

---

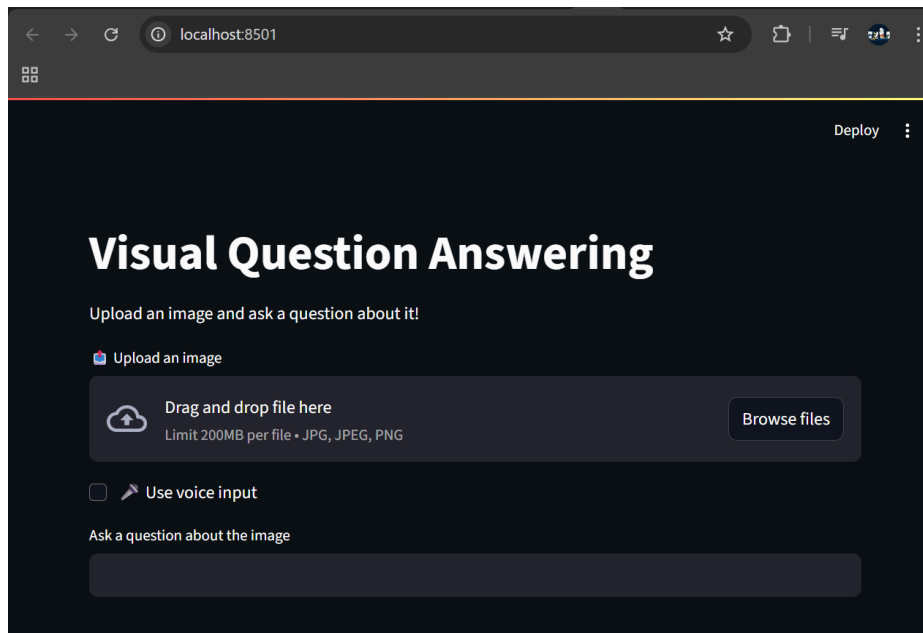
# Documentation for Visual Question Answering

Using BLIP-2 and Streamlit

Maha Qaiser  
22i-2348

## Description

This is a Visual Question Answering web app using BLIP-2 and Streamlit. It lets users upload an image, ask a question (text), and get a generated answer with optional voice output.



## Features

- Upload an image (.jpg, .jpeg, .png)
- Ask a question via text
- AI answers your question using BLIP-2
- Optional voice output using gTTS + playsound

## How to Run

### 1. Clone or Download the Project

```
git clone https://github.com/mahaqj/Visual-Question-Answering.git
```

### 2. (Optional) Create a Virtual Environment

```
python -m venv vqaenv
```

```
vqaenv\Scripts\activate # Windows
```

### 3. Install Dependencies

```
pip install -r requirements.txt
```

### 4. Run the App

```
streamlit run app.py
```

## Example Workflow

1. Upload an image: car2.png
2. Ask: "What colour is the car?"
3. Receive answer like: "blue"
4. Click "Speak Answer" to hear it spoken aloud

\*Note: the voice input is not currently working correctly.

## Example Results

### Test case 1


localhost:8501

Deploy


# Visual Question Answering

Upload an image and ask a question about it!

Upload an image

 Drag and drop file here  
Limit 200MB per file • JPG, JPEG, PNG


Browse files

 image95.png 342.8KB ×

☐ Use voice input


Ask a question about the image

what colour clothes are on the left side of the image?



Uploaded Image

Q: what colour clothes are on the left side of the image?

 Speak Answer

A: blue

## Test case 2


localhost:8501

Deploy


# Visual Question Answering

Upload an image and ask a question about it!

Upload an image

 Drag and drop file here  
Limit 200MB per file • JPG, JPEG, PNG


Browse files

 dog1.jpg 49.3KB ×

☐ Use voice input

Ask a question about the image

what animal is this?



Uploaded Image

Q: what animal is this?

Speak Answer

A: a dog