TALK TO CODE

UNDERSTANDING THOUSANDS OF LINES OF CODE JUST GOT EASIER

TEAM : NICE VIBERS

PROBLEM STATEMENT : INNOVATION

AI POWERED DEVELOPER GURU

BRIEF :

- Developers spend 60% of their time reading and understanding code.
- Reading large, complex, and undocumented codebases, as well as other developer’s code, can be hectic, time-consuming, and hinder productivity.
- A big challenge for any new developer hire is to go through hundreds and thousands of lines of cluttered, undocumented code. It slows down the speed of developer to understand and modify the code.
- ***TalkToCode*** addresses these major pain points by helping you understand large codebases easily. You can generate documentation and ask any doubts or queries you have about the codebase.

OPPORTUNITY

How will it be able to solve the problem?

- Reducing time spent on understanding code
- Read & Understand Complex, Undocumented Codebases
- Enhances Code Efficiency
- Generates Documentation
- Asking queries about the codebase

How different is it from any other existing ideas out there?

- Automated Workflow: Debugging, optimization, merge requests.
- Multi-channel Access: VS Code & web integration.
- Comprehensive Support: In-depth query solving & references.

Revenue Stream : Subscription-based servicing B2B(Organizations) and B2C Clients(Developers)

FEATURES

01

AI Help:

TalkToCode is like a smart coding buddy that answers your questions about the code.

02

Navigate Codebase:

It helps you find where things are in the code, like specific functions or files.

03

Auto Documentation:

It makes documentation for your codebase automatically, so it's easier to understand.

04

Debugging:

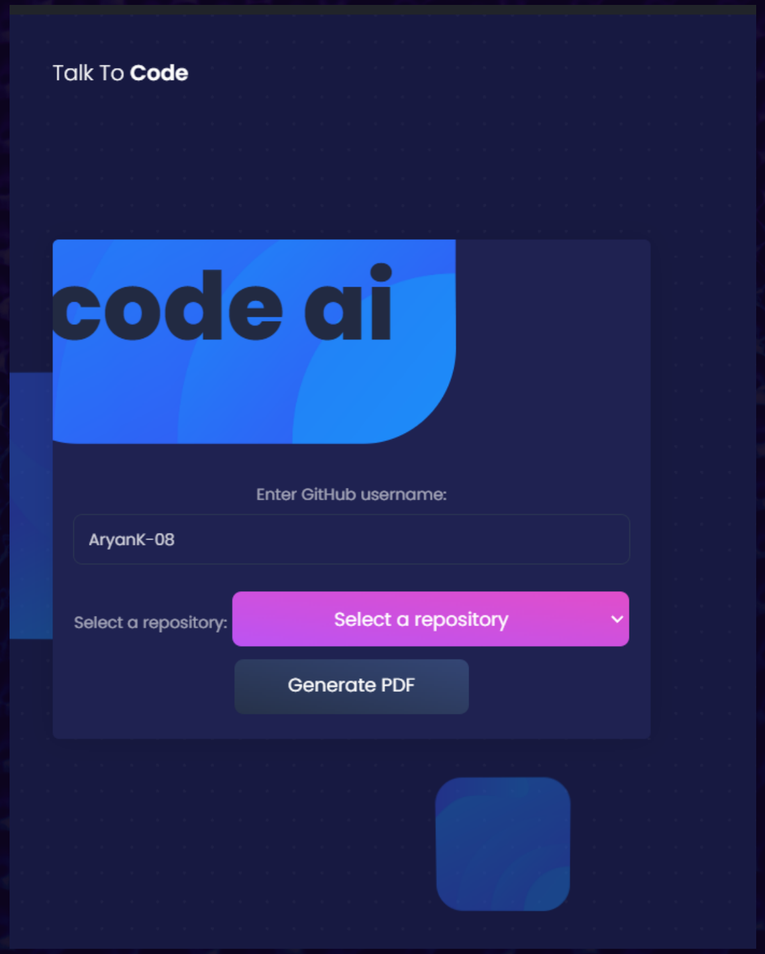
Automatically detects inefficient code, suggests improvements, and, with user consent, sends a merge request to the repository.

05

Codebase Design Map:

Use **Visual maps** to quickly understand code ecosystem, speed up feature development.

OUR PRODUCT :



Code

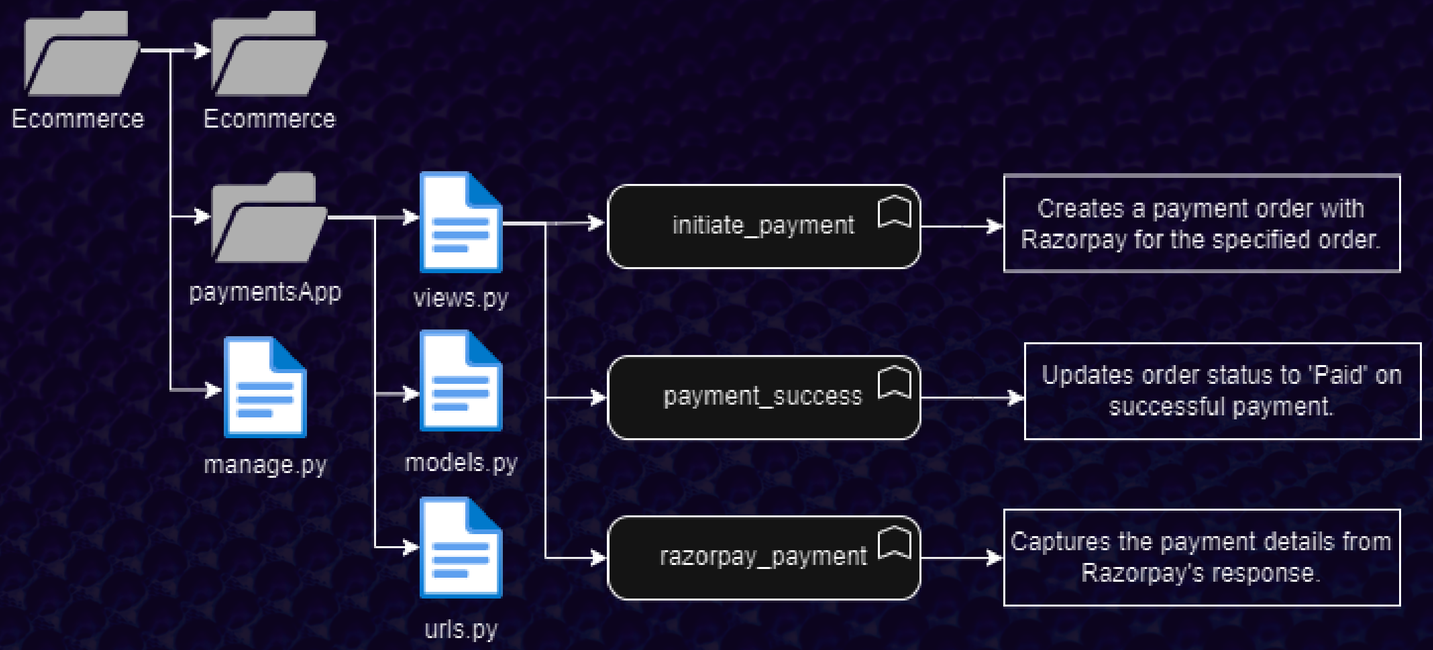
```
ef upload_image(request):
    if request.method == 'POST':
        form = ImageUploadForm(request.POST, request.FILES)
        if form.is_valid():
            uploaded_image = form.save(commit=False)
            result = plant_recognition_model(uploaded_image.image)
            return render(request, 'result.html', {'result': result, 'uploaded_image':
uploaded_image.image.url})
    else:
        form = ImageUploadForm()
    return render(request, 'upload.html', {'form': form})
```

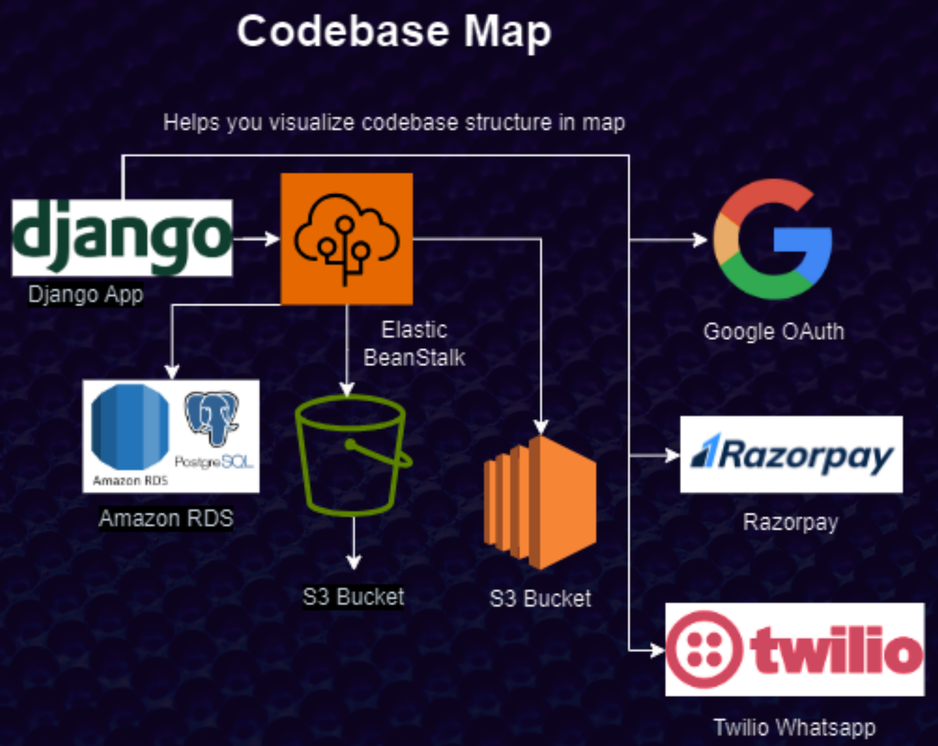
Explaination

The `upload_image` view function first checks if the request is a POST request, indicating that a form has been submitted. If so, it instantiates the `ImageUploadForm` with the POST data and files, and checks if the form is valid. If the form is valid, it saves the uploaded image without committing to the database, calls the `plant_recognition_model` function to make a prediction, and renders the `result.html` template with the prediction result and uploaded image URL. If the request is not a POST request, the empty `ImageUploadForm` is displayed.

In summary, the code snippet you provided uses a pre-trained machine learning model to classify

IMPLEMENTATION

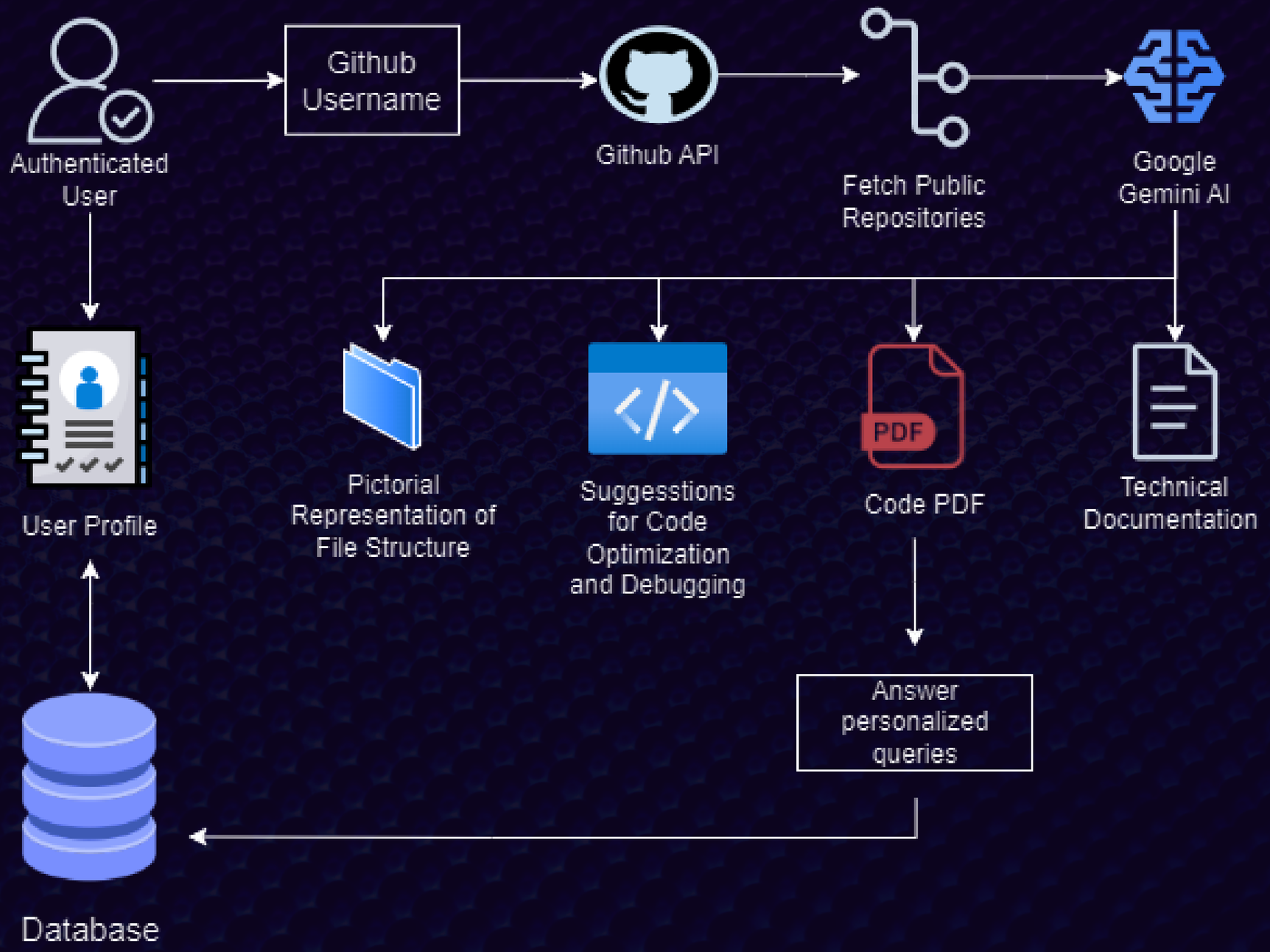




CODEBASE MAP FEATURE

- Works with multiple programming languages(.py, .dart, .js) & frameworks like django, flutter, MERN etc.
- We have more than 1000+ active users using TalkToCode.

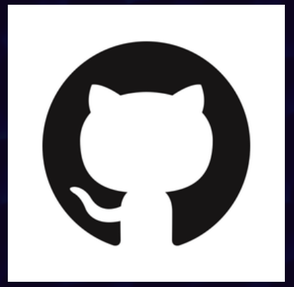
FLOW DIAGRAM



TECH STACK

Google Gen AI: Utilizing GeminiAI technology, the code extracted from a GitHub repository is transmitted for analysis. Gemini AI is used to interpret user doubts, and furnish ***automated documentation*** and ***debugging*** assistance.

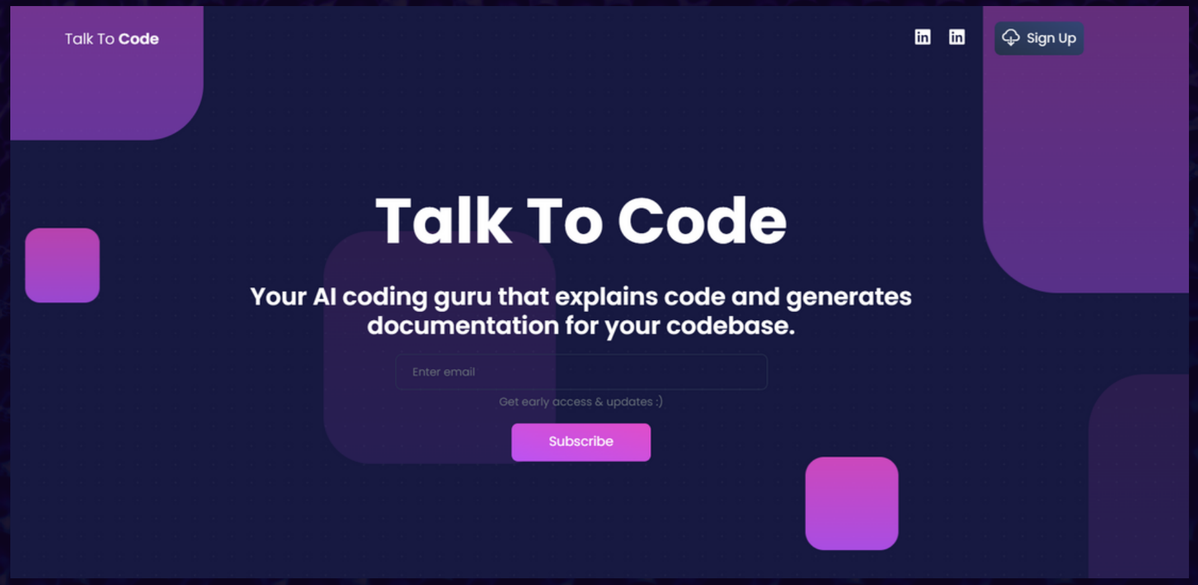
Fine-tuning Gemini AI transforms it into a **developer LLM**, serving as a concise and powerful code expert for developers.



VIDEO IMPLEMENTATION : LINK

PROJECT DETAILS : LINK

LIVE DEMO : LINK



ESTIMATED COSTING :

CLOUD SQL: ₹200/GB, APP ENGINE: ₹43,000/YEAR, GEMINI: $1/M INPUTS, $2/M OUTPUTS.