lesson 6: Hazard Controls on Set

Goal: Show how hazards are controlled once identified.
Flow: Accordion block with 5 items (GFCI, Cable Management, Barricades, Dry/Elevated Equipment, PPE).
On-Screen Text: Each accordion item explained with a Best Practice.
Visuals: Images of GFCI device, cable ramp, warning signage, elevated distro, crew PPE.

Lesson 7: Wrap-Up & Key Takeaways

Goal: Reinforce main learning points and close the course.
Flow: Text block with emojis for key takeaways, followed by a Statement block with a spotlight image.
On-Screen Text: ⚡ Respect electricity, 👀 Spot hazards, 🔌 Follow the flow, ✅ Sequence matters, 🛡 Control hazards.
Closing Statement: Electrical safety isn't just about compliance—it's about protecting people, gear, and productions. A safe set is a productive set.
Visuals: Spotlight or stage light photo for Congratulations block.

Result & Reflection

In a short time, I produced a polished demo that demonstrates how I can research and adapt quickly, translate complex safety procedures into interactive learning, and apply SAM to move projects forward with speed and clarity.

This project reinforced how valuable it is to get something into learners' (and SMEs') hands fast. By working iteratively, I turned a new topic into a complete demo that looks and feels like a real course. If this were a live project, I'd be ready to sit down with a subject matter expert and refine it into a final deliverable.