

AI-Powered Public Speaking Training Platform: Game Implementation

Reference & Inspiration

Watch this reference video to understand the inspiration behind this app: [YouTube Link](#).

(Note: The original app is not AI-powered—you are encouraged to develop an **AI-enhanced** version.)

Context

Public speaking is a crucial skill for professional growth. Your challenge is to build an **interactive, AI-powered training platform** that helps users enhance their speaking abilities through **gamified, real-time feedback-driven exercises**.

Game 1: Rapid Fire Analogies

Purpose and Training Objective

Builds improvisation, confidence, and the ability to trust your intuition instead of overthinking. Fights overthinking and perfectionism, builds the skill of flowing through mistakes, "failing forward," and trusting your subconscious to produce ideas. Trains quick mental recovery; when you stumble, you're coached to keep moving, not freeze up. Develops comfort with speaking before thinking, for real-time communication and improvisation.

Game Mechanics and Examples

How It Works:

You receive a series of random words and must instantly create analogies within a 5-second window. The system presents incomplete analogies (e.g., "Success is like --") and you must complete them immediately.

Real Examples from Training:

Example 1:

Prompt: "Business is like --"

Response: "Business is like running a marathon because you have to keep going."

Prompt: "Chess is like --"

Response: "Chess is like online dating because you have to make the right move."

Example 2:

Prompt: "Love is like --"

Response: "Love is Like Glue because you stick together."

Prompt: "The future is like --"

Response: "The future is like breaking your phone because you don't know what you're going to do next."

Detailed Game Flow

1. Game Setup Screen

- **What User Sees:**

- Game title: "Rapid Fire Analogies"
- Instructions: "Complete each analogy instantly. Don't think—just speak!"
- Settings slider: Timer (2-5 seconds per prompt)
- "Ready" button

- **What User Does:**

- Adjusts difficulty (timer speed)
- Clicks "Ready" when prepared to start

2. Active Game Screen

- **What User Sees:**

- Large prompt: "Business is like --"
- Circular countdown timer (shrinking)
- Microphone icon (pulsing when active)

- Progress indicator: "3/20"
- **What User Is Expected To Do:**
 - Speak immediately when prompt appears
 - Complete the analogy out loud before timer runs out
 - Don't pause or filter thoughts—say anything
- **What Happens Next:**
 - Timer hits zero → New prompt appears instantly
 - If user spoke → Green flash, next prompt
 - If user was silent → Red flash, but game continues anyway
 - No stopping between prompts until set is complete

3. Post-Round Feedback Screen

- **What User Sees:**
 - Summary: "You completed 18/20 prompts!"
 - Breakdown:
 - Response rate: 90%
 - Average response time: 2.3s
 - Stuck on: "A calendar is like --"
 - Audio playback of best/worst moments
 - "Try Again" or "Next Game" buttons

Evaluation Criteria

- **Primary:** Response rate (spoke vs. silent)
- **Secondary:** Speed (faster = better flow)
- **Bonus:** Energy/confidence detected in voice
- **NOT judged:** Logic, cleverness, or "correctness" of analogies

Game Progression

- Round 1: 10 prompts, 5 seconds each
- Round 2: 15 prompts, 3 seconds each
- Round 3: 20 prompts, 2 seconds each
- Mastery mode: Custom settings unlocked

Variants

The pace is manipulated (e.g., 3 seconds, 2 seconds). Can be played for seriousness, for fun, or with an intentionally non-sensical twist to focus on sheer confidence and speed instead of sense-making.

Game 2: The Conductor (Energy Modulation)

Purpose and Training Objective

Sharpens your "musicality" and energy modulation while speaking. Conditions your nervous system to let go of content and focus on energy and delivery. Practices musicality: modulating tone, pace, and energy on command. Breathing on cue trains recovery and the ability to find calm mid-speech. Each segment is an invitation to start anew, improvise, and recover presence/flow. Ultimately, this game builds resilience, adaptability, and charisma.

Game Mechanics and Examples

How It Works:

A solo speech exercise where the "conductor" (a visual prompt) tells you what emotional "energy" to use at each moment, ranging from calm, everyday speech (5) to high energy (8) to very calm/quiet (2). Sometimes you are prompted to take a breath and then jump to a new "universe" (topic or tone).

Real Examples from Training:

Example 1:

- Prompt: "If money didn't exist..."
- Energy Levels change while talking: 5 (Normal) → (Higher Energy) → (Lower Energy)

- Speaker: Lulie
- Response: She starts with: "If money didn't exist, we'd find ourselves in a society that actually doesn't function as well as our society now because money is the way that goods and services are exchanged..."
- Then, as the conductor changes energy levels, she modulates her tone, voice, and energy—increasing her volume and enthusiasm at higher levels and speaking softly and reflectively at lower ones. The unpredictability forces her to stay present, adapt, and communicate with her whole body, not just words.

Example 2:

- Prompt: "Where I get my inspiration..."
- Speaker: Lulie
- Response: She describes drawing inspiration from Twitter, contrasts it with Facebook, and as the conductor calls for different levels, she imbues her speech with more excitement, or calms it with softer tones each time the number changes or a 'breath' pause is inserted.
- This keeps her—and the audience—engaged, and introduces emotional variety to her delivery.

Detailed Game Flow

1. Game Setup Screen

- **What User Sees:**
 - Topic selection: "If money didn't exist..." (or custom)
 - Energy level preview: 1 (Whisper) to 9 (High Energy)
 - Duration: 2-5 minutes
 - "Start Speaking" button
- **What User Does:**
 - Selects topic or enters custom prompt
 - Clicks "Start Speaking"

2. Active Game Screen

- **What User Sees:**

- Current topic at top: "If money didn't exist"
- Large energy indicator: "ENERGY 5 - Normal"
- Visual energy meter (animated bar)
- Speaking timer: 1:30 remaining
- Possible "BREATHE" overlay (when triggered)

- **What User Is Expected To Do:**

- Begin speaking about the topic immediately
- When energy level changes, instantly match that energy with voice:
 - Level 1-3: Soft, calm, reflective
 - Level 4-6: Normal conversational tone
 - Level 7-9: Energetic, passionate, louder
- When "BREATHE" appears: Stop talking, take visible deep breath, then continue
- Never break the content flow—adapt energy while maintaining topic

- **What Happens Next:**

- Energy changes every 15-30 seconds (random intervals)
- Smooth transition animation shows new energy level
- Recording continues throughout all changes
- Game ends when timer reaches zero

3. Post-Game Feedback Screen

- **What User Sees:**

- Energy transition success rate: "8/10 transitions successful"
- Response time to changes: "Average: 1.2 seconds"
- Audio playback with energy levels marked
- Energy range chart showing vocal variety used

Evaluation Criteria

- **Primary:** Response speed to energy changes
- **Secondary:** Actual energy range demonstrated (voice analysis)
- **Tertiary:** Content continuity (didn't completely derail topic)
- **Recovery:** How well they used "breathe" moments to reset

Game Progression

- Beginner: 5 energy changes over 2 minutes
 - Intermediate: 8 changes over 3 minutes with "breathe" cues
 - Advanced: Random rapid changes + custom topics
 - Expert: Multiple speakers taking turns (relay mode)
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Game 3: Triple Step (Integration Under Pressure)

Purpose and Training Objective

Develops your focus on a "throughline" or message, even when bombarded with distractions. Simulates real-world conditions (unexpected questions/comments, tech hiccups, etc.). Teaches you to integrate chaos with confidence—and keep going. Sharpens transitions and narrative flexibility. A live speaking game for handling interruptions and distractions.

Game Mechanics and Examples

How It Works:

You must give a short talk on a topic while frequently weaving in (on the fly) random, unrelated words that appear on your screen. Display a main speaking topic, generate contextually relevant distractor words, and use AI to monitor speech coherence, analyze topic adherence, and evaluate handling of distractions.

Real Examples from Training:

Example 1:

- Prompt: "My favorite superhero is Iron Man; superheroes must be sacrificial..."
- Random Words include: Snacks, dinner guests, erase, language, microwave, etc.
- Speaker: Ben
- Response: Ben weaves all the random words into a speech about superheroes sacrificing time and attention—not just worrying about "snacks or popsicles," but about "bigger issues." He manages to make each new word fit, sounding as if it always belonged.

Example 2:

- Prompt: "All my life I lived in my city but haven't figured out how to live."
- Random Words: Alcohol, vacation, politics, tantric yoga, New York City...
- Speaker: Sudan
- Response: Sudan talks about wandering city life, touches on vacation snow, politics, New York City's tantric yoga, and how being in a meditative state has nothing to do with marijuana or shaving his beard. He stays confident, despite some rambling, and finds a coherent ending.

Example 3:

- Prompt: "There always is a weakest link..."
- Random Words: Reborn, diversity, plumber, vote, job...
- Speaker: Tristan
- Response: He speaks about analyzing your life, making decisions, choosing new paths (plumber, new job), and the importance of finding "the weakest link"—tying the random cards together.

Detailed Game Flow

1. Game Setup Screen

What User Sees:

- Main topic: "Innovation in technology"
- Preview of random word types: "Objects, emotions, places"

- Word drop frequency: Every 20-40 seconds
- "Start Speaking" button

What User Does:

- Reviews main topic
- Clicks "Start Speaking"

2. Active Game Screen

What User Sees:

- Main topic pinned at top: "Innovation in technology"
- Random word appears mid-screen: "PUMPKIN" (animated entry)
- Integration timer: 5 seconds to weave it in
- Word counter: "2/6 words integrated"
- Total speech timer: 2:30 remaining

What User Is Expected To Do:

- Begin speaking about main topic
- When random word appears: Smoothly integrate it into ongoing speech within 5 seconds
- Continue with main topic thread—don't let random words derail overall message
- Words must be spoken aloud to count as "integrated"

What Happens Next:

- New random words drop every 20-40 seconds
- Integration timer creates urgency
- Words must be spoken aloud to count as "integrated"
- Game continues until all words used or time expires

3. Post-Game Feedback Screen

What User Sees:

- Integration success: "5/6 words successfully woven in"
- Smoothness rating: "Maintained topic flow: 85%"
- Missed word: "Struggled with: 'nostalgia'"
- Audio clips of best integrations
- "Replay" or "Try Harder Words" options

Evaluation Criteria

- **Primary:** Successfully spoke the random words within time limit
- **Secondary:** How smoothly they integrated vs. awkward forced insertion
- **Tertiary:** Whether they maintained main topic coherence
- **Recovery:** How they handled words they couldn't integrate well

Game Progression

- Novice: 4 easy words, 30-second intervals
- Intermediate: 6 mixed words, 20-second intervals
- Advanced: 8 abstract concepts, random timing
- Expert: Live audience + peer voting on smoothness

Universal Evaluation Principles Across All Games

What Matters Most

- **Process over perfection** - Did they keep playing vs. freezing?
- **Recovery speed** - How fast they bounced back from mistakes
- **Willingness to risk** - Chose authentic expression over safe answers
- **Presence and flow** - Stayed engaged vs. getting lost in their head

What Doesn't Matter

- Sounding polished or professional

- Logical perfection or "correct" answers
- Avoiding all mistakes or awkward moments
- Being impressive or clever

Progressive Difficulty

- Each game starts accessible and ramps up challenge
- Mastery unlocked through consistent practice, not perfect performance
- Community features allow peer feedback and encouragement
- Personal progress tracking focuses on growth patterns, not absolute scores

This creates an environment where users feel safe to experiment, fail forward, and discover their authentic voice through structured play rather than high-stakes performance pressure.

AI Integration Requirements

Real-Time Speech Processing

The system should:

- Record and process user responses in real-time
- Implement an AI scoring system that evaluates response timing, speech continuity, and relevance
- Use AI to monitor speech coherence and analyze topic adherence
- Implement real-time voice analysis to track energy levels and analyze vocal variety
- Process and analyze speech in real-time
- Generate contextually relevant prompts and distractors
- Provide intelligent scoring and feedback

AI-Powered Features

- Generate meaningful distractor words based on the main topic

- Create an adaptive difficulty system
- Implement natural language understanding for response evaluation
- Provide instant feedback on mood matching
- Generate personalized improvement suggestions

Expected Technical Outcome

A functional prototype demonstrating:

- Real-time speech processing
- AI-powered feedback and scoring
- Interactive user interface for all three exercises
- Basic analytics dashboard for tracking progress