Lab 2 Setting Up a Hugging Face API to Access DeepSeek

This tutorial will guide you through the process of applying for a **Hugging Face API key** and using it to connect with the **Deepseek model**.

We choose **Hugging Face** because it provides a unified platform for accessing a vast ecosystem of AI models, datasets, and tools, alongside seamless integration with third-party inference providers. Its user-friendly API simplifies workflow management, resource deployment, and centralized API key administration, while free usage credits lower entry barriers for experimentation. Hugging Face also fosters collaboration through community-driven resources, enabling easy sharing and discovery of pre-trained models and datasets. This combination of versatility, convenience, and a thriving community makes it an ideal choice for scalable model development and inference.

Step 1: Create a Hugging Face Account

- Go to the **[Hugging Face website](#)**.
- Click **Sign Up** in the top right corner.
- Fill in the required details (username, email, and password) and complete the registration process.
- Verify your email to activate your account.

Step 2: Access the API Token

1. Log in to your **Hugging Face** account.

2. Click on your profile avatar in the top-right corner.

3. Select **Settings** from the dropdown menu.

4. Navigate to the **Access Tokens** section.

5. Click **Create New Token**, set a name, and choose the appropriate permissions **(at least select the following permissions).**

6. Copy the generated API for later use. **(The Full API key is only shown once, so make sure you copy it and save it somewhere.)**

Hugging Face currently offers $0.10 of limited free API usage for all types of models. To access higher limits, you need to join the waitlist for prepaid compute credits or subscribe to a Pro plan.

Since we're only performing model inference at the moment, we can try using a third-party inference provider on Hugging Face. Currently, **Together AI** is the only third-party provider on Hugging Face that hosts DeepSeek.

So, what we're going to do here is register for the Together AI API and integrate it with Hugging Face. This allows us to leverage Hugging Face's ecosystem while benefiting from trusted third-party providers.

Together AI provides $1 in free credits, which, when combined with Hugging Face's $0.10 free API usage, gives you a total of $1.10 in free API credits. This should be sufficient to complete your assignment.

Request a Together AI API Key and Add It to Hugging Face

Step 1: Register a Together AI Account

1. Go to the **Together AI website**.
2. Click **Get Started** at the top-right corner to register account.
3. Complete the verification process by checking your email.
4. Log in to your **Together AI** account.

Step 2: Request a Together AI API Key

1. Once logged in, Click on your profile avatar at the top-right corner, and select **settings**
2. go to the **API Keys** section in your account settings.
3. Copy the generated **API key**, as you will need it for Hugging Face.

Step 3: Add the Together AI API Key to Hugging Face

1. Log in to **Hugging Face**.

2. Click on your **profile avatar** in the top-right corner.

3. Select **Settings** from the dropdown menu.

4. Go to the **Inference Providers** section.

5. Find the **Together AI** and click the **key icon**

6. Save the Key.

From now on, you can use your Hugging Face API key to access resources from third-party providers as well. Different third-party provider keys will be stored within your Hugging Face account, allowing for seamless integration and centralized management of API access.

By following this guide, you have successfully:

✅ Generated a **Hugging Face API Key**

✅ Generated a **Together AI API key**

✅ Added the **Together AI API key** to **Hugging Face**

With $1.10 in total free API credits, you should have enough resources to complete your assignment.