

# Bhuban – Master UI, Animation & Full■Scale System Architecture

A world■class video platform blueprint built on Yellow, Pink & Red energy.

## 1. Bhuban World – Opening Splash Animation (3–5 Seconds)

**Core Concept:** A cinematic journey from Creator → Platform → Audience.

Pink Film Strip → Yellow ‘B’ → Red Live World.

**Phase I – The Spark (0.0s–1.0s):** Off■white background (#FFFDE7). Pink (#F06292) film strip enters with whip■pan motion and Elastic■Out easing.

**Phase II – Brand Manifestation (1.0s–2.2s):** Film strip morphs into a liquid trail and pours into a 3D ‘B’ with squash■and■stretch physics.

**Phase III – Expansion (2.2s–3.5s):** Radial ripple clears the splash and reveals the UI beneath with Z■axis zoom■out.

**Specs:** 60fps, Cubic■Bezier easing, inner pink glow, 3■note ascending earcon.

## 2. Navigation & Core App Functions

**Home:** Algorithmic universe feed with single■tap scroll■to■top and double■tap refresh.

**Bhuban Shorts:** Vertical, full■screen immersive feed with prefetching for zero latency.

**Upload Hub (+):** Bottom sheet with Go Live, Upload, Create Short. Icon rotates to X.

## 3. User Identity & Authentication

OAuth 2.0 + OpenID Connect (Google, Apple, Facebook).

Unified Email■as■Primary■Key system with account linking.

Apple Private Relay support, Refresh Tokens, Passkeys (FaceID/Fingerprint).

GDPR/CCPA compliance with automated data erasure.

## 4. Video Playback & Interaction Engine

Adaptive HLS streaming from 144p to 8K.

Like animation: Pink■to■Red heart explosion.

Comments: Nested threads with AI■boosted high■value replies.

Subscribe: Solid Pink → Transparent Gray with bell icon.

## 5. Recommendation Algorithm (The Bhuban Brain)

Engagement Score Formula:  $E = (V \cdot w1) + (C \cdot w2) + (S \cdot w3) - (D \cdot w4)$ .

Bhuban Spike: 100 likes in 10 minutes triggers global trending.

Computer Vision scans brand color aesthetics.

NLP auto■captions and 50+ language translation.

## 6. Creator Studio & Analytics

Real-time Pulse Dashboard using Kafka-based stream processing.

Retention Heatmaps showing spikes and dead zones.

Traffic source funnel: Impressions → CTR → Views.

Built-in A/B Thumbnail Testing with automatic winner selection.

## 7. Monetization & Payout System

Revenue Split: 55% Creator / 45% Platform.

Net-30 payout cycle with \$100 threshold.

Local wallets (bKash, Nagad) + Stripe + Bank transfers.

Automated tax forms (W-8BEN / W-9) and KYC.

## 8. Safety, Moderation & Community Health

Multimodal AI moderation (Video, Audio, Metadata).

3-Strike enforcement with transparent violation receipts.

Deepfake detection & labeling.

AI 'Vibe-Check' to slow toxic comment threads.

## 9. Infrastructure, Debugging & Self-Healing Systems

Microservices & Micro-frontend architecture.

Blue-Green deployments for zero downtime.

Circuit Breakers, Auto-Scaling, and Automated Rollbacks.

Real-time telemetry with AI error clustering.

## 10. Pre-Launch War-Room Checklist

Million-user spike load testing.

Fraud & bot traffic simulation.

Cross-platform cache and analytics sync verification.

99.99% uptime target.

## Final Vision

Bhuban is designed as a creator-first, zero-failure ecosystem.

Every pixel, animation, and algorithm serves clarity, trust, and growth.

This document is the single source of truth for design, engineering, and scale.