TogetherFrame - Work in progress

Objective:-

To eliminate the emotional gap created by physical distance by allowing couples, families, and friends to experience real-time shared presence and capture meaningful memories together — even while being miles apart.

The platform aims to transform digital connection from simple video calls into immersive, emotionally rich shared experiences.

What Is It?

This is a web-based real-time virtual presence platform that allows two or more people to:

- Connect through a private link
- Appear together in a shared digital space
- Appear inside each other's real physical rooms using AR
- Interact through guided gestures
- Capture realistic, high-quality photos and short reels & time lapses

Instead of just placing users in a fake shared background, the advanced version enables:

Person A to appear inside Person B's actual room in real time as an AR presence.

1. Unified Studio (The Connection Experience)

It is an AI-powered telepresence platform that "merges" distant people into a shared physical space.

- **Core Experience:** Partners, families, or friends "teleport" into each other's camera feeds using **3D Environmental Merging**. They appear as if they are standing in the same room, not just in a video box.
- **Physical Interactions:** Users follow AI-guided silhouettes to perform real-life gestures like **hugging, holding hands, and leaning on shoulders**.
- **AI Harmonization:** The app automatically matches lighting and shadows between both rooms and uses **Haptic Sync** to vibrate phones when users "touch" on-screen.
- The app displays **Real-time Silhouettes** on the screen.

- *Example:* To "hug," User A sees an outline of where User B is standing. The AI gives audio/visual prompts: *"Lean 5 inches left," "Lower your chin," "Wrap your arms now."*

Real-Time Virtual Presence

A. Shared Virtual Room Mode (Web-Based)

- Private room link access
- Real-time camera sync
- AI background removal
- Placement in a shared immersive environment
- AI lighting correction to match both users

B. AR Room Presence Mode (Advanced)

- One user scans their room
- The other user appears as a real-time AR projection
- Floor detection + spatial placement
- Proper scaling and shadow blending
- Users pose together inside a real physical environment
- Capture realistic AR photo

Real-Time Photo Experience

- 3s / 5s timer
- Smart auto-alignment
- HD image export
- Auto-generated timelapse reel
- Multiple camera angles for events (stage view, side view, group view, etc.)

Smart Pose Guidance (AI Director Mode)

On-screen instructions:

- "Stand here"
- "Raise your hand to match"
- "Lean slightly left"
- "Move closer"
- "Match shoulder height"

AI ensures:

- Height alignment

- Skin tone balance
- Lighting match
- Depth correction

When perfectly aligned:

- Glow effect
- Auto-capture option

Core Interaction Features (Gestures)

- Hand holding
- Side hug
- Full hug
- Head on shoulder
- Back hug
- Twirl pose
- Spin & catch
- High five
- Finger heart

2. Physical Gestures (Haptic-Visuals):

- **Cheek Pulling:** Move your fingers on the screen; the AI deforms the recipient's cheek mesh in real-time to look like a physical pull.
- **The Flying Kiss:** Blow a kiss; a 3D particle "lands" and leaves a translucent lip-mark on the partner's cheek that moves with them.
- **Heartbeat Sync:** Both users place their hands over their phone's camera/sensors. The app detects pulses and vibrates both phones in a synchronized rhythm. Once synced, a 3D heart "pops" and glows between both chests on the screen.

3. Supporting Feature: Virtual Date & Social Experiences

The web app isn't just for photos; it's a destination.

- **The "World-Tour" Dates:** Choose a backdrop of top global cities.

- *Indian Icons:* Marine Drive at sunset, Taj Mahal at sunrise, or a Jaipur Palace courtyard.
- *Global Icons:* A rainy London street, a Parisian café, or a New York rooftop.
- **Activity-Based Dates: City-Based Experiences**
- Indian heritage cities
- Beach sunsets
- Snow destinations
- Rooftop cafés
- International skylines

Date Concepts:

- Candlelight dinner
- Concert date
- Arcade date
- Pickleball date
- Rooftop stargazing
- Rain walk
- Amusement park\

- **Dance & Reel Tutorials:**
  - **Sync-Dance:** Follow on-screen tutorials for trending Instagram reels. The app records both of you and uses AI to align your movements perfectly for a side-by-side or "merged" reel.

4. Fulfillment & Gifting: "Living Memories"

- **Surprise Live Photos:**
  - **The Digital Scratch Card:** Send a link that looks like a scratch card; scratching it reveals the "Merged Photo" with a recorded audio message.
  - **The AR QR Card:** A physical card is delivered. When the recipient scans the QR code, the photo on the card "comes to life" as a **Time-lapse Reel** showing the funny behind-the-scenes moments of the couple trying to figure out the pose.
- **Instant Downloads:** One-click access to the high-res "Perfect Photo" and the "Behind-the-Scenes" blooper reel.

AIs or APIs required:- (RESEARCH ONLY)

Category	Tool / API Name	Key Use Case for Your Brand	Official Link
Real-time Presence	NVIDIA Maxine	"Teleports" person into partner's room; matches lighting (Relighting).	NVIDIA Maxine SDK
Interaction & Face	Banuba Face AR SDK	Enables "Cheek Pulling" (skin stretching) and 3D face mesh triggers.	Banuba AR SDK
Web Experience	Snap Camera Kit	(Gemini Said) Needed to build "Flying Kisses" and WebAR on your site.	Snap Developer Portal
AR Creation Tool	Lens Studio 5.x	Desktop software to build 3D hand tracking and facial mesh interactions.	Download Lens Studio
Visual Blending	Adobe Firefly API	Automatically matches shadows/colors of two photos for a perfect merge.	Adobe Firefly API
Lighting Correction	Clipdrop Relight	Fixes facial lighting post-photo to match the new destination room.	Clipdrop APIs
Image Perfection	Claid.ai	Upscales grainy phone photos into high-res (300 DPI) prints.	Claid.ai API
AR Physical Gifts	8th Wall	Makes Polaroids "come to life" via a browser scan (No app needed).	8th Wall
Sync & Video	Twilio Video / IVS	The low-latency engine for the live photoshoot connection.	Twilio Video API
India Fulfillment	Printrove / Qikink	API-based printing and shipping for Polaroids and gifts in India.	Printrove API

Posing OutlinesMediaPipe / ARCore (Pose Estimation)

Skin StretchingBanuba Face Mesh (Vertex Deformation)

Heartbeat Sync - Heartbeat SyncHealthKit (iOS) / Google Fit / Photoplethysmogram (PPG) via Camera Sensors

Merged BackgroundNVIDIA Maxine (Live Video Segmentation)

Time-lapse BloopersScreen Recording + AI Auto-Edit

Physical DeliveryPrintrove API (India-wide Logistics)

Trending ReelsShotstack Best for programmatic, music-synced auto-editing.

Time-lapse BloopersInVideo AI Simplest "Photo-to-Video" automation.

Dance Tutorials - MediaPipe Tracks body movement to give "Stand Here" instructions.

Heartbeat SyncHealthKit (iOS) / Google Fit