

# Quizzatron

We one-up QuizUp

# Background

## **Problem Statement:**

- Manual quiz creation is time-consuming
- Existing tools lack PDF integration & gamification

## **Existing Solutions:**

- QuizUp: Engaging but manual creation only
- No solution combines PDF automation with gamification

**What is  
Quizzatron ?**

# What is Quizzatron?

**AI-powered quiz generation** using LLMs (Gemini/DeepSeek).

**User-friendly platform** to create and play quizzes on any topic.

**Multiple input options:** Topic search, PDF upload, or popular categories.

Why Quizzatron?

# Why Quizzatron?

**Automated & Smart** - Generates quizzes instantly from topics or PDFs or popular categories.

**Interactive & Fun** - Gamified experience with scoring and timers.

**Versatile & Scalable** - Supports LLM-generated, pre-stored, and API-fetched quizzes.

# Data sources:

**User PDFs** - Personal content, up to 1M tokens

**OpenTDB API** - Curated questions via direct API integration, filtered by category

**OpenTriviaQA** - Pre-built question sets from GitHub repository, category-filtered

# Use Cases:

**Students & casual users** - Quick knowledge testing on specific topics

**Professors** - Efficient exam question sourcing

**Developers** - Quiz generation API for third-party applications



How Quizzatron?

# Design I: Stack

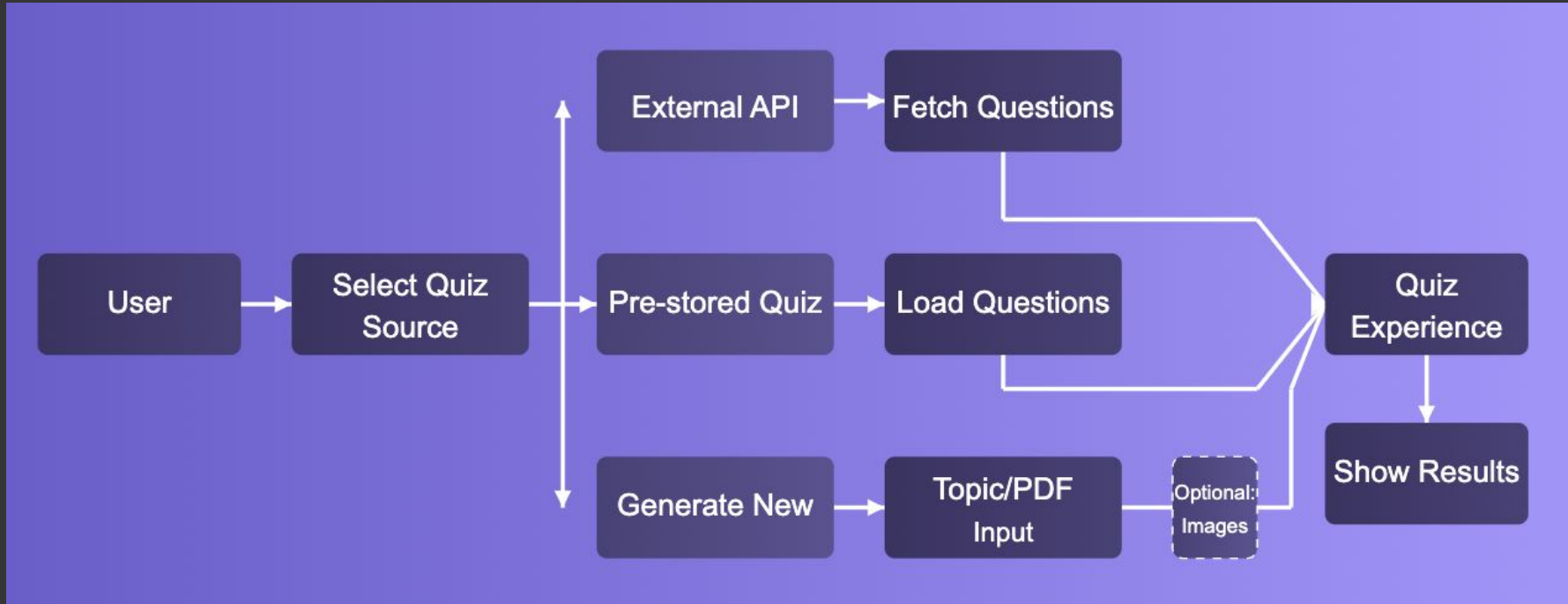
**Frontend:** React

**Backend:** Flask API, Python

**Database:** MongoDB

**LLMs:** **Gemini Flash-2.0** (genai API), **Deepseek-R1** (ollama)

# Design II: Flow diagram



It's Quizzatron time.

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**FUTURE SCOPE**

# Future Scope

**Multiplayer Mode:** Compete with friends in real-time quiz battles.

**Personalized Learning:** AI adapts difficulty based on user performance.

**Crowdsourcing Quiz Data:** Enable users to upload their own curated lists and add it to existing database