

MEETRA AI – FEATURE BREAKDOWN (MICRO FEATURES)

◆ **MODULE 1: AUTHENTICATION & USER ACCESS**

1.1 User Registration

- Email + password signup
- Password validation rules
- Email verification (future-ready)

1.2 User Login

- Email + password login
- Google OAuth login
- JWT token generation

1.3 Guest Access

- Join meeting via invite link
 - No account required
 - Temporary session identity
-

◆ **MODULE 2: MEETING CREATION & JOINING**

2.1 Create Meeting

- Generate unique meeting ID
- Set meeting name
- Optional password
- Host role assignment

2.2 Join Meeting

- Join via meeting link
- Password validation
- Role detection (host / participant)

2.3 Meeting Lifecycle

- Start meeting
- End meeting
- Auto-close when host leaves

◆ MODULE 3: VIDEO & AUDIO (CORE ENGINE)

3.1 Audio Stream

- Mic on/off
- Audio permission handling
- Noise handling (basic)

3.2 Video Stream

- Camera on/off

- HD video support
- Device selection (camera)

3.3 Call Stability

- WebRTC peer connection
 - Reconnect on drop
 - Latency monitoring (<300ms)
-

◆ MODULE 4: SCREEN SHARING

4.1 Start Screen Share

- Entire screen share
- App/window share

4.2 Stop Screen Share

- Manual stop
 - Auto stop on disconnect
-

◆ MODULE 5: IN-MEETING CHAT

5.1 Text Chat

- Real-time messages
- Sender identification

- Timestamped messages

5.2 Emoji Reactions

- Basic emoji reactions
- Real-time broadcast

5.3 File Sharing (Basic)

- Upload file in chat
 - Download by participants
 - Size limits
-

◆ MODULE 6: UI / UX SYSTEM

6.1 Layout Modes

- Grid view
- Speaker focus view

6.2 Controls

- Floating control bar
- Auto-hide toolbar
- One-click mute / video toggle

6.3 Visual Design

- Calm color palette

- Clean typography
 - Zero clutter layout
-

◆ **MODULE 7: BRANDING & THEMES**

7.1 Branding

- Custom logo placement
- App name configuration

7.2 Themes

- Light mode
 - Dark mode
 - Soft gradient UI theme
-

◆ **MODULE 8: AGENTIC AI – MEETING COPILOT (MOST IMPORTANT)**

8.1 Audio → Text Pipeline

- Capture meeting audio
- Speech-to-text processing
- Speaker identification

8.2 Live Meeting Summary

- Real-time summary generation

- Key topic detection

8.3 Action Item Extraction

- Detect tasks
- Assign to users
- Timestamped references

8.4 Decision Tracker

- Detect decisions
- Store structured decisions list

8.5 Ask-AI Chat

- “Ask AI about meeting” input
- Context-aware responses
- Queries like:
 - What were action items?
 - What did Ali say?
 - What was decided?

◆ MODULE 9: POST-MEETING AI OUTPUT

9.1 Summary Generation

- Final meeting summary
- Downloadable text

9.2 Action Report

- Action items list
 - Owner + task mapping
-

◆ **MODULE 10: FUTURE AI FEATURES (SEPARATE FLAGS)**

(Implement later – but documented now)

- Auto follow-up emails
 - Speaker sentiment analysis
 - Meeting effectiveness score
 - Voice commands
 - CRM sync agent
 - Calendar scheduling agent
-

◆ **MODULE 11: SECURITY**

11.1 Authentication Security

- JWT tokens
- Session expiry

11.2 Meeting Security

- Encrypted signaling

- Secure WebRTC channels
- Meeting passwords

11.3 Access Control

- Host / participant roles
- Permission enforcement

◆ MODULE 12: NON-FUNCTIONAL REQUIREMENTS

- Latency < 300ms
- 99.9% uptime
- GDPR compliance
- Scalable to 10k users
- Feature flags for rollout

◆ MODULE 13: SYSTEM & INFRASTRUCTURE

13.1 Backend

- REST APIs
- WebSocket signaling
- Media server integration

13.2 Database

- PostgreSQL (users, meetings, summaries)
- Redis (real-time state)

13.3 Infrastructure

- Docker setup
- TURN / STUN servers
- Cloud deployment (AWS / GCP / Fly)

◆ **MODULE 14: DEVELOPMENT PHASES (TASK READY)**

Phase 1 – Planning

- PRD finalization
- Wireframes
- Architecture docs

Phase 2 – Core Video

- Video/audio
- Chat
- Screen sharing

Phase 3 – AI Agent

- Speech-to-text
- Summary agent
- Action extractor

Phase 4 – UI Polish

- Animations
- Branding
- Performance tuning

Phase 5 – Testing & Launch

- Load testing
- Security testing
- Beta release

♦ MODULE 15: METRICS & MONETIZATION

KPIs

- Avg meeting duration
- AI usage rate
- Retention
- Churn
- Feedback score

Monetization

- Free (40 min)
- Pro (AI features)
- Teams
- Enterprise

