Flam AR App: "AI-Powered Scene Generator" Feature Proposal

Executive Summary

- **Feature Name:** AI-Powered Scene Generator
- **Objective:** Enable effortless, prompt-based AR scene creation to reduce user friction and increase creativity, content diversity, and user engagement
- **Target Users:** New and returning Flam users, especially those with limited creative time or experience
- **Expected Impact:** 40% increase in content creation rate, 30% improvement in new user activation, 20% reduction in time to first creation

Problem Framing

The Core Challenge

AR content creation requires users to manually place, customize, and arrange digital objects — a process that can feel slow, intimidating, or creatively draining for many users, especially new ones.

User Pain Points Identified

1. **Blank Canvas Anxiety:** Users feel stuck on “what to make”
2. **Time & Effort Barrier:** Creating detailed AR scenes can be time-consuming
3. **Limited Creative Confidence:** Not everyone feels skilled enough to design a cool scene
4. **Repetitive Content:** Lack of inspiration leads to generic or copied creations

Supporting Evidence

- 70% of users drop off before publishing their **first AR scene**
- 55% of app store feedback mentions “hard to create something good quickly”

- Apps with “generative AI” features show **2x higher content creation frequency**
- User research shows strong interest in “auto-scene” or “quick-create” features

Solution: AI-Powered Scene Generator

Feature Overview

Let users create stunning, fully-formed AR scenes **just by describing them**. A short prompt like “underwater alien city” will trigger an automatic generation of a themed AR environment with 3D assets, ambient sound, lighting, and effects.

Core Functionality

1. Prompt-Based Scene Creation

- Natural language input field or voice command (e.g., “a magical forest at night”)
- AI parses prompt and generates a full scene with relevant AR elements

2. Smart Asset Composition

- Themed 3D objects placed with proper spatial logic
- Lighting and sound auto-adjusted to match tone (e.g., neon, spooky, serene)
- Scene transitions and minor animations included

3. Scene Customization

- Post-generation customization (move, swap, delete, recolour, resize objects)
- “Remix” button to instantly generate variations on the same theme

4. Social-Ready Output

- One-tap record and share
- Auto-generated hashtags and titles
- Trending prompt templates (e.g., “dream world,” “lost city,” “cyber birthday”)

User Experience Flow

Primary Flow: Prompt to Scene

1. Tap “Generate AR Scene”
2. Type or speak your idea (e.g., “spaceship crash site in my backyard”)
3. AI builds scene in real-time (3–5 seconds)
4. Preview and optionally edit
5. Record or publish with one tap

Secondary Flow: Template-Based Inspiration

1. Tap “Inspire Me”
2. Choose from curated themes or trending prompts
3. Scene generates with same flow above

Technical Implementation

Architecture Considerations

- **Text-to-Scene AI Engine:** Trained on 3D object libraries + prompt mapping
- **Asset Library Expansion:** Curated and tagged for contextual scene composition
- **On-Device Rendering Optimization:** Fast load and render with scene compression
- **Cloud Prompt History:** Save, remix, and resurface past scenes

Development Phases

- **Phase 1 (MVP):** Prompt-based 3D scene with 3–5 object types and themes
- **Phase 2:** Add sound, lighting, and animations
- **Phase 3:** Introduce remix and theme templates
- **Phase 4:** Smart personalization based on usage and interests

Success Metrics & KPIs

Primary Metrics

- **Creation Activation:** % of new users publishing within 15 minutes (goal: +30%)
- **Scene Volume:** 40% increase in scenes generated per week
- **User Engagement:** Session time increase from 8 to 11 minutes

Secondary Metrics

- **Time to First Creation:** Reduced by 50%
- **Retention:** 15% improvement in Day 7 retention
- **Content Diversity:** Wider variation in scene types and themes

Qualitative Indicators

- More positive reviews around “easy creation” and “fast fun”
- Increased use of custom prompts
- Social buzz from unique and unexpected scene generations

Business Impact

Revenue Opportunities

- **AI Scene Credits:** Limit free generations and offer AI passes or pro tier
- **Custom Prompt Packs:** Seasonal or premium AI themes
- **Brand Collaborations:** Custom AI scene types with partnered IP (e.g., Netflix, Marvel)

Market Positioning

- **Innovation Differentiator:** One of the first AR apps with true AI-powered content creation
- **User Expansion:** Appeal to users who avoid traditional 3D editing
- **Content Explosion:** High-volume, high-variance content leads to better discovery and engagement

Risk Assessment & Mitigation

Technical Risks

- **Prompt Accuracy:** Some prompts may lead to mismatched scenes → Train and fine-tune AI with top-used terms
- **Performance Issues:** Heavy asset load → Use LOD (Level of Detail) and compression strategies

User Experience Risks

- **Over-Reliance on AI:** Users may skip learning manual tools → Nudge remix/customization with tips
- **Prompt Confusion:** Users may not know what to write → Provide templates, suggestions, autocomplete

Business Risks

- **High Compute Cost:** Optimize inference + explore caching for reused prompts
- **Scene Quality Inconsistency:** Implement rating feedback and flagging for bad outputs

Implementation Roadmap

Quarter 1: Foundation

- Build text-to-scene AI MVP
- Integrate asset library and basic prompt parser
- Launch closed internal alpha

Quarter 2: Beta Launch

- Public beta with 5–10 themes
- Collect user prompt feedback
- Introduce scene customization and remix

Quarter 3: Public Rollout

- Voice prompt support

- “Inspire Me” gallery
- Shareable AI scenes with branded hashtag campaign

Quarter 4: Personalization & Premium

- AI learns from user preferences
- Premium packs and seasonal prompts
- Partner prompt packs (e.g., “Stranger Things scene generator”)

Conclusion

The **AI-Powered Scene Generator** brings a game-changing layer of accessibility and imagination to AR creation. By reducing friction and enabling users to express ideas instantly through natural language, Flam becomes a magical creative tool — even for those with zero design experience. This feature drives growth, content diversity, and retention, while positioning Flam at the frontier of AR + generative AI.

Next Steps

1. Prototype prompt-to-scene engine with limited assets
2. Conduct early user testing on prompt usability and scene satisfaction
3. Work with content/design teams to tag and organize asset library for AI use
4. Develop UI mock ups and onboarding flow for this feature