

Lesson 03 Demo 02

Exploring AI Capabilities with Hugging Face Spaces

Objective: To explore Hugging Face Spaces and understand its features while uncovering potential business impacts

Tools required: Hugging Face

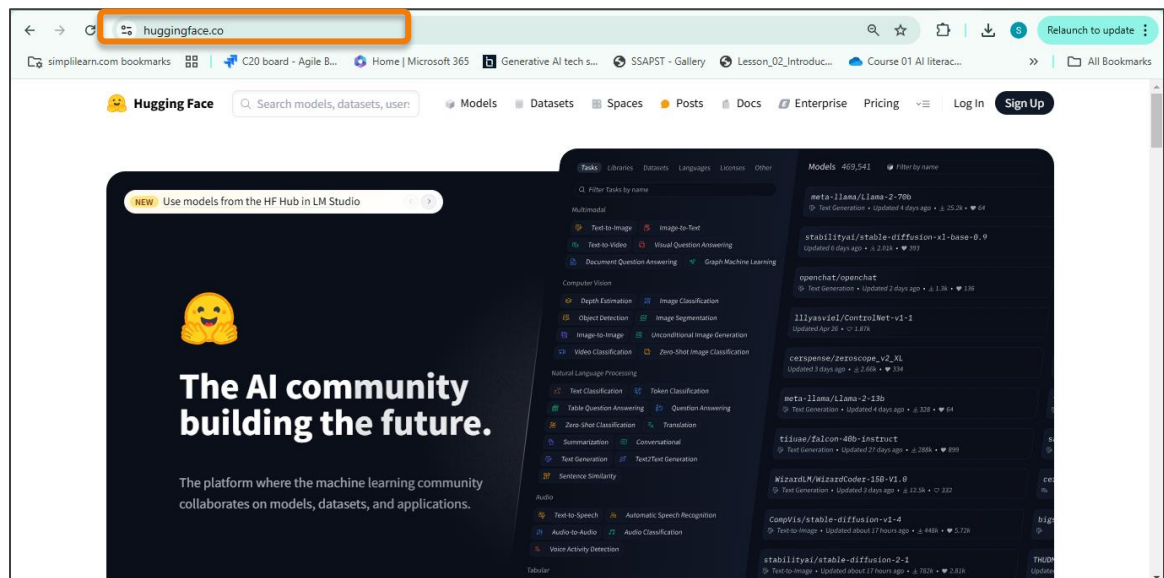
Prerequisites: None

Steps to be followed:

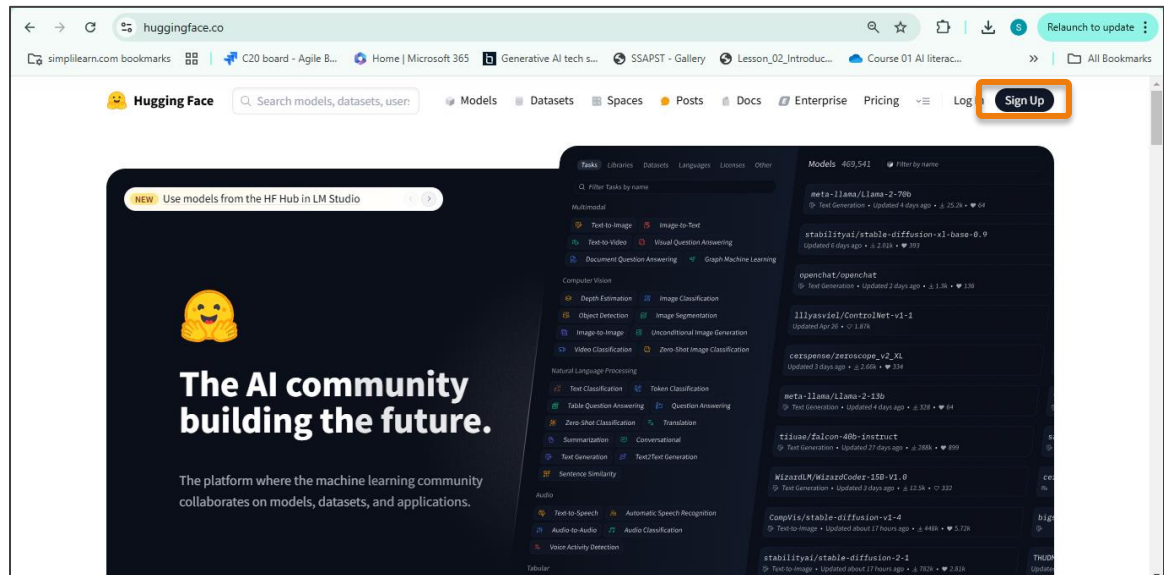
1. Create a Hugging Face account
2. Explore five Hugging Face Spaces

Step 1: Create a Hugging Face account

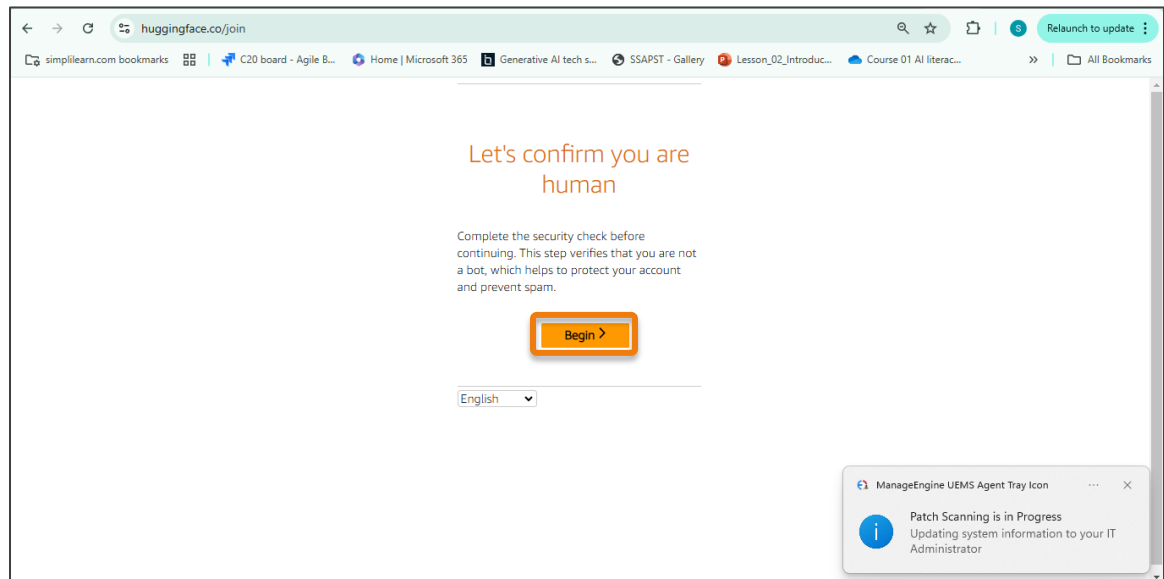
1.1 Navigate to Hugging Face



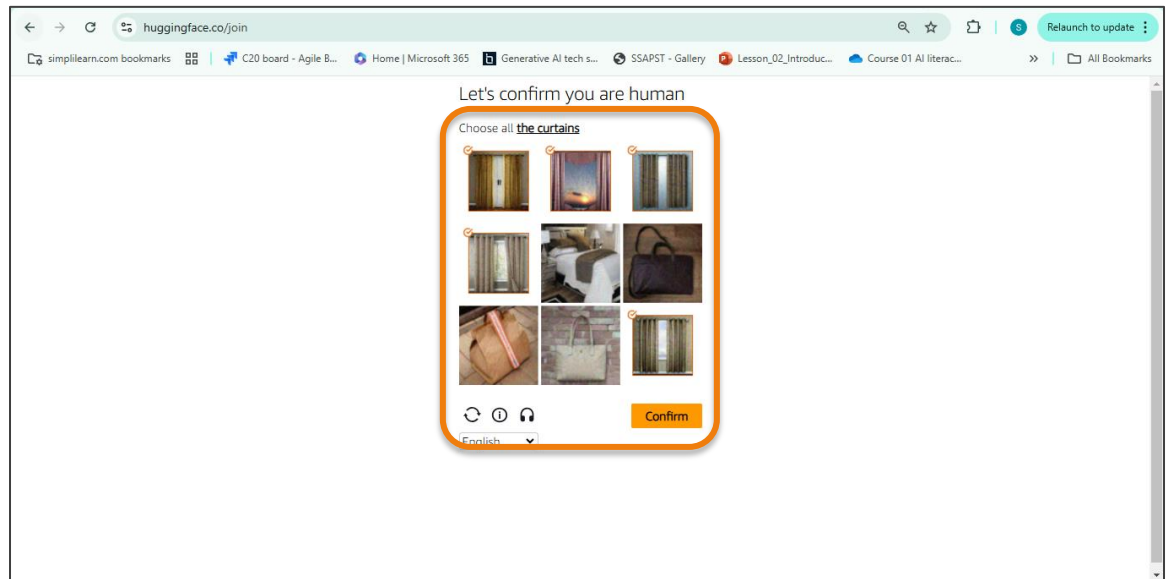
1.2 Click the **Sign Up** button on the top right corner of the page



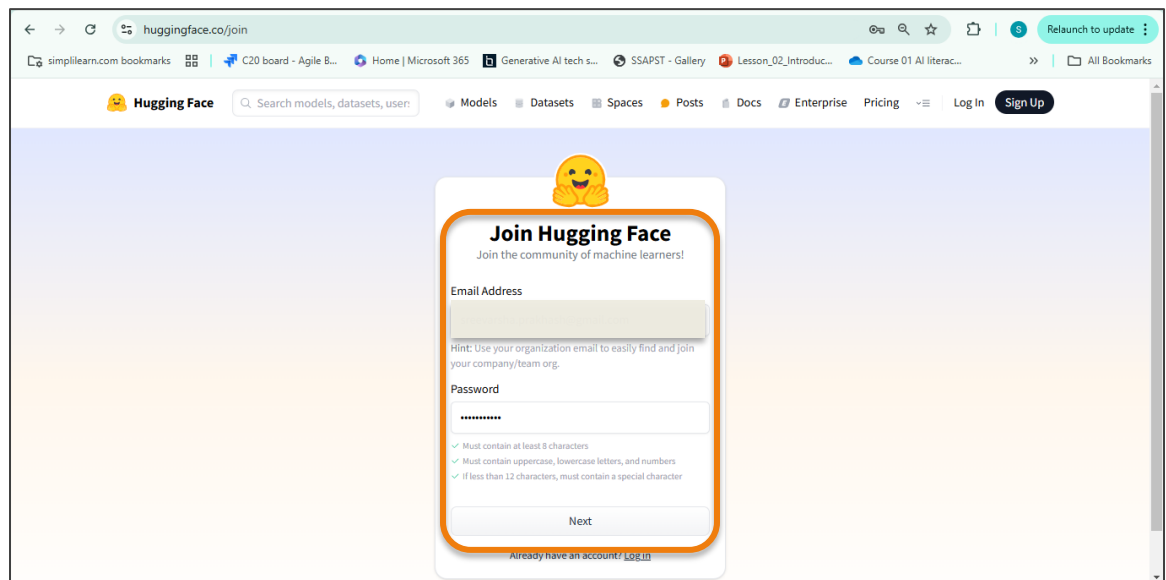
1.3 Confirm that you are a human by clicking on **Begin**



1.4 Choose the right images as instructed for confirmation



1.5 Complete the signing-up process by adding an email address and a strong password. Then, click Next.

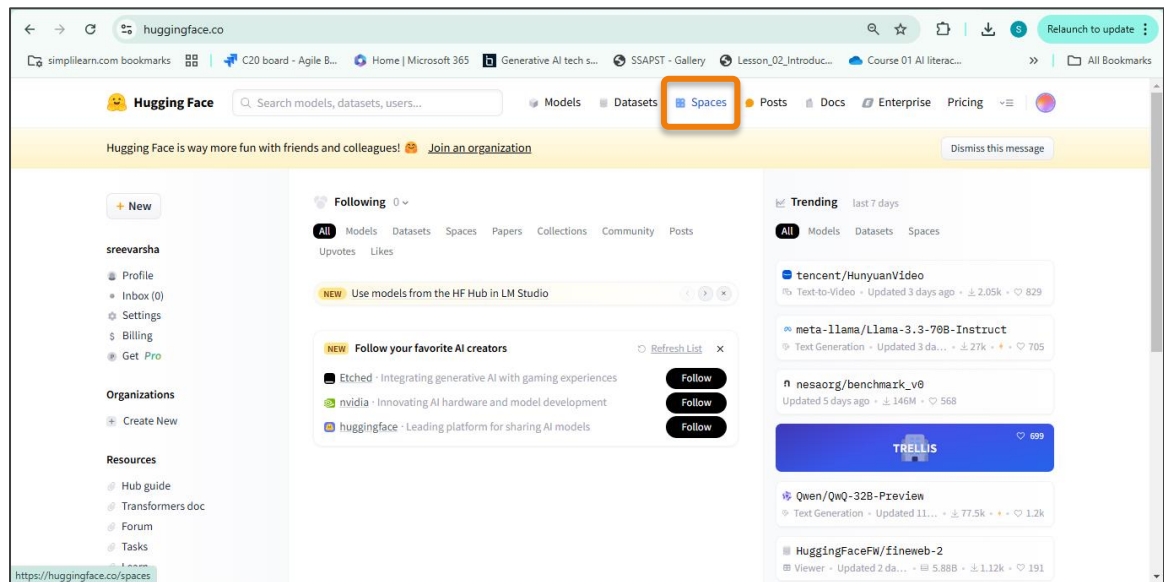


1.6 Fill in all the mandatory details and click **Create Account**

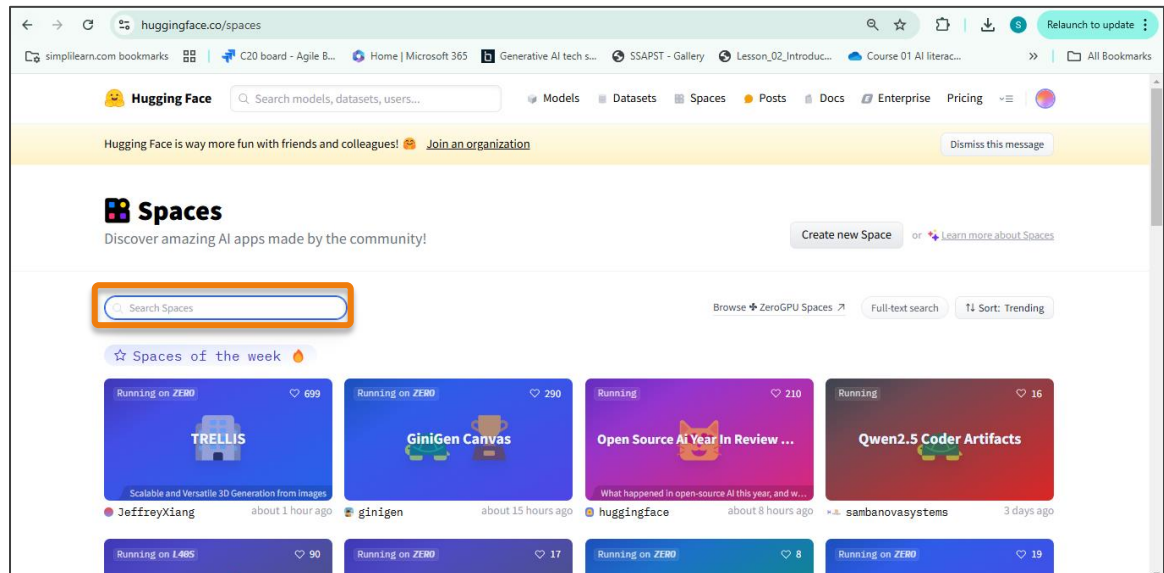
The screenshot shows the 'Complete your profile' page on huggingface.co/join. The form includes fields for Username (sreevarsha), Full name (prakash), Avatar (optional), Twitter username (optional), GitHub username (optional), LinkedIn profile (optional), Homepage (optional), and AI & ML interests (optional). A checkbox for 'I have read and agree with the Terms of Service and the Code of Conduct' is checked. The 'Create Account' button is highlighted with an orange border.

Note: Complete any additional puzzles to confirm that you are a human

1.7 Click on **Spaces** at the top of the Hugging Face home page



1.8 Use the search bar to locate specific spaces by name



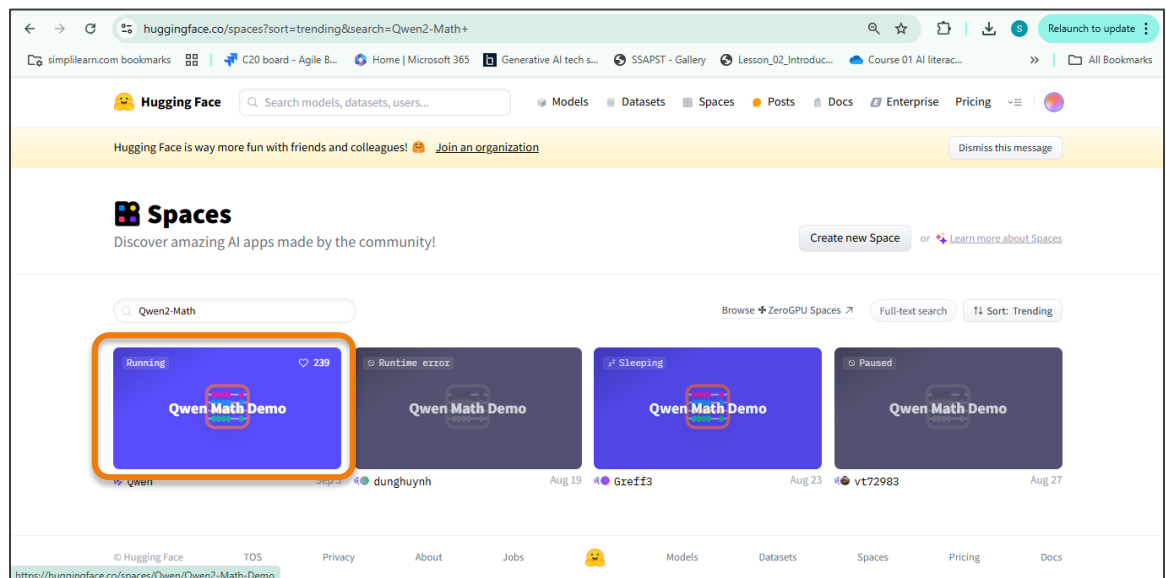
Step 2: Explore five Hugging Face Spaces

Learners will explore the following Spaces to understand their functionalities and potential business impact:

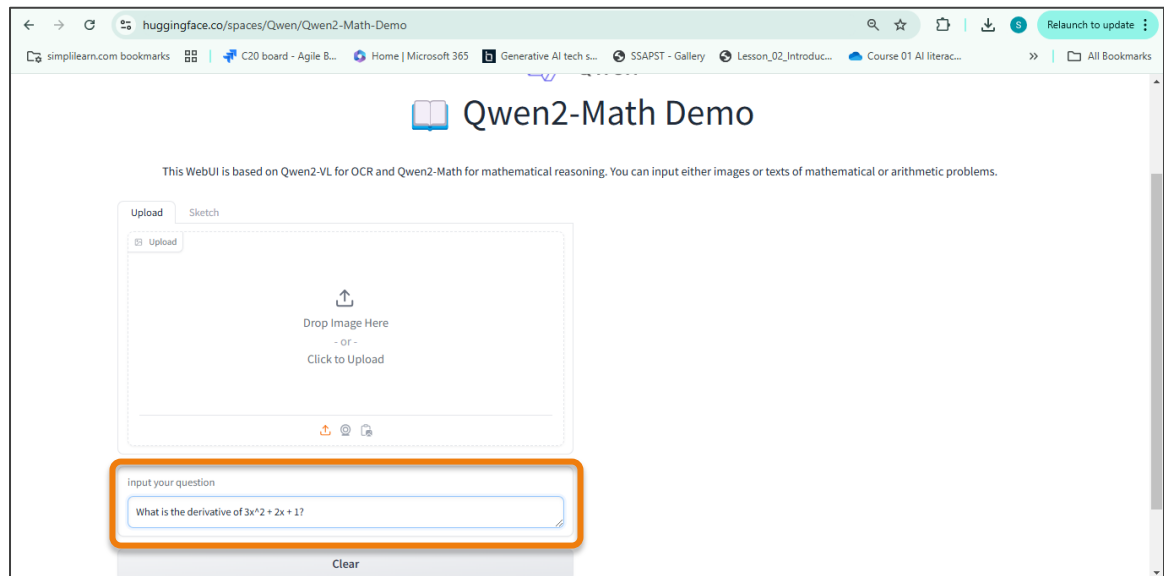
2.1 **Qwen2-Math**: Solves complex mathematical problems, including algebra and probability

Business impact: Automates calculations for finance, education, and analytics teams

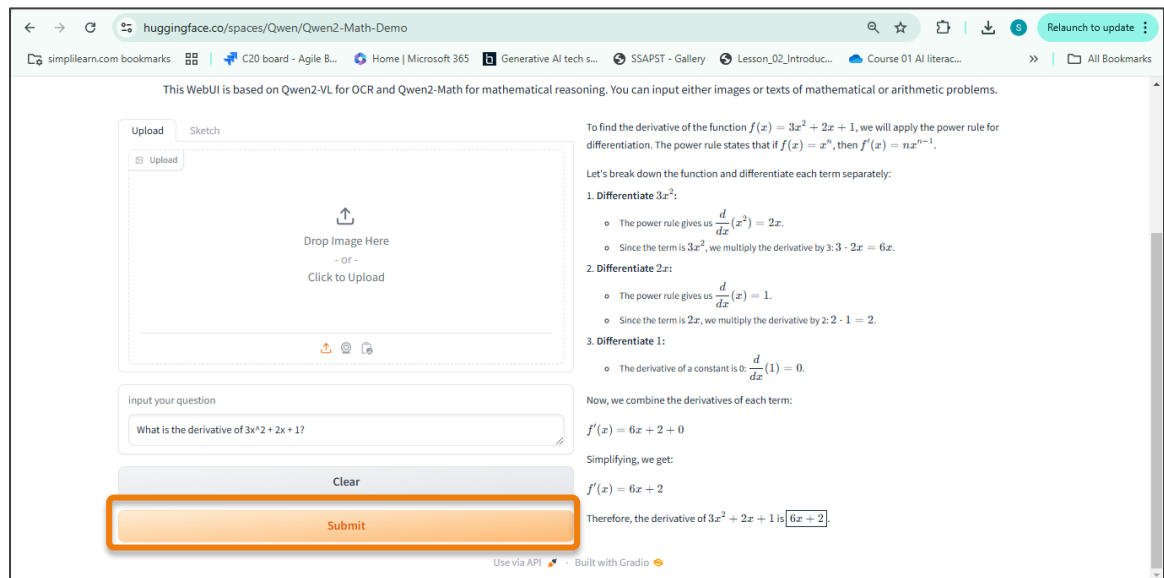
2.1.1 Type **Qwen2-Math** in the search bar and select any model widget labeled **Running** in the top-left corner



2.1.2 Add a math question to the text box. For example, **What is the derivative of $3x^2 + 2x + 1$?**



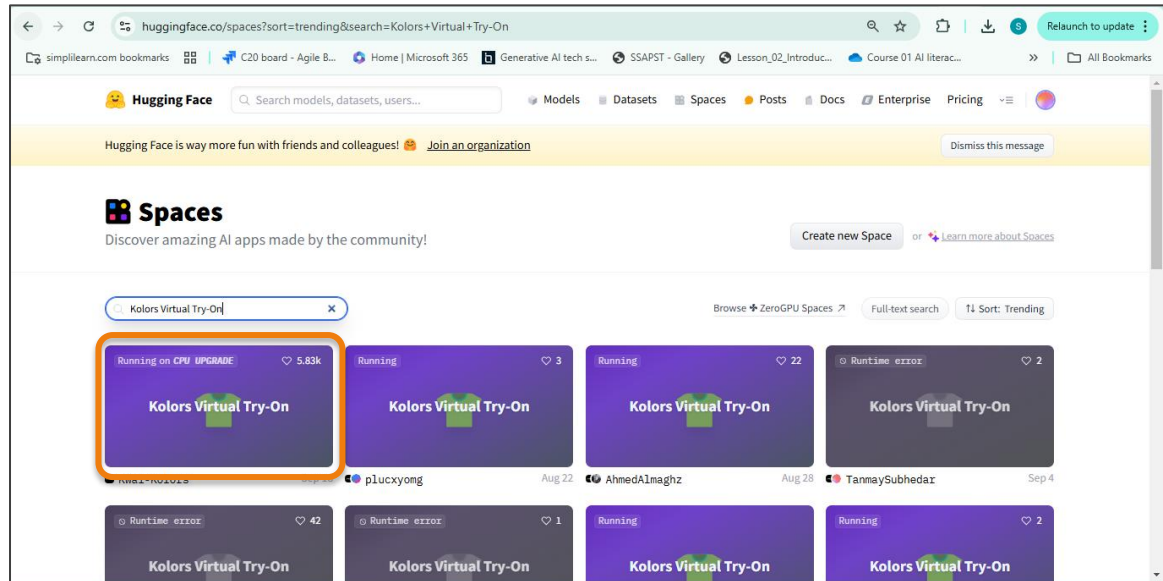
2.1.3 Click **Submit** to solve the math problem instantly



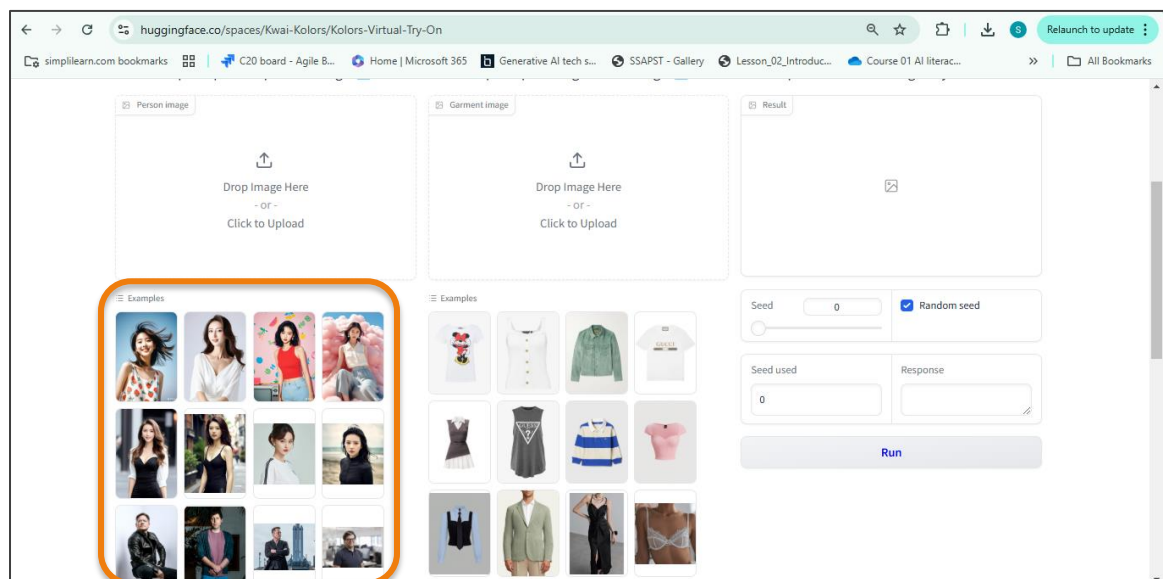
2.2 Kolors Virtual Try-On: Enables virtual color and pattern testing on clothing

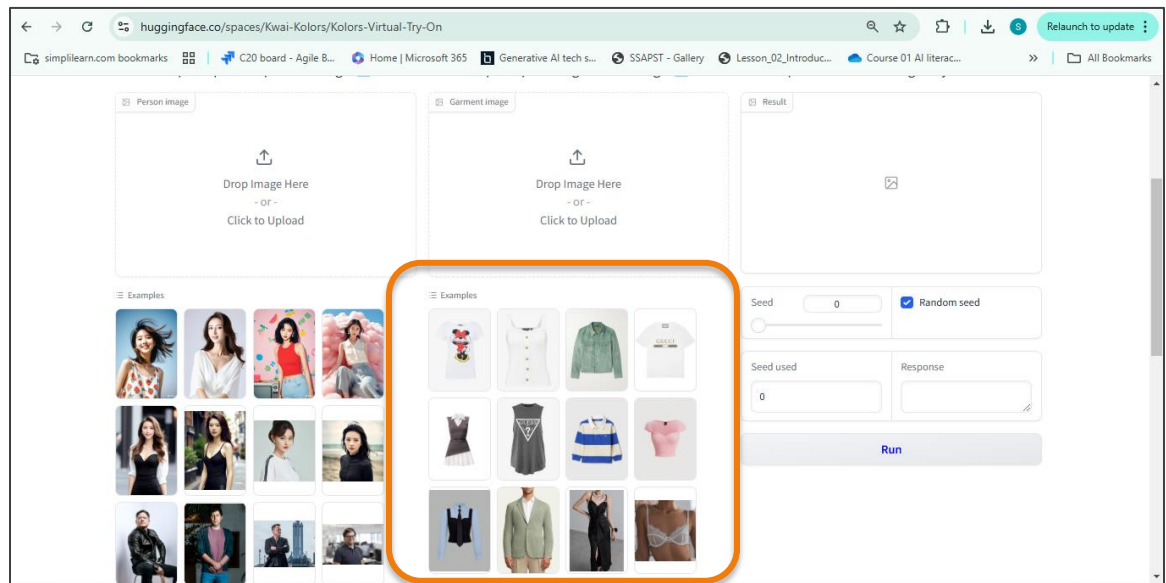
Business impact: Enhances customer experience in e-commerce by enabling personalized previews

2.2.1 Type **Kolors Virtual Try-On** in the search bar and choose any model widget marked as **Running** in the top left corner

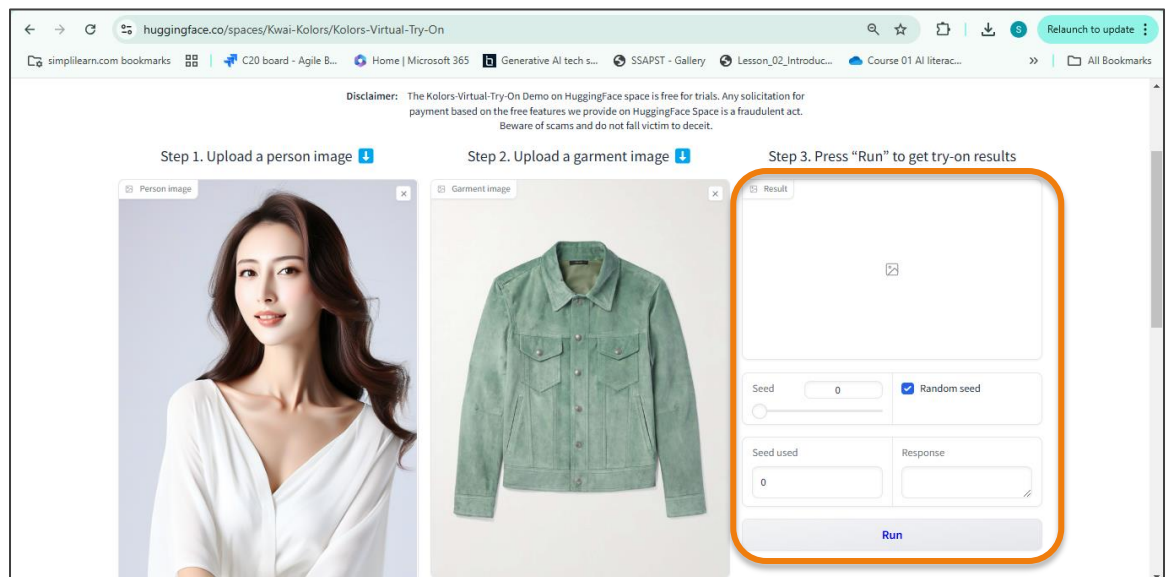


2.2.2 Upload a **Person image** and **Garment image** of your choice or use an example image given for each section as a placeholder

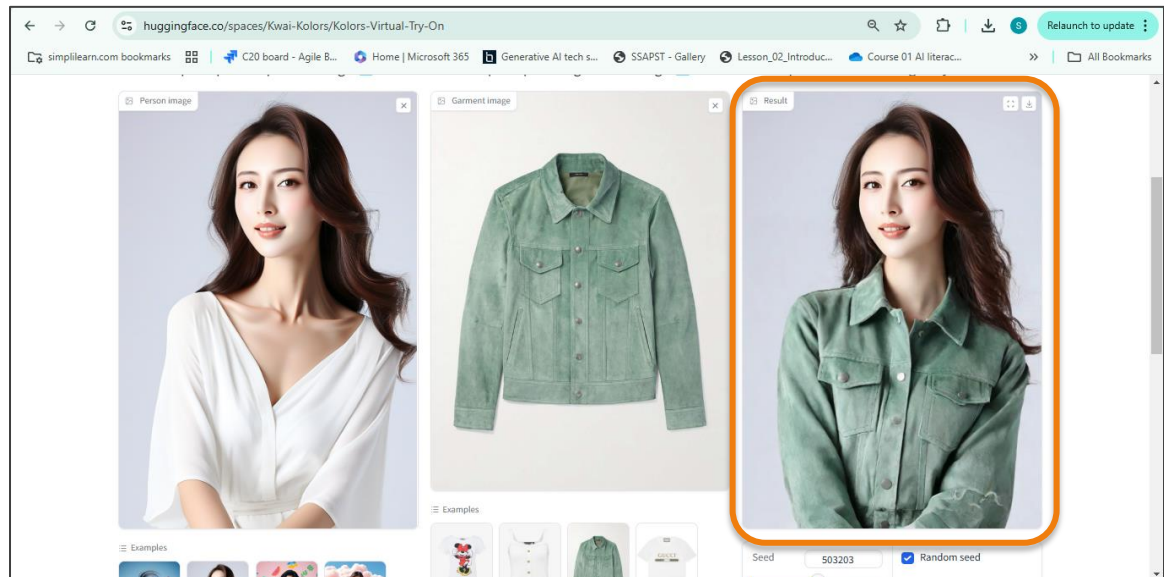




2.2.3 Adjust the features in **Step 3** according to your preference and click on **Run**



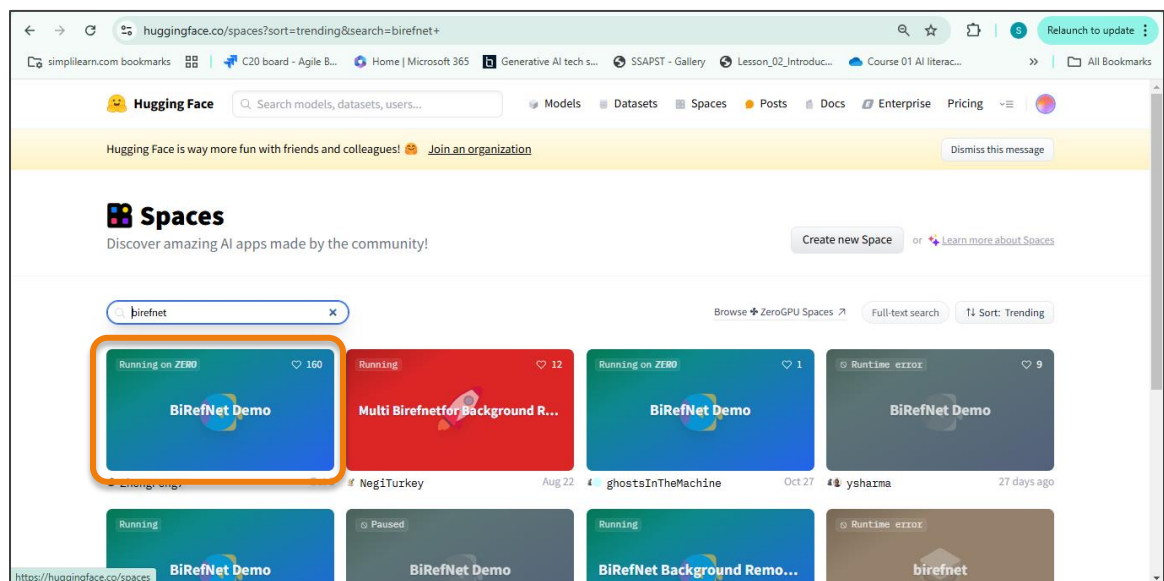
The output is shown below:



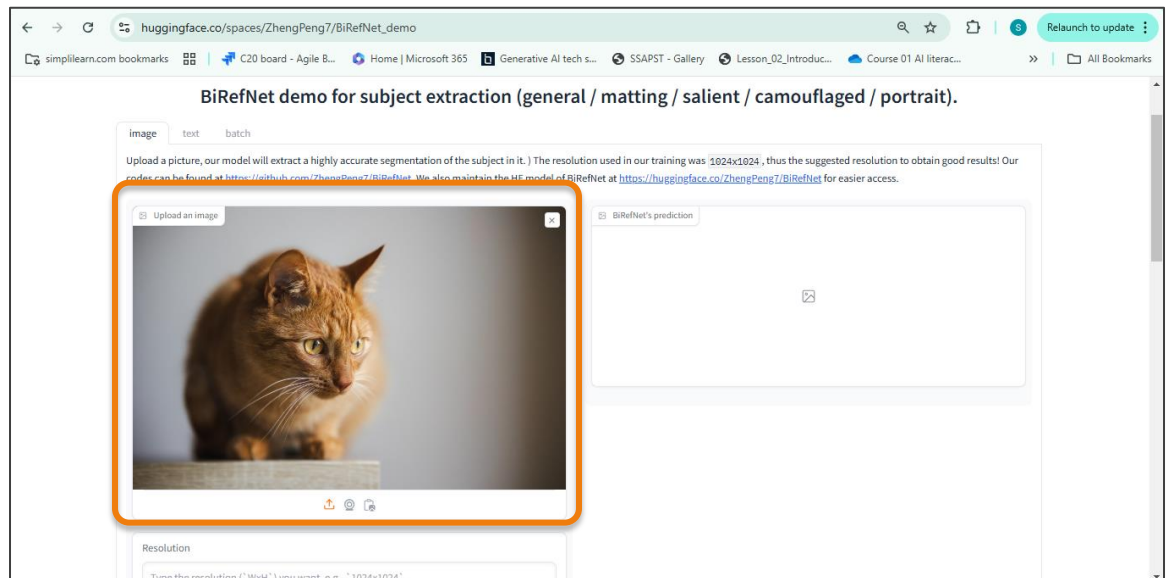
2.3 BiRefNet Demo: Removes image backgrounds quickly and cleanly

Business impact: Streamlines marketing content creation by producing professional product visuals

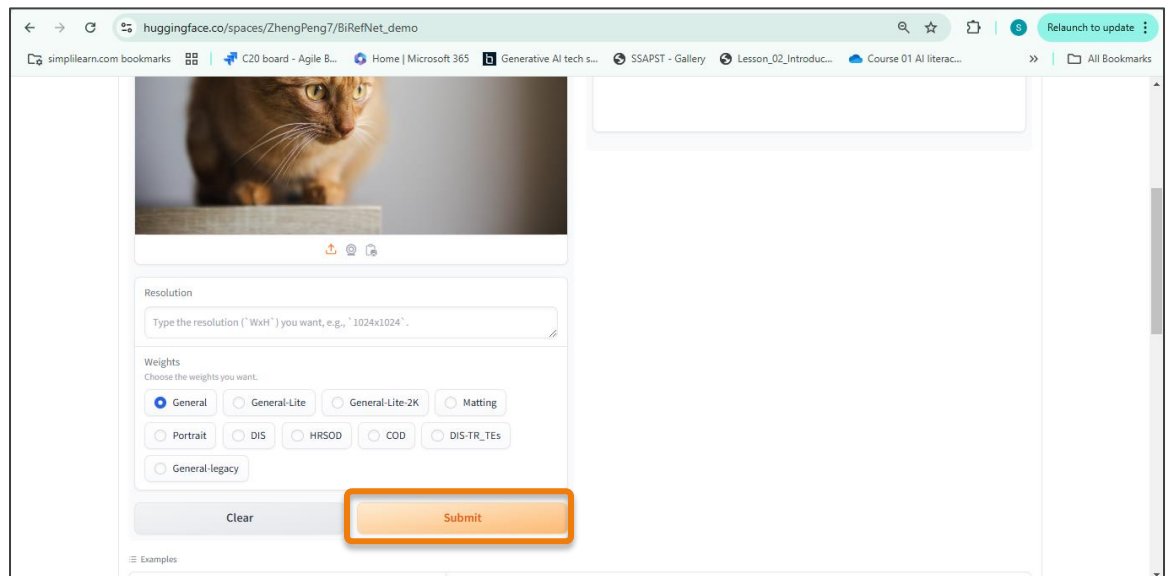
2.3.1 Type **BiRefNet** in the search bar and choose any model widget with the **Running** label in the top left corner

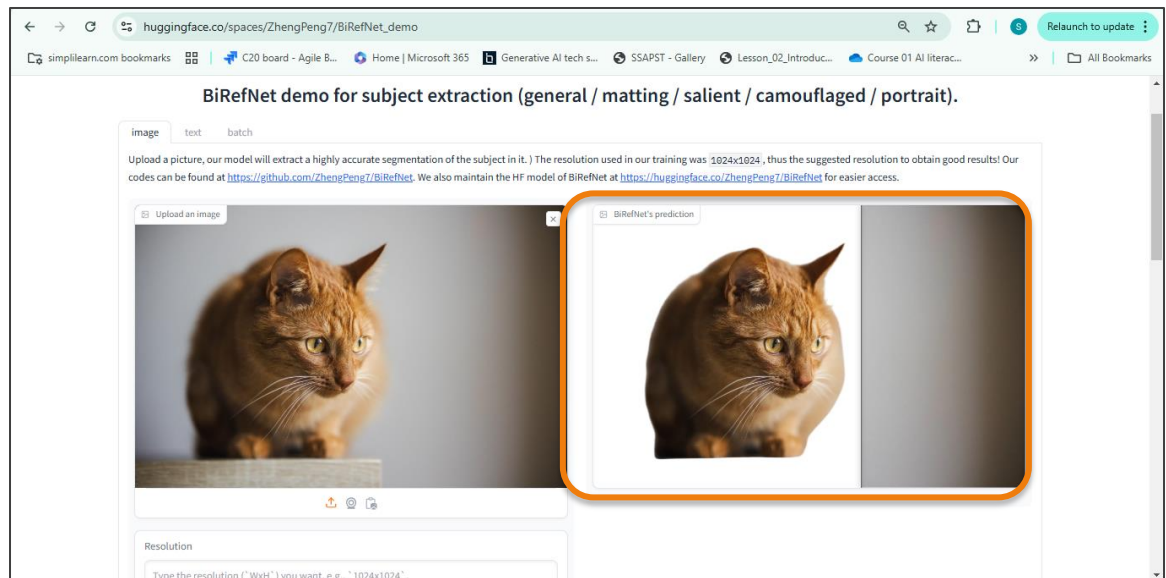


2.3.2 Upload any photo containing an object or a person. For example, a portrait photo or product image



2.3.3 Click **Submit** and view the edited image output

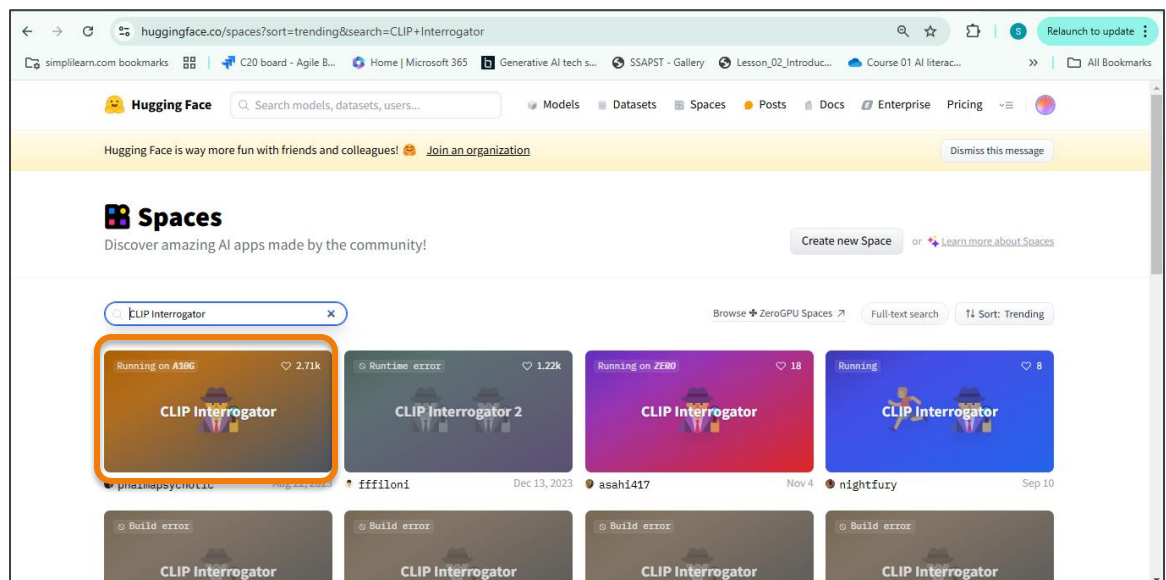




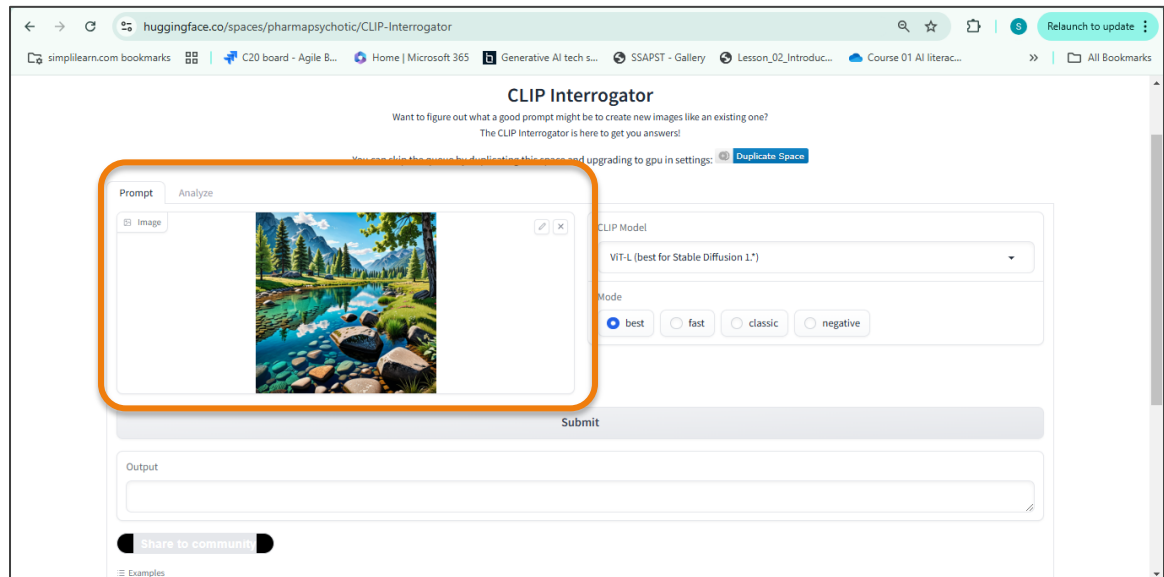
2.4 CLIP Interrogator: Generates descriptive tags for images

Business impact: Generates metadata automatically, improving SEO and digital asset management

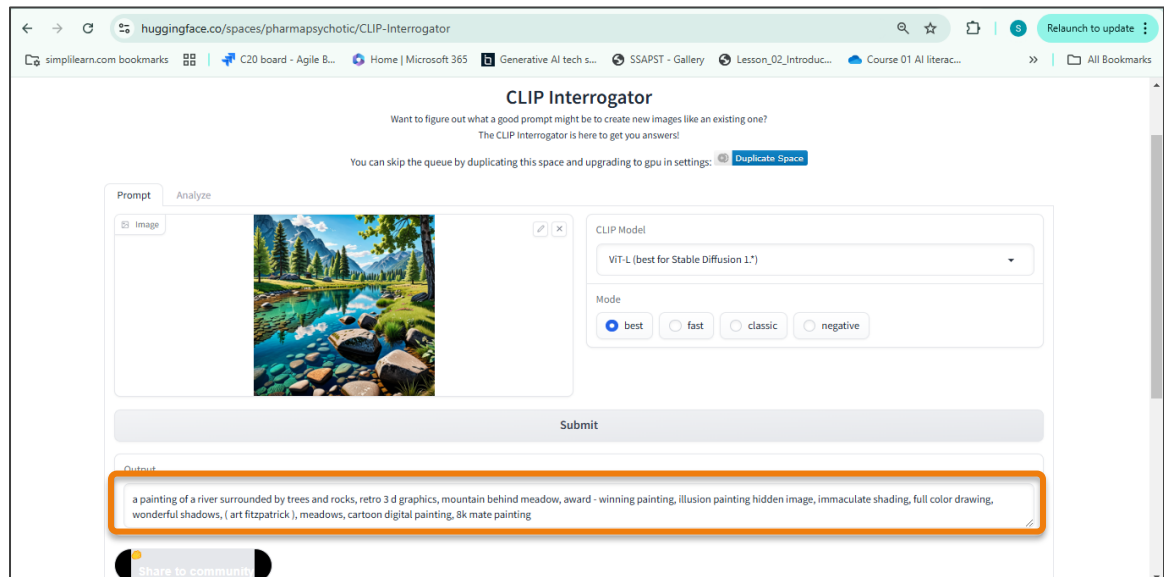
2.4.1 Type **CLIP Interrogator** in the search bar and choose any model widget marked as **Running** in the top left corner



2.4.2 Upload an image like a landscape photo or product image



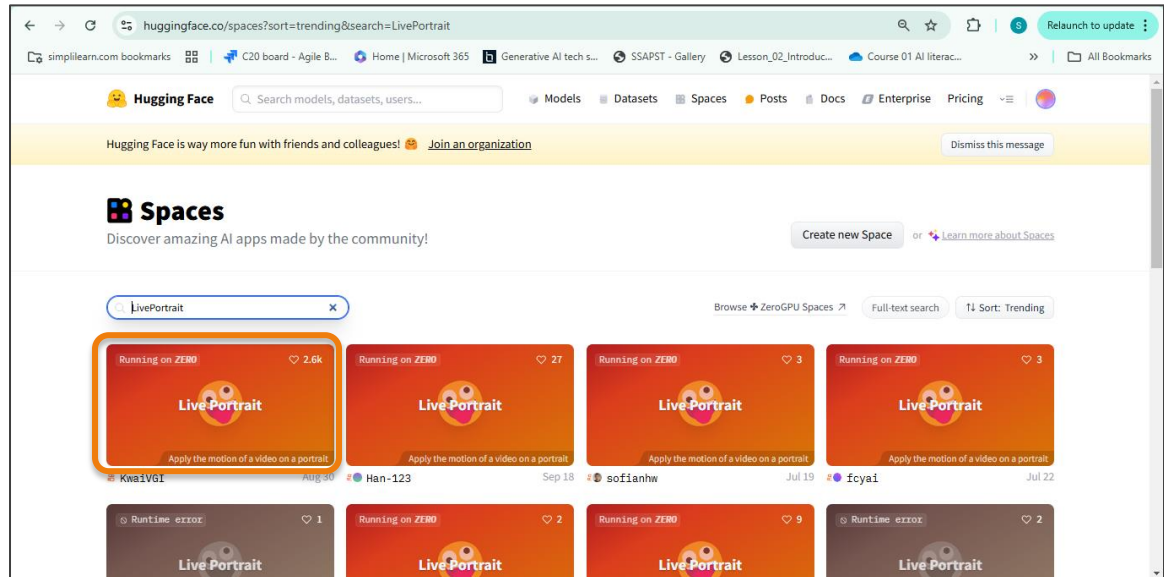
2.4.3 Click on **Submit** and review the AI-generated description



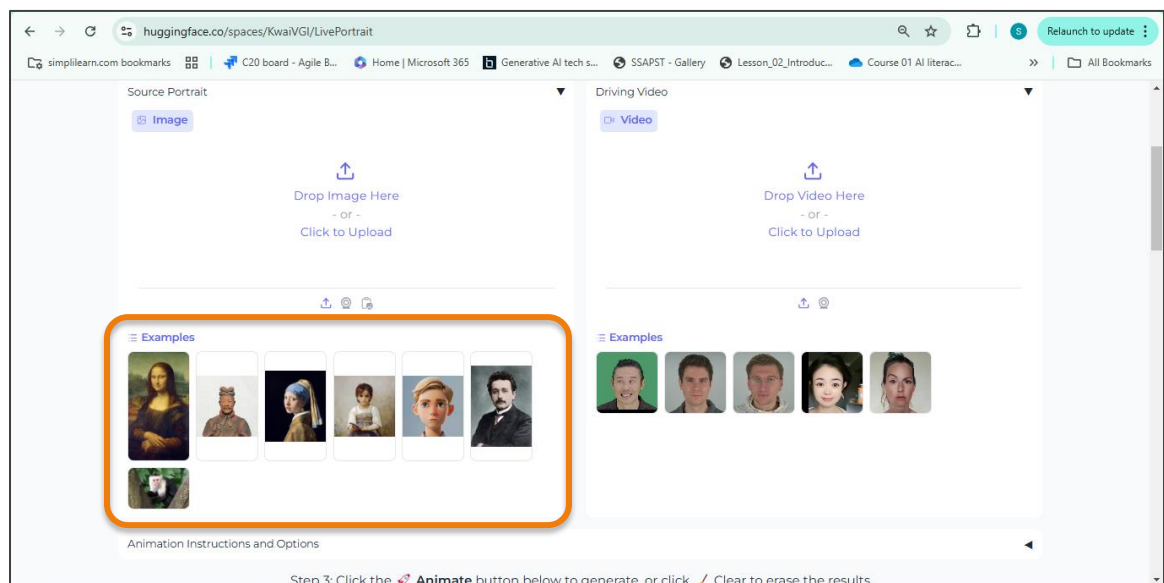
2.5 LivePortrait: Animates still images into engaging avatars

Business impact: Adds dynamic, personalized content to marketing or training material

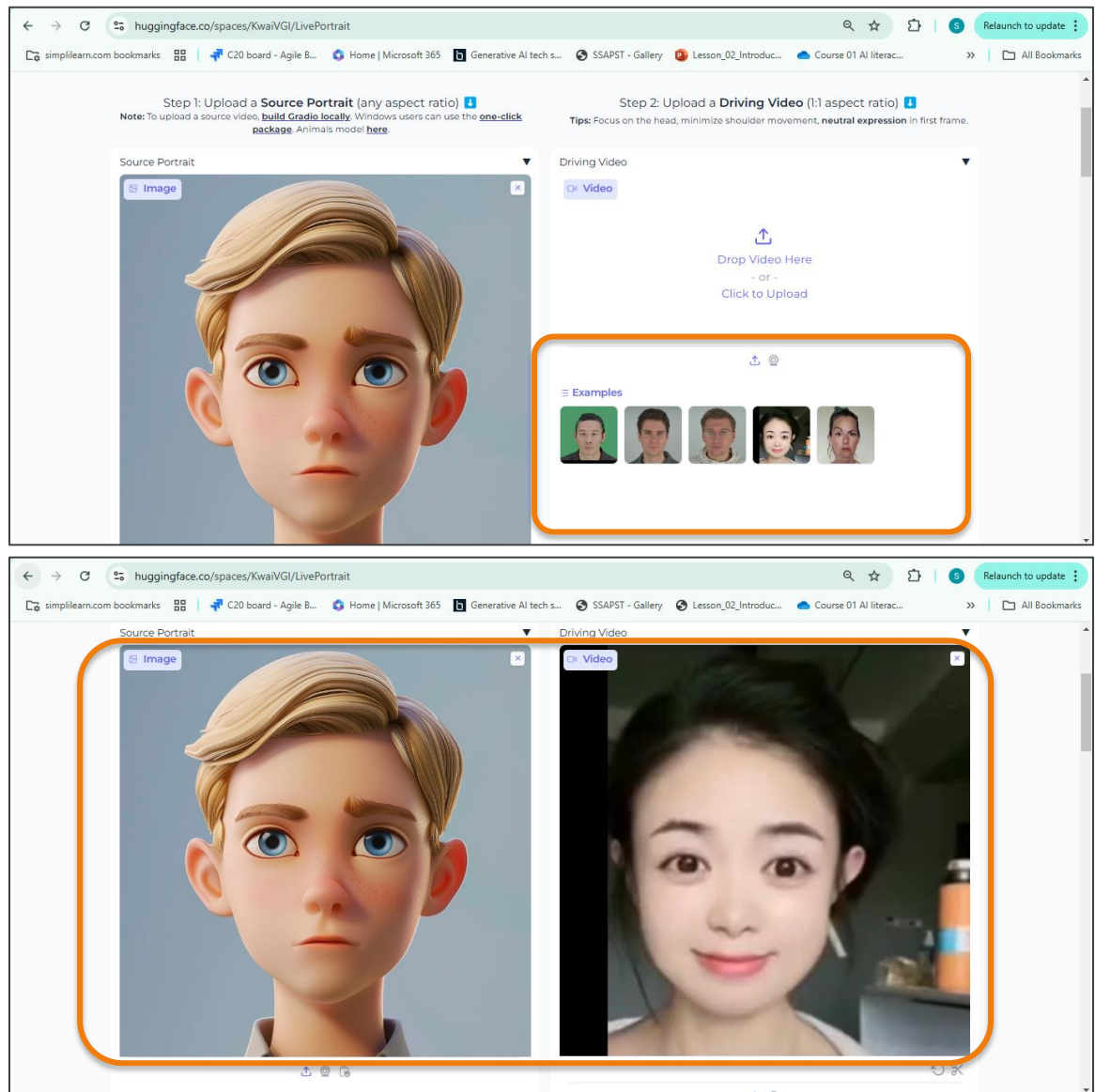
2.5.1 Type **LivePortrait** in the search bar and choose any model widget with the **Running** label in the top left corner



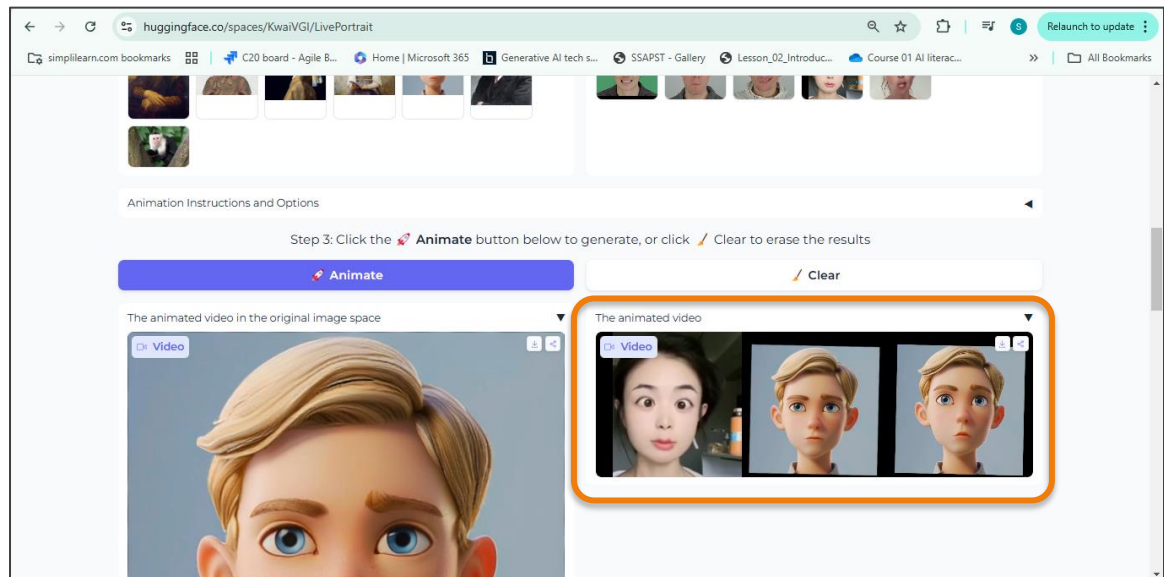
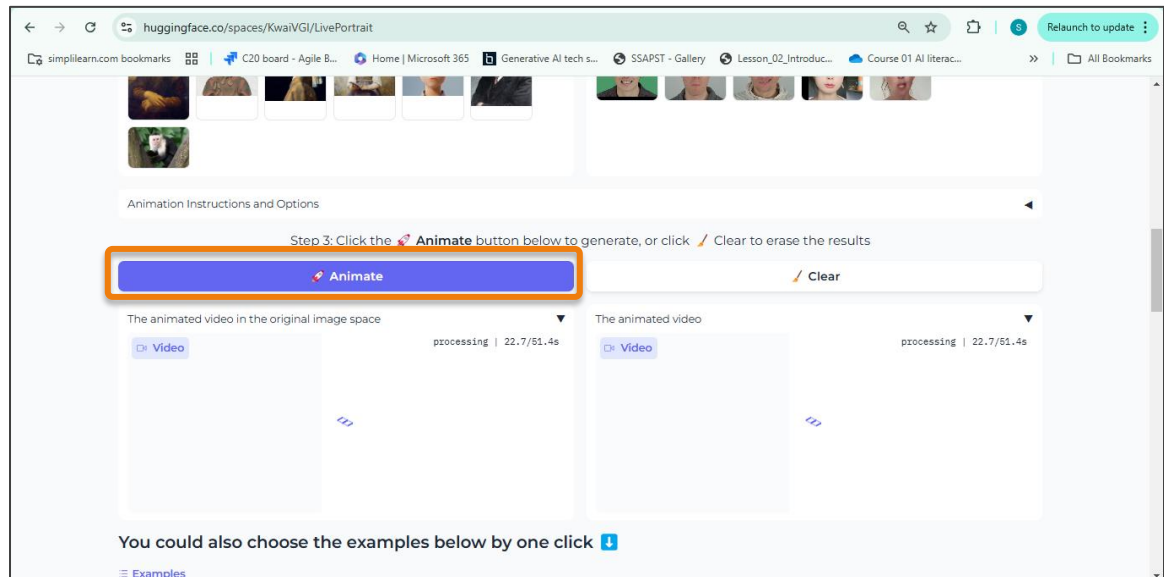
2.5.2 Upload a **Source Portrait** image of your choice or use an example image as a placeholder



2.5.3 Upload a **Driving Video** of your choice or use an example video as a placeholder



2.5.4 Click on the **Animate** button to generate and view the animation



By following these steps, you have successfully explored Hugging Face Spaces to understand how AI tools enhance efficiency, customer experiences, and innovation across industries like e-commerce, marketing, and education, inspiring their adaptation for strategic goals.