Pitch Deck Analysis App - System Documentation

1. System Architecture

The Pitch Deck Analysis App is a modern web application designed to automate the analysis of startup pitch decks. It uses a decoupled architecture with a React frontend and a FastAPI backend.

Component	Technology	Description
Frontend	React, TypeScript, Vite	User interface for uploading decks and viewing analysis.
Backend	Python, FastAPI	REST API for handling uploads and orchestration.
Database	SQLite (SQLModel)	Stores startup profiles, decks, and analysis results.
AI Services	Gemini / OpenAI	LLMs for summarization, claim extraction, and scoring.
Background Jobs	APScheduler	Asynchronous processing of PDF files.

2. Sample Inputs

The system accepts PDF files. Below is a text representation of a hypothetical pitch deck page.

```
Slide 1: Title
Acme Corp: Revolutionizing Widget Manufacturing

Slide 2: Problem
Current widget manufacturing is slow and expensive. Factories waste 30% of raw
materials.

Slide 3: Solution
Our AI-driven 3D printing technology reduces waste by 90% and increases speed by 5x.
```

3. Sample Outputs

The system generates a JSON analysis containing a summary, claims, and follow-up questions.

Generated Summary (JSON Segment)

```
{ "product": "AI-driven 3D printing technology for widgets.", "market": "Manufacturing
sector looking for efficiency.", "traction": "Prototype complete, 2 pilot customers." }
```

Extracted Claims & Scores

```
[ { "text": "Reduces waste by 90%", "category": "product", "score": 0.8, "notes":
"Plausible but requires verification of specific test conditions." } ]
```

Generated Questions

[{ "text": "Can you provide data from the pilot customers verifying the 90% waste reduction?", "category": "product" }]