

# FlashBrain

## **Introduction:**

FlashBrain, powered by React JS and FastAPI and deployed using Docker, is a pioneering web application redefining the educational landscape. This dynamic platform transforms academic content into interactive flashcards, providing a collaborative and engaging learning environment for students, educators, and lifelong learners.

## **I. Transformative Features:**

### **1.1 Multimedia Integration: Video-Driven Flashcard Generation:**

Experience a unique dimension of multimedia integration by utilizing video clips to dynamically generate flashcards. Seamlessly convert various document formats (PDFs, text documents, Word files, PowerPoint presentations) and video content into visually enriched flashcards. Each flashcard is complemented by relevant and suggestive images to enhance comprehension.

### **1.2 Public Flashcards and Social Interaction:**

Cultivate a collaborative learning community by making flashcards public. Easily searchable, sortable, and filterable, public flashcards encourage user interaction through features like liking and providing feedback.

## **II. Seamless User Experience:**

### **2.1 User Authentication Options:**

Ensure a secure login experience with various authentication options, including email, Google authentication.

## **2.2 Account Verification and Interest Selection:**

Undergo a straightforward account verification process for added security. Personalize the learning experience by selecting categories of interest for tailored flashcards.

## **III. Enhanced Insights and Engagement:**

### **3.1 Weekly Progress Reports:**

Stay informed with weekly reports summarizing posts within selected categories of interest, offering a comprehensive overview of your learning progress.

### **3.2 Dynamic User Ranking Algorithm:**

Experience a unique learning environment with an advanced algorithm assigning user ranks based on factors such as post frequency, received likes, and overall engagement.

## **Conclusion:**

Embark on an enriched and collaborative educational journey with FlashBrain, where traditional flashcards meet cutting-edge features. Empower yourself and others with a transformative learning experience, seamlessly bridging the gap between innovation and education.