**Image Recognition with IBM Cloud Visual Recognition**

Building an image recognition system using IBM Cloud Visual Recognition involves several steps, including setting up an IBM Cloud account, creating a Visual Recognition service, obtaining API keys, and designing a simple web interface for user interaction.

**Step 1: Create an IBM Cloud Account**

If you haven't already have an IBM Cloud account, visit the IBM Cloud website (<https://cloud.ibm.com/registration>) and sign up for a free or paid account.

**Step 2: Set Up IBM Cloud Visual Recognition Service**

Log in to your IBM Cloud account.

Click the "Create Resource" button from the IBM Cloud dashboard.

Search for "Visual Recognition" in the IBM Cloud catalog.

Select the "Visual Recognition" service from the catalog.

Follow the on-screen instructions to create the service. You can choose a pricing plan based on your project's requirements.

After creating the Visual Recognition service, you will have access to API keys and credentials needed for integration.

**Step 3: Obtain API Keys**

From the IBM Cloud dashboard, navigate to your Visual Recognition service.

In the service dashboard, you'll find the API keys and credentials you need for integration. Make sure to keep these keys secure.

**Step 4: Design a Simple Web Interface**

To design a simple web interface for users to upload images and view AI-generated captions, you can use a web development framework or platform of your choice. Here's a basic outline of the steps involved:

**Frontend Development:**

Create an HTML form where users can upload images.

Use HTML, CSS, and JavaScript to design the user interface.

Implement a feature for users to select and upload images from their local device.

Backend Development:

Set up a server using a backend framework or serverless platform (e.g., Node.js, Python, Flask, Express.js).

Implement a route or endpoint to receive and handle image uploads from the frontend.

Use the Visual Recognition API provided by IBM Cloud to send the uploaded image for analysis.

**Integration with IBM Cloud Visual Recognition:**

Use the API keys and credentials obtained in Step 3 to authenticate with the Visual Recognition service.

Implement a function to send the uploaded image to the Visual Recognition service for analysis.

Receive and process the response, which will include AI-generated captions or image labels.

**Display AI-Generated Captions:**

Present the AI-generated captions or labels on the web interface, allowing users to view the results.

You can display the captions alongside the uploaded images for user convenience.

**Testing and Deployment:**

Test the web application thoroughly to ensure it functions as expected.

Deploy the application to a hosting platform of your choice (e.g., IBM Cloud, Heroku, AWS) for public access.