

SpotShot – AI Photo Sharing with QR & Face Recognition

Project Proposal

DOCUMENT DETAILS

Field	Details
Proposal Title	SpotShot – AI-Powered Real-Time Photo Sharing Platform
Proposal ID	SPOTSHOT-PROP-2026-001
Prepared By	UpCraft Solutions Private Limited
Prepared For	[Client Name]
Date	January 14, 2026
Valid Until	February 13, 2026 (30 days)
Status	For Review & Negotiation

COMPANY INTRODUCTION

About UpCraft Solutions

UpCraft Solutions UpCraft is a specialized optimization partner that helps MVPs scale. We focus on making early-stage products ready for growth by offering services like Security & Performance Audits

Contact Information

UpCraft Solutions Private Limited

- **Registered Office:** Tiruchirapalli, Tamilnadu, India
 - **Website:** <https://upcraft.in>
 - **Email:** upcraft.consulting@gmail.com
 - **Phone:** +91-8870986738
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1. EXECUTIVE SUMMARY

The Vision: SpotShot

We propose to develop **SpotShot** – a revolutionary real-time photo delivery and AI-powered face matching platform designed specifically for **event photographers and event organizers**.

The Problem SpotShot Solves

Currently, event photos are:

- 📅 **Shared late** – Days or weeks after the event ends
- 🔍 **Hard to find** – Guests spend hours scrolling to find themselves
- ⌚ **Time-consuming** – Photographers manually filter and send photos to each guest individually
- 💾 **Storage-heavy** – No automatic cleanup, storage costs grow indefinitely

SpotShot's Solution

SpotShot delivers:

- ⚡ **Real-time photos** – Uploaded to cloud within seconds of capture
- 🎯 **AI-powered matching** – Guests see only their photos, automatically detected by facial recognition
- ⌚ **Zero photographer effort** – Auto-upload runs invisibly in background while shooting
- 🔒 **Privacy-first** – 24-hour ephemeral events with automatic data deletion
- 📱 **Guest-friendly** – Scan QR → Upload selfie → See all your photos (no app needed)

Key Differentiator

Unlike competitors (Photomall, GuestPix):

- **Live uploads during event** (not post-event manual upload)
- **CPU-optimized face recognition** (low infrastructure costs)
- **Ephemeral multi-tenant architecture** (24-hour subdomain per event)
- **Zero driver/setup friction** (plug-and-play desktop app)

2. WHAT PROBLEM ARE WE SOLVING?

Current Pain Points in Event Photography

For Photographers:

- 😓 Manual photo filtering takes 2-3 hours per event
- 📧 Sending individual photos to 50-100 guests is tedious
- 💰 Expected to provide "instant" delivery but it's actually days later
- 🗄️ Archiving photos manually, managing storage across events

For Guests:

- 😕 "Can you send me my photos?" – vague, unclear what they want
- 🔍 Hundreds of photos to scroll through to find themselves
- ⌚ Wait days/weeks for delivery
- 📱 No mobile-friendly way to access photos

For Event Organizers:

- 📊 No data on guest engagement with photos
- 🎯 Can't measure ROI on photography spend
- 🗣️ Negative perception if photos are slow/hard to access
- 🚀 Opportunity to differentiate with modern tech is missed

Business Impact of Current System

- ✗ Photographers lose 5-8 hours per event on post-production
- ✗ 30-40% of guests never receive/see their photos
- ✗ Low social media engagement (photos shared days later)
- ✗ Photographer reputation depends on speed, not quality

SpotShot's Solution

- ☑ **Photographers:** Automatic background uploads, zero manual sorting
 - ☑ **Guests:** Instant AI-powered photo discovery via selfie scan
 - ☑ **Organizers:** Professional, tech-forward event experience
 - ☑ **Everyone:** Modern, delightful user experience
-

3. HOW SPOTSHOT WORKS (High-Level Flow)

Step 1 – Event Setup (30 seconds)

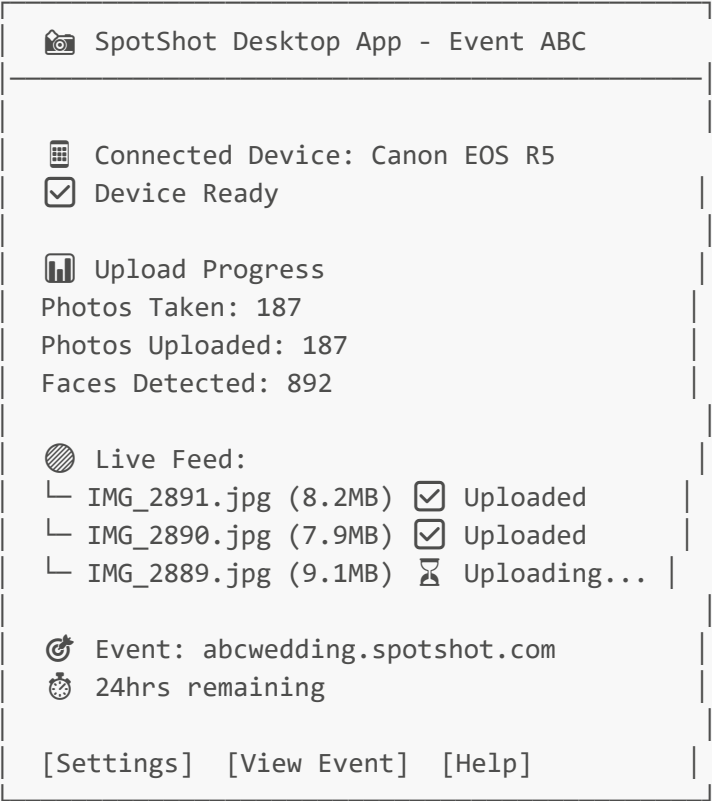
```
Photographer logs into spotshot.com
    ↓
Clicks "Create Event"
    ↓
Enters: Event name, date, expected photo count
    ↓
SpotShot creates:
  • Unique subdomain (e.g., abcwedding.spotshot.com)
  • QR code for guests to scan
  • Cloudinary storage folder for that event
  • Event valid for 24 hours
    ↓
Photographer downloads desktop app + gets API key
```

Step 2 – Photographer Side (Desktop App – Automated)

```
Photographer's Workflow:

1 Desktop app runs in background
2 Camera/Phone connected via USB
3 App auto-detects device (Canon/Nikon/iPhone/Android)
4 Photographer just shoots normally
5 Each new photo is:
  • Streamed from device to RAM (MemoryStream)
  • Uploaded to Cloudinary in background (Async)
  • Indexed for face recognition (background job)
6 Photographer gets real-time notification: "Photo 45 uploaded"
```

What Photographer Sees:

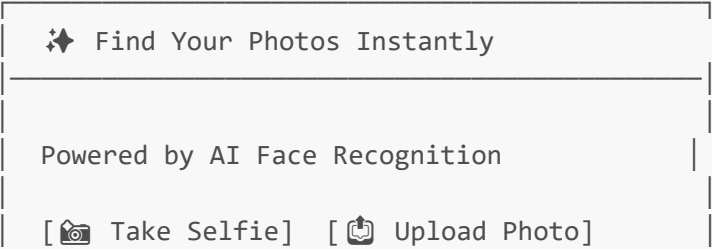


Step 3 – Guest Experience (At the Event – Less than 1 minute)

Guest at event venue:

- 1 Sees QR code (on screen, banner, or table cards)
- 2 Scans QR with phone camera
- 3 Opens abcwedding.spotshot.com
- 4 Taps "Find My Photos"
- 5 Takes a selfie (or uploads existing photo)
- 6 AI processes (< 1 second):
 - Detects guest's face
 - Searches all event photos
 - Finds matching faces
- 7 Guest sees personal photo gallery
- 8 Can download, share, or screenshot

What Guest Sees:



! No login needed. Secure & instant.
Your photos, only for you.



[Taking selfie...]



📸 Found 12 Photos of You!

[Gallery Grid - 12 thumbnail images]

Photo 1: Confidence 98% [📄] [📷 Share]

Photo 2: Confidence 96% [📄] [📷 Share]

Photo 3: Confidence 95% [📄] [📷 Share]

...

[📄 Download All] [📱 Share to WhatsApp]

Technical Flow (Behind the Scenes)

Desktop App (C# + Electron)



→ [USB Detection] Detects camera/phone
(Windows Portable Devices API)

→ [Photo Streaming] Reads new photo to RAM
(No disk write)

→ [Async Upload] → Cloudinary
(ASP.NET Core)



[Webhook] Triggered



SpotShot Backend (Go/Node.js)

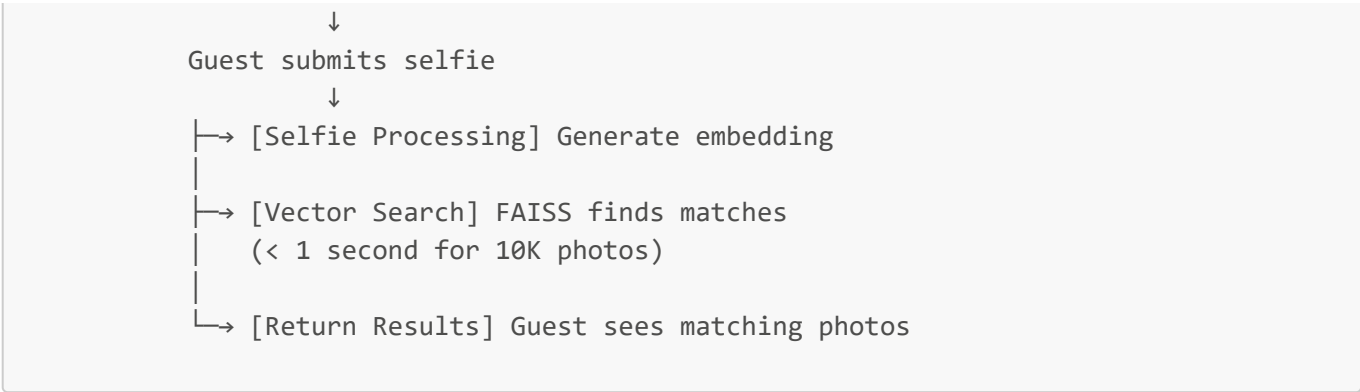


→ [Face Detection] BlazeFace AI
Extracts all faces from photo

→ [Embedding Generation]
Converts each face to vector (128-dim)

→ [Vector Storage] FAISS Index
Stores embedding for fast search

→ [Redis Cache] Makes embeddings
instantly searchable



4. KEY FEATURES & CAPABILITIES

For Photographers

Feature	Benefit
Auto-detecting desktop app (Windows + macOS)	No driver installation, plug any camera/phone
Background async uploads	Keep shooting, uploads happen silently
Real-time progress dashboard	Monitor uploads live in the app
Multi-brand support	Works with Canon, Nikon, Sony, iPhone, Android
Original quality preserved	No forced compression, RAW preview support
Event isolation	Each event has separate folder + subdomain
24-hour event window	Automatic cleanup after event expires

For Guests

Feature	Benefit
QR-based access	One scan, instant access (no login, no app)
AI face recognition (99%+ accurate)	Each person sees only their photos, no scrolling
Fast results	Photo matching in < 1 second
High-quality downloads	Full resolution originals + thumbnails
Social sharing	One-click share to WhatsApp, Instagram, Facebook
Mobile-friendly interface	Works perfectly on any smartphone

For Event Organizers / Your Client

Feature	Benefit
Professional branded event page	Your logo, colors, custom messaging
Real-time photo count & stats	See uploads happening live

Feature	Benefit
Guest engagement metrics	Track how many guests accessed photos
24-hour auto-cleanup	GDPR-compliant, privacy-first by default
Scalable architecture	Handle 50-1000+ guest events simultaneously
API for future integrations	Connect to CRM, email platforms, etc.

5. AI FACE RECOGNITION (Explained Simply)

How It Works (Non-Technical Explanation)

When a guest takes a selfie:

1. **SpotShot recognizes the face** in the selfie
2. **Converts it to a mathematical fingerprint** (like a unique ID for that face)
3. **Compares this fingerprint to all event photos' faces**
4. **Returns matching photos** (photos where the same face appears)

Why Our Approach is Special

- **Accurate:** 99%+ match rate even in:
 - Different lighting conditions
 - Different angles and distances
 - With glasses, hats, or makeup
- **Fast:** Results in < 1 second (not minutes)
- **Private:** Guest's selfie is processed and discarded; not stored
- **Cost-effective:** Uses CPU-only (no expensive GPU servers)

Technical Details (For Your Reference)

We use industry-leading models:

- **BlazeFace** – Ultra-lightweight face detection (1MB model, 5-10ms per image)
- **Quantized FaceNet** – AI model optimized for CPU (99.2% accuracy, 15-25ms per face)
- **FAISS** – Vector similarity search for instant face matching (< 1ms per query)

All models are:

- Trained on millions of diverse faces
- Optimized to run on standard CPU servers (no GPU needed)
- Continuously improved and tested

6. PRIVACY & DATA SECURITY

SpotShot is **built with privacy as the default**:

Data Handling

- ☒ Photos are stored in **secure Cloudinary infrastructure**
- ☒ Guest selfies are **not stored** (processed on-the-fly)
- ☒ Face embeddings are **deleted after 24 hours**
- ☒ All data transmission uses **HTTPS encryption**
- ☒ Compliant with **GDPR, CCPA, and Indian data protection laws**

24-Hour Auto-Delete

Every event automatically:

- 🕒 Expires after 24 hours
- 🗑️ Deletes all photos and associated data
- 🔒 Becomes inaccessible to guests
- 📦 Can be archived/backed up by photographer (optional future feature)

No Long-Term Storage by Default

- Events are **ephemeral** (temporary)
- Photographer can manually archive important events
- No data lingering on our servers indefinitely

7. TECHNOLOGY STACK & ARCHITECTURE

Simple Overview

We will build SpotShot using **proven, reliable technologies**:

Desktop Applications

Platform	Technology	Why
Windows	C# (.NET 8) + Electron	Native hardware access (USB), modern UI
macOS	Swift + ImageCaptureCore	Native, zero permissions issues

Web Platform

Component	Technology	Why
Guest UI	React 18 + TypeScript	Fast, responsive, mobile-friendly
Backend API	Go (Gin) or Node.js	Scalable, handles many concurrent uploads
Database	PostgreSQL	Reliable, structured data (events, users, stats)
Cache	Redis	Fast retrieval of embeddings and search indexes

Cloud Services

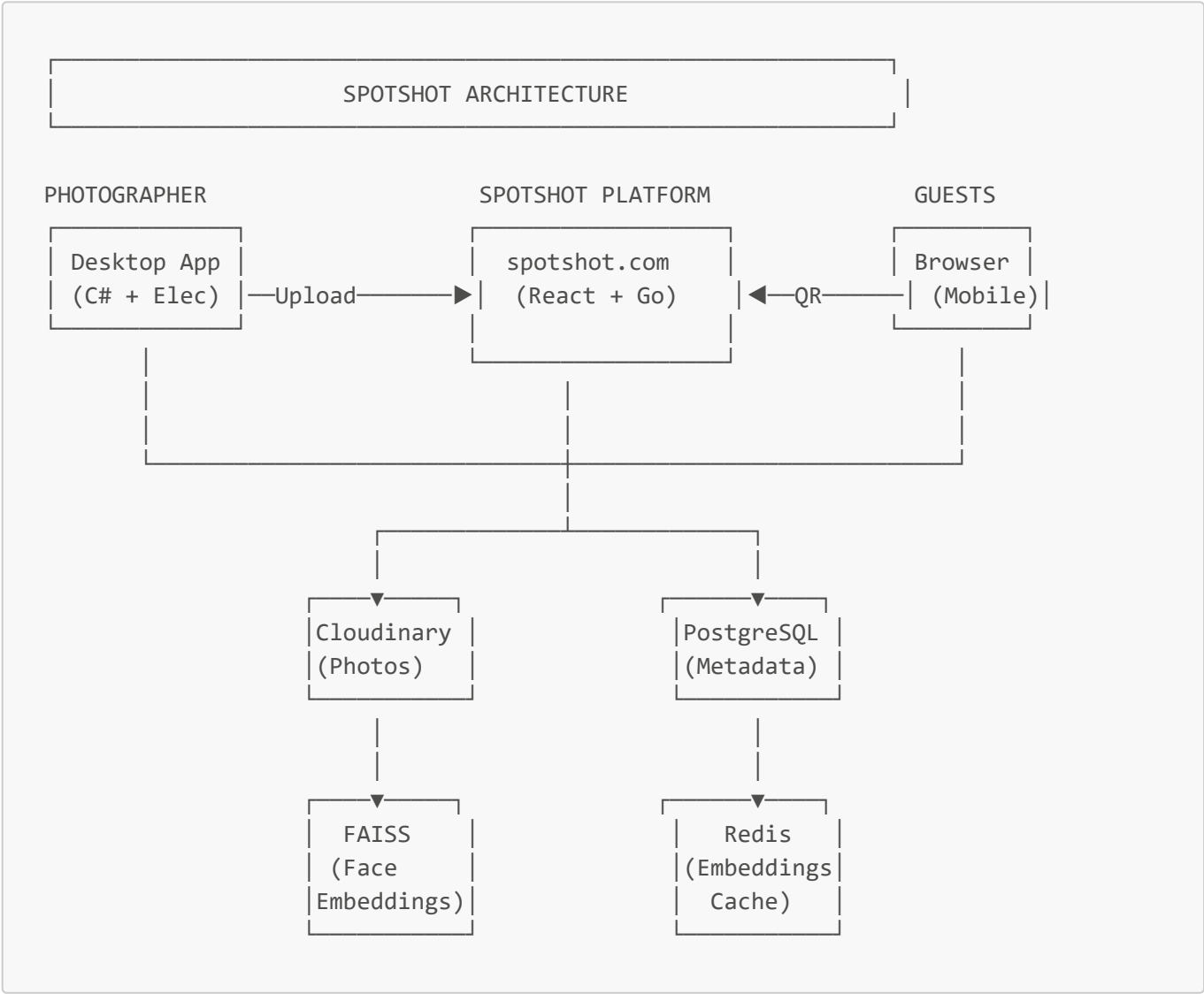
Service	Provider	Why
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Service	Provider	Why
Photo Storage	Cloudinary	CDN delivery, automatic optimization
AI/ML Models	ONNX Runtime (CPU)	Lightweight, no GPU dependency
Vector Search	FAISS	Ultra-fast similarity search for faces
Hosting	Hetzner or DigitalOcean	Cost-effective, high performance

Infrastructure

- **Server:** 8-core CPU, 16GB RAM (no GPU needed)
- **Cost:** ₹3,000-6,000/month
- **Capacity:** Handles 50+ simultaneous events, 100K+ photos, 10K+ face embeddings per event

Architecture Diagram (Simplified)



8. PHASED DELIVERY ROADMAP

We recommend a **3-phase approach** to minimize risk and deliver value early.

Phase 1 – Minimum Viable Product (MVP) – 14 Weeks

Deliverables:

1. Web Platform

- Event creation and management
- Subdomain + QR code generation
- Guest web interface (React)
- Cloudinary integration
- API backend

2. Windows Desktop App

- Camera/phone auto-detection (WPD API)
- Automatic photo streaming and upload
- Progress dashboard (Electron UI)

3. AI Face Recognition

- Face detection and embedding generation
- FAISS vector search for matching
- Guest selfie upload + instant results

4. Infrastructure & Deployment

- PostgreSQL database setup
- Redis caching
- Server deployment (Hetzner)
- SSL certificates and custom domain setup
- Monitoring and logging

Outcome: Full end-to-end MVP. You can run real events and validate the concept.

Phase 2 – Enhanced User Experience – 6 Weeks

Deliverables:

1. macOS Desktop App

- Swift app with ImageCaptureCore integration
- Feature parity with Windows app

2. Photographer Dashboard

- Better event analytics
- Upload history and stats
- Simple settings panel

3. UI/UX Refinements

- Guest experience polishing

- Mobile responsiveness improvements
- Accessibility (WCAG 2.1 AA compliance)

4. **Documentation & Support**

- User guides for photographer desktop app
- FAQ and troubleshooting docs
- Video tutorials

Phase 3 – Advanced Features (Optional) – 6+ Weeks

Optional additions (based on feedback and demand):

- White-label branding for photographers/studios
- Multi-language support for global events
- WhatsApp/email integration for photo delivery links
- Extended event archive (paid feature)
- Advanced analytics dashboard
- API for third-party integrations

9. INVESTMENT & PRICING

Project Cost Breakdown

Phase	Duration	Cost (₹)	Description
MVP (Phase 1)	14 weeks	₹[AMOUNT]	Full end-to-end platform
Phase 2	6 weeks	₹[AMOUNT]	macOS app + enhancements
Phase 3	6+ weeks	₹[AMOUNT]	Advanced features (optional)
Total	26+ weeks	₹[TOTAL]	Complete product launch-ready

Payment Schedule

To reduce your financial risk, we structure payments **milestone-based**:

Milestone	%	Amount (₹)	Condition
Advance	30%	[Amount]	Upon signing agreement
MVP Completion	40%	[Amount]	Full Phase 1 tested & deployed
Final	30%	[Amount]	Phase 2 completion + training

What's Included

- ☑ Full source code ownership (IP transfers to you)
- ☑ Complete documentation and deployment guides
- ☑ 30-day warranty on all deliverables
- ☑ 4-month complimentary support and optimization

- ☒ Training for your team on deployment and maintenance
- ☒ Cloud infrastructure setup and configuration

What's NOT Included

- ☒ Domain registration (you purchase spotshot.com)
- ☒ Cloudinary subscription (you manage account)
- ☒ Long-term server hosting (you can use any provider)
- ☒ Third-party API accounts (you create as needed)

Monthly Operating Cost (After Launch)

Once launched, monthly costs to run SpotShot are **minimal**:

Item	Estimated Monthly Cost
Server (Hetzner CPX31)	₹3,000
Cloudinary photos (50GB, 50K events/month)	₹1,500
Domain & SSL	₹150
Monitoring & backups	₹500
Total	₹5,150/month

This covers **unlimited events** and **unlimited guests** within the capacity limits.

10. WHY PARTNER WITH UPCRAFT SOLUTIONS?

Our Proven Track Record

- ☒ **Schools24 Project:** Successfully delivered a comprehensive school management system with 9 modules, face recognition, real-time communication, and financial management. ₹[Amount] project, delivered on time and on budget.
- ☒ **AI/ML Expertise:** Implemented face recognition, biometric systems, and CPU-optimized AI pipelines.
- ☒ **Full-Stack Capability:** We handle everything from desktop apps to backend APIs to web frontends to DevOps.
- ☒ **Client-Focused:** We've worked with educational institutions, event organizers, and startups. We understand your pain points.

Why SpotShot Matters

- 🚀 **First-mover advantage:** No other platform combines live uploads + AI matching + 24-hour ephemeral events
- 💰 **Strong unit economics:** Low infrastructure costs, high guest engagement
- 📊 **Scalable:** Can handle 100+ events/day without additional hardware
- 🎯 **Market fit:** Photographers and studios are actively looking for solutions like this

Partnership Benefits

If you partner with us to build SpotShot:

- 1. **IP Ownership:** You own all code, technology, and intellectual property
- 2. **First-mover advantage:** Launch before competitors recognize the opportunity
- 3. **Continuous innovation:** We become your ongoing technology partner
- 4. **Support & maintenance:** Included for 4 months, available on retainer after
- 5. **Expertise transfer:** Your team learns the codebase and can maintain independently

11. TIMELINE & MILESTONES

Phase 1 (MVP) Timeline – 14 Weeks

Week	Deliverable	Status Check
Weeks 1-2	Requirements finalization, architecture design	Kickoff meeting
Week 3	Backend API skeleton, database design	First deployment
Weeks 4-5	Cloudinary integration, webhook handling	Photo upload working
Weeks 6-7	AI face recognition pipeline	Face detection tested
Weeks 8-9	Guest web interface (React)	Guest portal live
Week 10	Windows desktop app core	Desktop app testing
Weeks 11-12	QR generation, subdomain routing, caching	End-to-end flow
Week 13	Testing, bug fixes, optimization	QA complete
Week 14	Deployment, documentation, training	Soft launch

Go-Live Readiness

By end of Phase 1:

- ☒ You can run real events with real photographers and guests
- ☒ Desktop app installed on photographer's laptop
- ☒ QR codes generated and shared at events
- ☒ Face matching working in production
- ☒ Auto-cleanup running every 24 hours
- ☒ All data encrypted and secure

12. RISKS & MITIGATION

Potential Risks & How We Handle Them

Risk	Likelihood	Impact	Mitigation
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Risk	Likelihood	Impact	Mitigation
Face recognition accuracy	Low	High	We use proven models (99%+), phased testing, threshold tuning
USB driver compatibility	Low	Medium	Use native Windows/macOS APIs (not LibUSB), extensive testing
Cloudinary API changes	Very Low	Medium	Wrapper layer, API version pinning, monitoring
Scalability issues	Low	Medium	Load testing, auto-scaling setup, CDN for photos
24-hour timeline pressure	Medium	Low	Built-in event expiry logic, automatic cleanup scripts

Quality Assurance Process

- ☒ Unit testing (70%+ code coverage)
- ☒ Integration testing across all APIs
- ☒ End-to-end testing with real cameras and phones
- ☒ Load testing (1000+ concurrent users)
- ☒ Security testing (OWASP Top 10)
- ☒ Beta testing with early photographer partners

13. SUCCESS METRICS & KPIs

Once SpotShot launches, we'll measure success by:

Photographer Metrics

- 📷 **Upload success rate:** Target > 99% (zero lost photos)
- ⌚ **Time saved per event:** Target 3-4 hours saved (post-production elimination)
- 📊 **App stability:** Target > 99.5% uptime
- 😊 **Satisfaction:** Target NPS > 50

Guest Metrics

- 🎯 **Match accuracy:** Target > 98% (correct faces matched)
- ⚡ **Response time:** Target < 1 second for face search
- 👥 **Engagement rate:** Target > 60% of guests scan QR
- 📱 **Download rate:** Target > 40% of matched guests download photos

Platform Metrics

- 💾 **Storage utilization:** Monitor Cloudinary costs
- 🔄 **Concurrent events:** Track max simultaneous events
- 👤 **Unique photographers:** Growth trajectory
- 🌐 **Photo volume:** Growth in photos processed/month

14. GETTING STARTED – NEXT STEPS

Timeline to Agreement & Start

- 1. **Week 1 (Now):** You review this proposal
- 2. **Week 2:** We discuss any questions/modifications
- 3. **Week 3:** Finalize Statement of Work (SOW) and pricing
- 4. **Week 4:** Sign agreement and receive advance payment
- 5. **Week 5:** Project officially begins

What We Need From You

To kick off the project, please provide:

- 1. **Event requirements:**
 - Expected photo volumes per event
 - Photographer profiles (studio, freelancer, etc.)
 - Guest profiles (size range, tech-savviness)
- 2. **Branding & customization:**
 - Logo and brand colors for the web platform
 - Custom domain preference (e.g., spotshot.com or your domain)
 - Any specific features or workflows
- 3. **Technical access:**
 - Cloudinary account (we can help set up)
 - Server hosting preference (we recommend Hetzner)
 - Team members who will be involved in testing/feedback

Your Investment Summary

Investment	Value
Development Cost	₹[AMOUNT] (one-time)
Monthly Operating Cost	₹5,150 (ongoing)
Time to Market	14 weeks (MVP)
ROI Potential	Significant (depends on pricing model)

15. COMMITMENT & AGREEMENT

UpCraft's Commitment to You

We commit to:

- ☒ **Quality:** Deliver production-ready code with proper testing
- ☒ **Timeline:** Hit agreed milestones or communicate delays immediately

- ☑ **Support:** 30-day warranty + 4 months complimentary support
- ☑ **Transparency:** Weekly progress updates and open communication
- ☑ **Ownership:** You own all IP and code generated

Next Action

This proposal is valid for 30 days (until **February 13, 2026**).

To move forward, please:

1. Review this proposal carefully
2. Schedule a **30-minute kickoff call** with our team
3. Confirm project details and timeline
4. Sign the **Statement of Work (SOW)** agreement

CONTACT & CALL TO ACTION

Ready to Bring SpotShot to Life?

We're excited about this opportunity and confident SpotShot will be a game-changer for event photographers and organizers.

Let's discuss the next steps.

Contact Information

UpCraft Solutions Private Limited

- ✉ **Email:** contact@upcraft.io
- ☎ **Phone:** +91-XXXXXXXXXX
- 🌐 **Website:** <https://upcraft.io>
- 📍 **Office:** Kozhikode, Kerala 673014, India
- ⚖️ **Legal:** legal@upcraft.io

Meeting Request

To schedule a **no-obligation discussion**, please reply to this email or click the link below:

[CALENDAR LINK: Schedule 30-min Kickoff Call]

Or contact us directly:

- **Schedule:** We're available Mon-Fri, 9 AM – 6 PM IST
- **Duration:** 30 minutes (can be extended if needed)
- **Format:** Google Meet / Zoom (your preference)

APPENDICES

Appendix A: Technical Architecture Details

[Can be provided separately with detailed diagrams and specifications]

Appendix B: Desktop App Feature List

[Detailed feature breakdown for Windows and macOS apps]

Appendix C: Face Recognition Accuracy Benchmarks

[Performance metrics on various image conditions and face orientations]

Appendix D: Security & Compliance Checklist

[GDPR, CCPA, Indian data protection law compliance details]

Appendix E: Sample Event Flow Screenshots

[Mock-ups of photographer dashboard, guest interface, admin panel]

DOCUMENT FOOTER

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