Personalized Video Content Generation

Adverstory
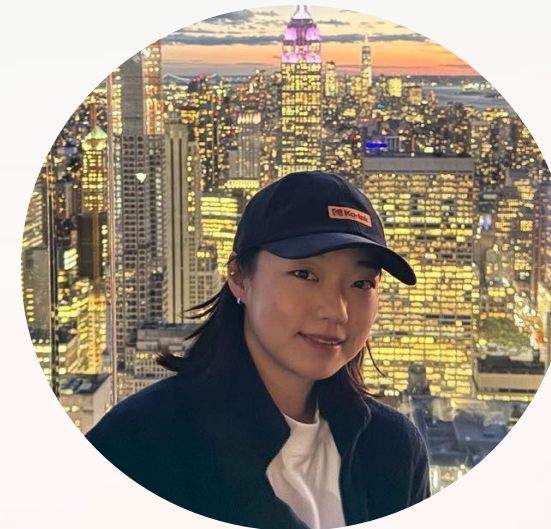
Meet Our Team

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Project Objective

Create a system that generates personalized video content based on user preferences, providing unique and dynamic experiences for everyone

Key Features

- Retrieve relevant content based on user preferences
- Personalize video generation to match individual tastes and interests
- Continuously improve by adapting to new user behavior and preference
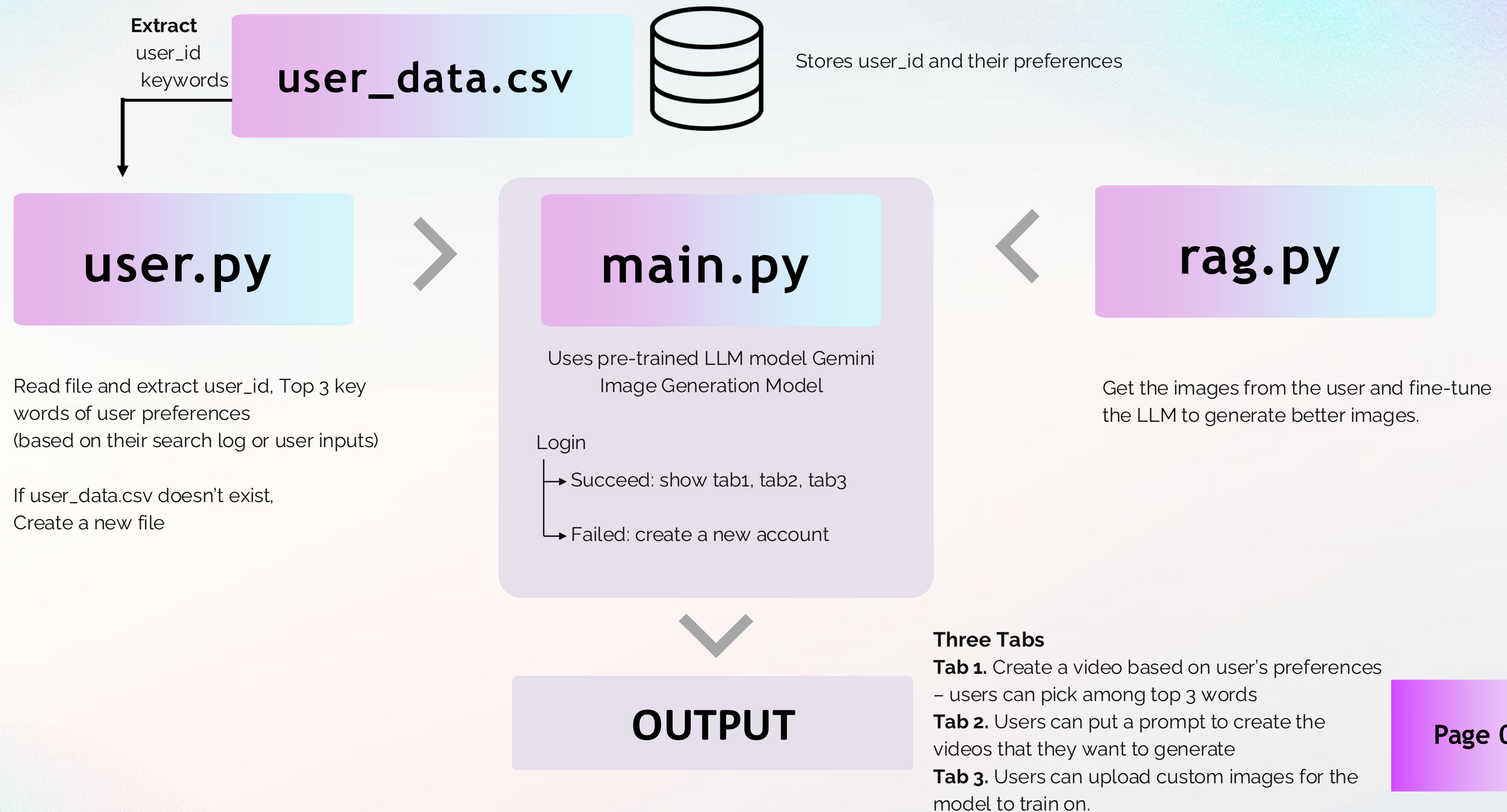
Data-Driven Continuous Learning

Unlike existing solutions that generate videos based on one-time text prompts, our system stores user preferences and continuously refines video recommendations

User-Centric Personalization

Users don't need to input prompt every time – our system learns from past preferences and generates tailored content

Improved User Experience with RAG

By augmenting the model's knowledge with real-time retrieval, RAG ensures that generated content is more personalized and aligned with user preferences

Key Differentiators

Structure

Extract
user_id
keywords

user_data.csv

Stores user_id and their preferences

user.py

Read file and extract user_id, Top 3 key words of user preferences
(based on their search log or user inputs)

If user_data.csv doesn't exist,
Create a new file

main.py

Uses pre-trained LLM model Gemini Image Generation Model

Login
→ Succeed: show tab1, tab2, tab3

→ Failed: create a new account

OUTPUT

rag.py

Get the images from the user and fine-tune the LLM to generate better images.

Three Tabs
Tab 1. Create a video based on user's preferences – users can pick among top 3 words
Tab 2. Users can put a prompt to create the videos that they want to generate
Tab 3. Users can upload custom images for the model to train on.

Output

Log-in

Existing users can utilize stored information to create videos
New users can set their initial preferences

Input

User has three options
- Stored preferences
- Input prompt
- Uploaded file

Video Generator

Creates 3-6 second video according to the input prompt

Existing User

User Login

Enter your User ID

2

Welcome back, 2!

New User

User Login

Enter your User ID

10

User ID not found. Would you like to create an account?

Enter your preferences (comma-separated)

animals, trucks, sports   Press Enter to apply

Create Account

Video Content Generation

Generate from Keywords   Custom Prompt   RAG Image Upload

Generate Video from Your Keywords

Select keywords to generate video (up to 3)

animals ×

Generate Video

Generating video from selected ke

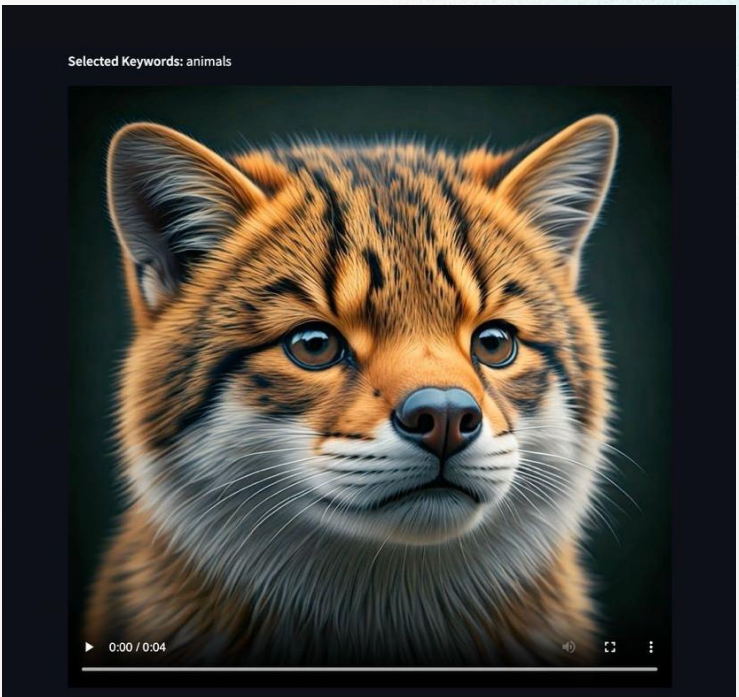Select keywords to generate video (up to 3)

Choose an option

animals

trucks

sports

Can choose up to three preferences of the user

Selected Keywords: animals

THANK YOU