

# **DrawChain**

## **Product Requirements Document**

*Version 1.0*

### **Executive Summary**

DrawChain is a multiplayer web-based game that combines the classic telephone game with collaborative drawing. Players alternate between drawing what they see and describing what was drawn, creating a hilarious chain of interpretations that reveals how ideas evolve through visual and textual communication.

### **Project Overview**

#### **Problem Statement**

Most online social games require lengthy time commitments or real-time coordination. There is a need for asynchronous, creative social games that are easy to pick up, generate shareable content, and encourage creative expression without requiring artistic skill.

#### **Target Audience**

- Age: 13-35 years old
- Social gamers who enjoy party games like Jackbox, Among Us, or Skribbl.io
- Friend groups looking for low-stakes, creative activities
- Content creators seeking shareable, humorous gaming moments
- Remote teams looking for icebreaker activities

#### **Value Proposition**

DrawChain transforms creative miscommunication into entertainment. Unlike traditional drawing games that focus on accuracy, DrawChain celebrates the chaos and humor that emerges when ideas pass through multiple interpretations. The game creates memorable, shareable moments while being accessible to players of all artistic abilities.

### **Core Features**

#### **Game Flow**

1. Player 1 receives a random prompt and draws it
2. Player 2 sees only the drawing and writes what they think it is
3. Player 3 sees only the description and draws it
4. Pattern continues alternating between drawing and describing
5. After all players participate, the complete chain is revealed for everyone to see

## Drawing Canvas

- Simple, intuitive HTML5 canvas-based drawing tools
- Color palette with 12 basic colors
- 3 brush sizes (small, medium, large)
- Eraser tool
- Undo/Redo functionality (last 10 actions)
- Clear canvas button
- 60-second timer for each turn

## Room Management

- Create private game rooms with shareable links
- Room capacity: 4-8 players
- Lobby system where players can see who has joined
- Host controls to start game and configure settings
- Room expires after 24 hours of inactivity

## Prompt System

- Curated library of 500+ family-friendly prompts
- Prompt categories: Animals, Objects, Actions, Phrases, Abstract Concepts
- Difficulty levels: Easy, Medium, Hard
- Custom prompt option for hosts

## Result Sharing

- Animated reveal showing the complete chain step-by-step
- Download complete chain as shareable image
- Individual frame download option
- Social media share buttons (Twitter, Facebook, Reddit)

## User Stories

### As a Player

- I want to join a game room quickly so I can start playing with friends immediately
- I want simple drawing tools so I can focus on creativity rather than learning complex features
- I want to see the complete chain at the end so I can laugh at how much the original idea changed
- I want to share funny results on social media so my other friends can see the chaos

### As a Room Host

- I want to control game settings so I can customize the experience for my group
- I want to see who is in the lobby so I know when everyone has joined
- I want to kick inactive players so the game can proceed smoothly

# Technical Requirements

## Performance

- Page load time under 2 seconds on average broadband
- Drawing input lag under 50ms
- Support concurrent sessions of 100+ active rooms
- Real-time updates with less than 100ms latency

## Compatibility

- Browser support: Chrome 90+, Firefox 88+, Safari 14+, Edge 90+
- Responsive design: Desktop (1920x1080), Tablet (768x1024), Mobile (375x667)
- Touch-friendly drawing interface for mobile devices

## Security & Privacy

- No personally identifiable information required to play
- Rate limiting on room creation (5 rooms per IP per hour)
- Content moderation hooks for reporting inappropriate content
- Automatic profanity filter for text descriptions

## Success Metrics

### Key Performance Indicators

- Daily Active Users (DAU) - Target: 1,000 within 3 months
- Average Session Duration - Target: 15+ minutes
- Room Completion Rate - Target: 80% of started games finish
- Share Rate - Target: 30% of completed games get shared
- Viral Coefficient - Target: 1.5 (each user brings 1.5 new users)

## Future Enhancements (Post-MVP)

- User accounts with game history and statistics
- Public matchmaking for solo players
- Achievement system and player badges
- Custom prompt packs and themed categories
- Voting system for funniest chains
- Gallery of featured community chains
- Mobile native apps (iOS/Android)
- AI-powered automatic prompt generation

# Dependencies & Assumptions

## Dependencies

- Cloud hosting service (AWS, Google Cloud, or similar)
- WebSocket infrastructure for real-time communication
- Image storage service for saving drawings

## Assumptions

- Players have stable internet connections
- Most sessions will have 4-6 players (optimal group size)
- Players prefer simplicity over feature complexity
- Social sharing will be primary growth driver

## Appendix

### Competitive Analysis

**Skribbl.io:** Real-time competitive drawing game. DrawChain differentiates by focusing on collaborative humor rather than competitive guessing.

**Gartic Phone:** Direct competitor with similar telephone game mechanics. DrawChain will differentiate through superior UX, faster gameplay, and better mobile support.

**Jackbox Games:** Premium party game suite. DrawChain offers free alternative with focus on one excellent game mode.

### Sample Prompts

**Easy:** Cat sleeping on a laptop, Pizza delivery person, Rainbow after rain

**Medium:** Astronaut playing basketball, Confused octopus using chopsticks, Time traveler at a Renaissance fair

**Hard:** The concept of nostalgia, Quantum physics, Existential dread

---

*End of Product Requirements Document*