AI Parliament - Agentic Conversation Platform

Complete Real-Time Debate & Formulation System

Version: 2.0 - Agentic Conversation Edition

Focus: Natural, flowing multi-agent conversations with real-time visibility

Core Concept: Natural Agentic Conversations

Instead of rigid phases, agents engage in natural, flowing conversations that organically progress through:

Problem Understanding - Agents clarify and explore the issue together

Idea Formulation - Agents brainstorm and build on each other's thoughts

Position Development - Agents articulate and refine their stances

Active Debate - Agents challenge, defend, and persuade

Synthesis Negotiation - Agents collaboratively craft solutions

Final Agreement - Agents converge on recommendations

Key Innovation: Agents decide WHEN to speak, WHO to respond to, and HOW to engage - creating authentic deliberation.

1. Agentic Conversation Engine

1.1 Agent Turn-Taking System

Natural Conversation Flow:

1.2 Real-Time Streaming Architecture

Complete streaming system for live conversation viewing:

1.3 Organic Idea Formulation

Agents collaboratively build ideas:

2. Real-Time UI Components

2.1 Live Conversation View

Complete real-time interface:

2.2 Conversation Flow Visualization

Visual representation of conversation dynamics:

2.3 Idea Formation Board

Visual board showing ideas being formulated:

3. Enhanced Debate Dynamics

3.1 Interruptions & Interjections

Agents can interrupt naturally:

3.2 Consensus Detection

Real-time consensus tracking:

3.3 Dynamic Moderation

AI moderator manages conversation:

4. Complete Real-Time Streaming Implementation

4.1 WebSocket Server

4.2 Frontend WebSocket Hook

5. CSS Animations for Real-Time Feel

6. Complete Implementation Checklist

Phase 1: Core Agentic Engine (Day 1)

- [ ] Agent autonomous decision-making system
- [ ] Natural turn-taking algorithm
- [ ] Conversation context management
- [ ] Real-time WebSocket server
- [ ] Basic statement streaming

Phase 2: Advanced Interactions (Day 1-2)

- [ ] Interruption handling
- [ ] @mention parsing and response
- [ ] Idea formulation system
- [ ] Consensus tracking
- [ ] Moderator AI

Phase 3: Real-Time UI (Day 2)

- [ ] Live conversation viewer
- [ ] Typewriter effect for statements
- [ ] Agent status indicators
- [ ] Idea formation board
- [ ] Conversation flow visualization

Phase 4: Polish & Deploy (Day 2)

- [ ] Smooth animations
- [ ] Mobile responsive
- [ ] Error handling
- [ ] Load testing
- [ ] Deploy to production

Success Metrics for Agentic System

Conversation Quality:

• Natural flow (no awkward pauses > 10s)

• Appropriate interruptions (< 5% of turns)

• Balanced participation (Gini coefficient < 0.4)

• Topic progression (new points every 3-5 turns)

Real-Time Performance:

• Statement latency < 100ms

• Word streaming smooth (50-100ms/word)

• No dropped WebSocket messages

• UI stays responsive (60 fps)

Engagement:

• Observer retention > 75%

• Average watch time > 8 minutes

• Comments/reactions > 30%

• Shares > 15%

This transforms AI Parliament into a truly living, breathing conversation platform where agents organically discuss, formulate, and debate in real-time, with observers watching the ideas form naturally!

■■■ Let the conversations begin!