# Build with AI

## Gemini Show & Tell

# PharmaScan

Extract medicine info with Gemini

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# Why PharmaScan?

# PharmaScan

- Have you ever stumbled upon a medication tucked away in your first-aid kit or medicine cabinet and wondered, **"What is this for again?”**
- PharmaScan is here to bridge that gap between medications and understanding.
- It empowers individuals to easily access crucial information about their medications by simply using their smartphone camera.
- With a quick scan, PharmaScan provides clear and concise details about the medication, including:

**Purpose**
Why it is used, conditions it treats

**Dosage**
Recommended dosage frequency for safe use

**Usage Guidelines**
Dosage forms like tablet, capsule, liquid

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# Inspiration behind PharmaScan

- Inspired by the rising demand for reliable medication information, particularly among those with limited healthcare literacy or facing language barriers.
- Provide quick information about medicines to the users regardless of their medical background.
- Leveraging technology in healthcare: The image recognition and text extraction capabilities of Gemini Pro Vision model provided the foundation to create an accessible and efficient tool.

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# Tools & Products

- PharmaScan is available on Android and Hugging Face 🤗 Spaces.
- Under the hood, PharmaScan uses the Gemini Pro Vision model to perform OCR and identify name of the medicine and provide its details.

**Products used:**

Gemini API

Google Colab

Google Cloud

Android Studio

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## <Behind the code>

Android SDK

```
// Configure API key and model.
val generativeModel = GenerativeModel(
    modelName = "gemini-1.0-pro-vision-latest",
    apiKey = BuildConfig.apiKey
)

// Pass the input image and text prompt.
val inputImage: Bitmap = // ...
val inputContent = content() {
  image(inputImage)
    text("Write a prescription in pointer format ordered by name of
medicine, symptoms, primary diagnosis, usage and dosage of medicine in the
image?")
}

// Generate response.
val response = generativeModel.generateContent(inputContent)
print(response.text)
```

Python

```
# Install the Gen AI SDK.
!pip install -q -U google-generativeai

import google.generativeai as genai
from PIL import Image

# Configure the API key.
genai.configure(api_key=API_KEY)

# Configure the model.
model = genai.GenerativeModel(model_name='gemini-pro-vision’)

# Load the image.
img = Image.open('/content/image.jpg’)

prompt = "Identify the place from the image."

# Give the input image and prompt, get response.
response = model.generate_content([prompt, img], stream=True)

# Print the response.
response.resolve()
print(response.text)
```

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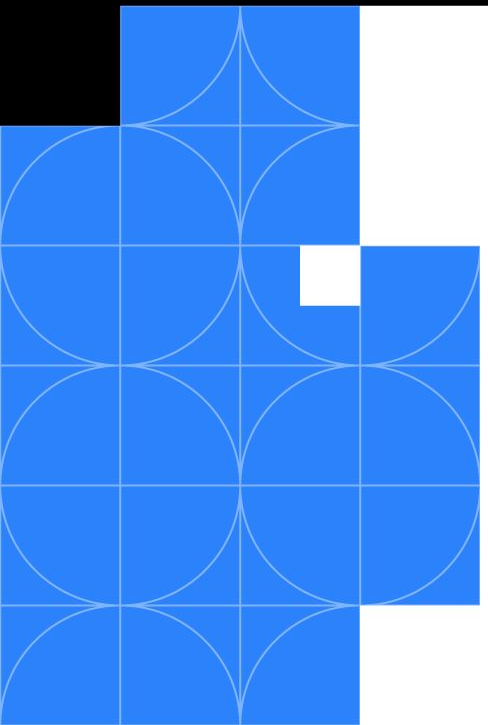
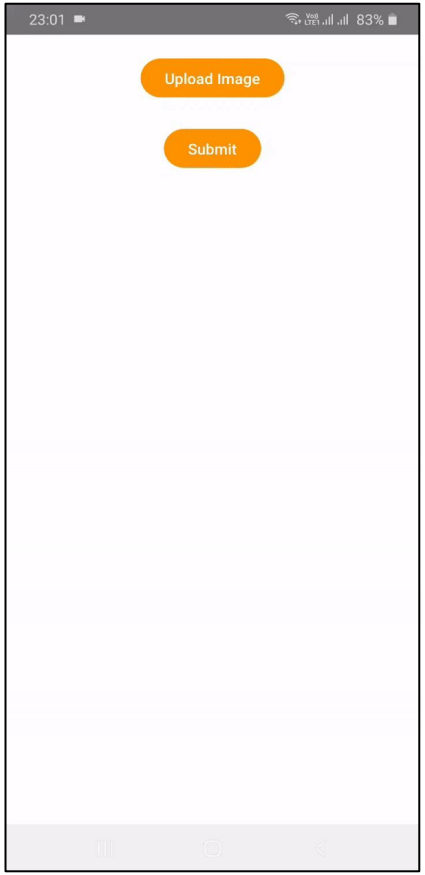


## LIVE Demo

# 💊 PharmaScan : Extract medicine info using Gemini




PharmaScan is an Android application that leverages the Gemini Pro Vision model to identify medicines and provide their details such as usage, dosage, diagnosis, etc. on the go.

Check out on GitHub:
https://github.com/NSTiwari/Medicine-Scan-with-Gemini

Try it on Hugging Face 🤗:
https://huggingface.co/spaces/Aashi/Medicine-Prescription-with-Gemini

Watch the complete demo on YouTube:
https://www.youtube.com/watch?v=Q06ABLwFGTQ

If you liked our work, don't forget to give a ⭐
to the repository.

# 👨‍🌾 FarmScan : Farmer’s Digital Assistance built with Gemini

FarmScan is an implementation of the Google Pro Vision model API on Android to recognize the freshness of fruits/vegetables, their approximate market value, shelf life, and a lot more insights to help farms plan the cultivation/selling of crops better.

Check out on GitHub:
https://github.com/NSTiwari/FarmScan-using-Gemini

Try it on Hugging Face 🤗:
https://huggingface.co/spaces/Aashi/FarmScan

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# Future Prospects

## Future Prospects:

As of now, PharmaScan is just a proof-of-concept but we would love to see it getting enhanced with community contributions.

- **Personalized medication management:** Providing reminders and alerts for medication schedules, potential drug interactions, and refills.

- **Accessibility features:** Developing features for visually impaired users, such as audio output of medication information.

- Combined capabilities of Gemini's vision processing and Gemma's text interpretation and response generation.

PharmaScan is open-sourced on GitHub.

We welcome contributions to enhance this project with new features. If you have any interesting ideas to add, please feel free to submit a pull request.

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## Thank You.