



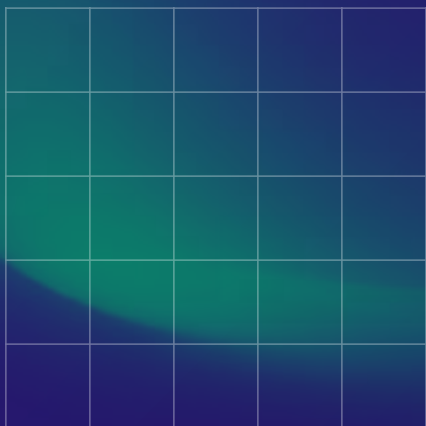
# GDGHack!

Build with AI Hackathon

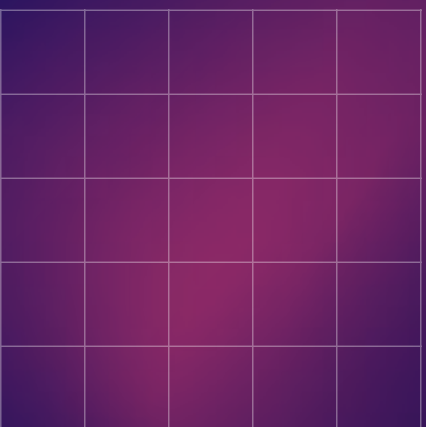
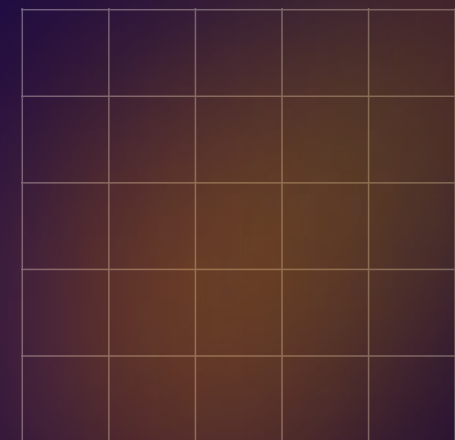


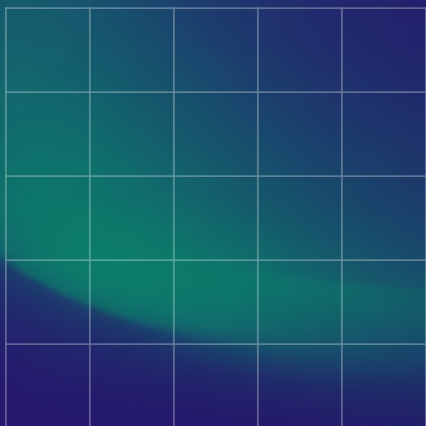
 [lector.ai](https://lector.ai)



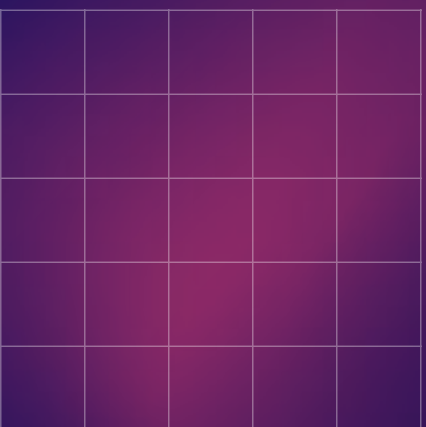
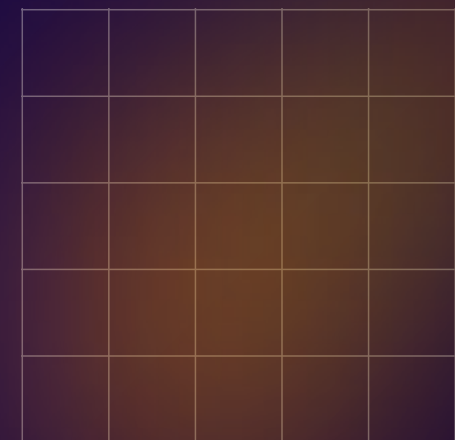


***ARE YOU  
READY?***





# TASK AND THEME OF GDGHACK '25







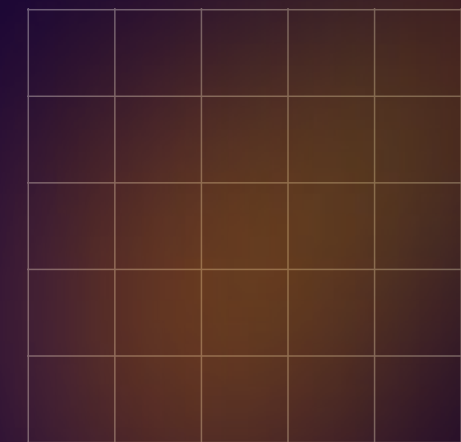
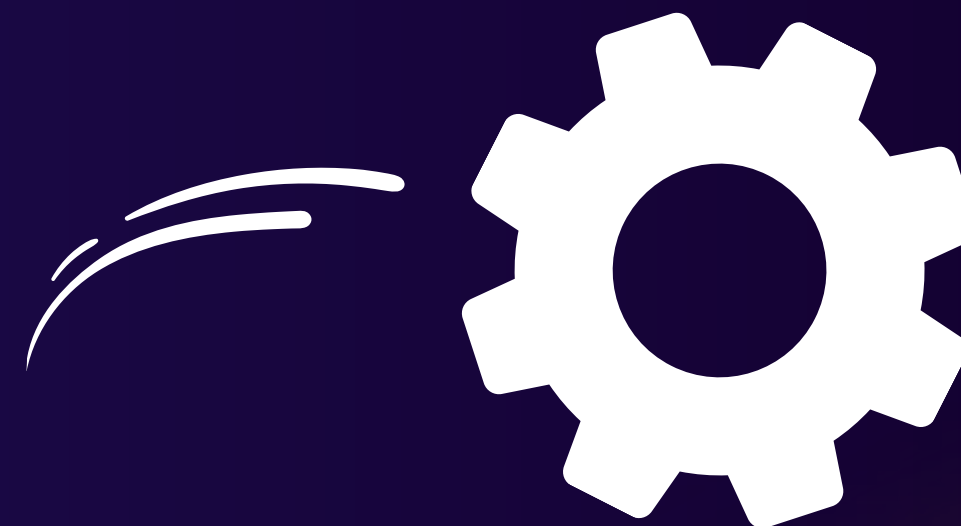
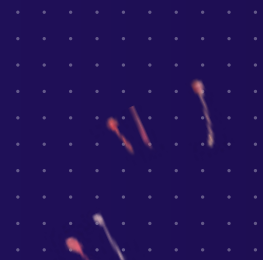
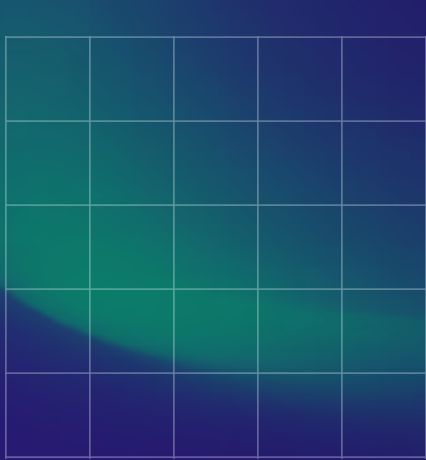
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Build with AI Hackathon

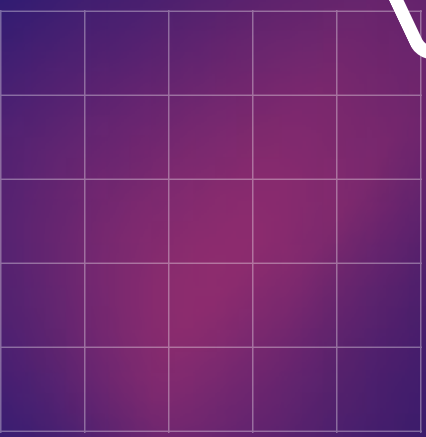
Enes Yusuf Aksay



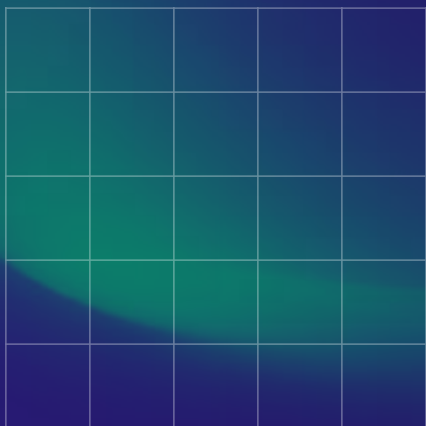
## GDG Lead



# Theme & Task

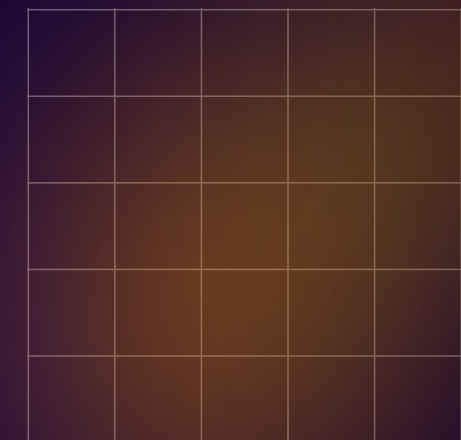






# What is a VLLM?

**A Vision-Language Model (VLLM) is an AI system that can understand and generate responses based on both visual inputs (like images or videos) and textual inputs.**





## Step 1

# Create a VLLM

Students are use or fine-tune a Vision-Language Large Model (VLLM) that is specialized in **extracting and localizing information from documents.**





**Step 1**

## **Create a VLLM**

**Extract.**

**The VLLM should be able to successfully extract  
information from a given scanned document.  
Regardless if it is handwritten or digital.**





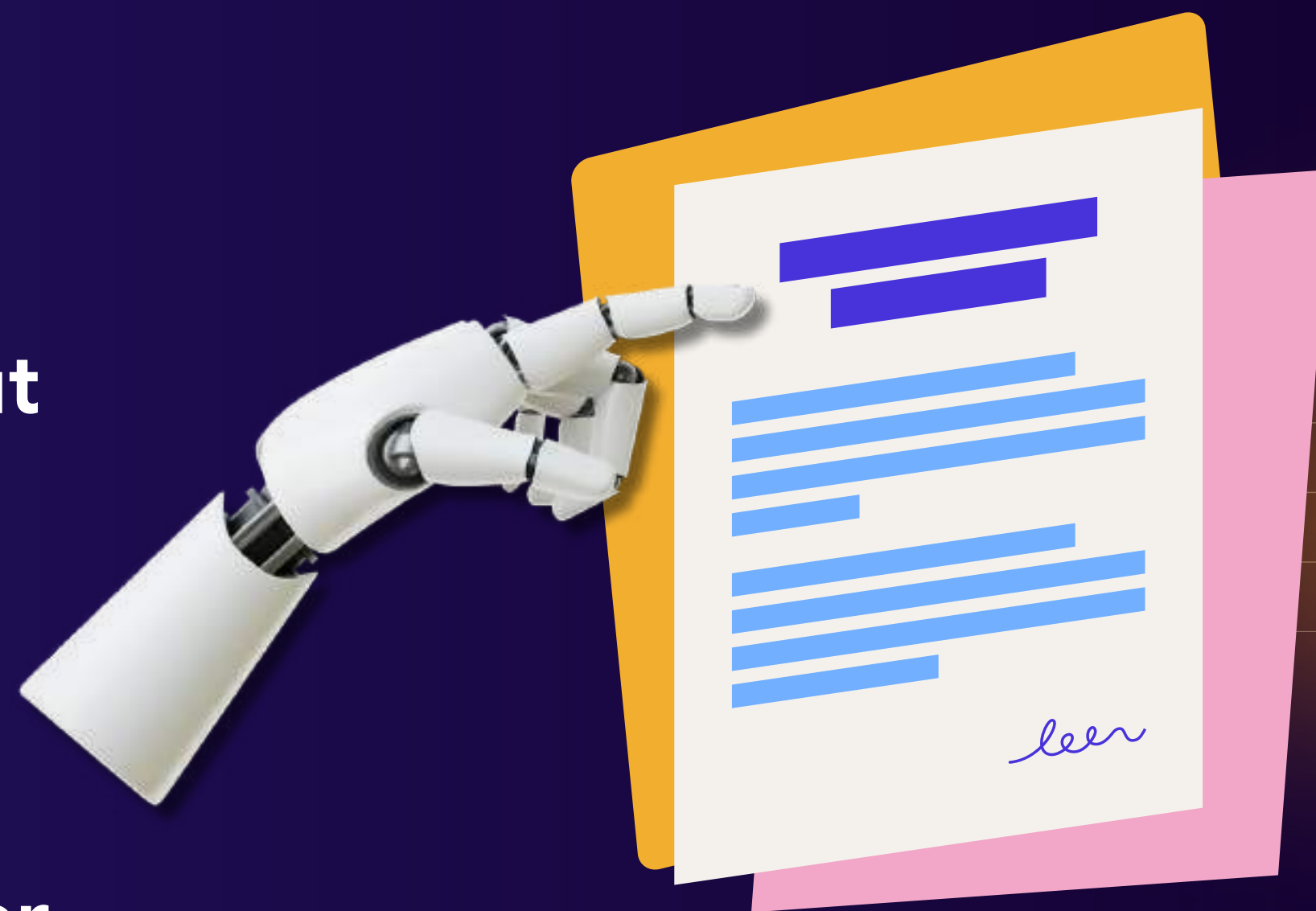
## Step 1

# Create a VLLM

Localizing.

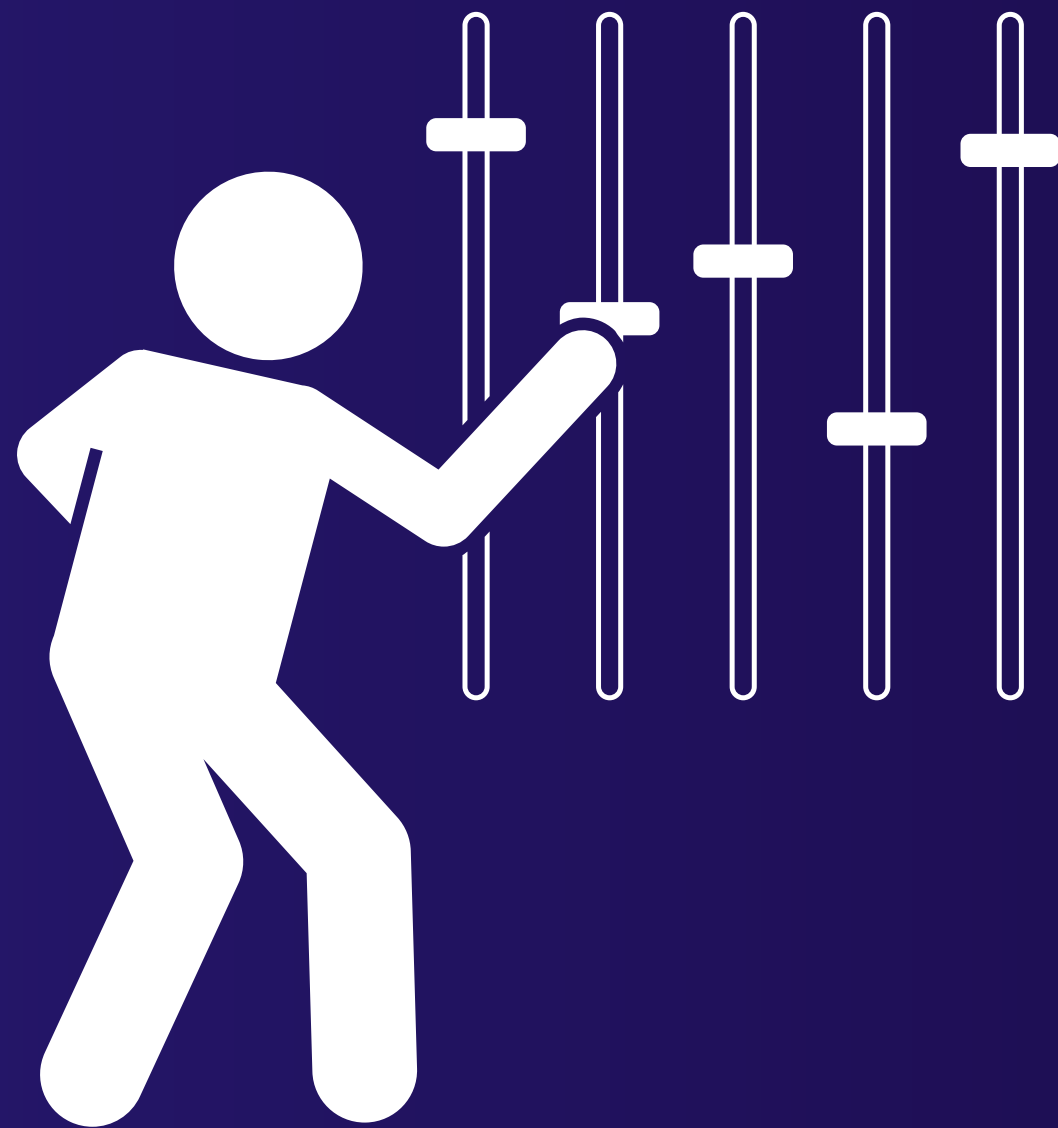
The VLLM should be able to point out where the information it got was extracted from.

This can be a description, or a box drawn on the document, or any other way.



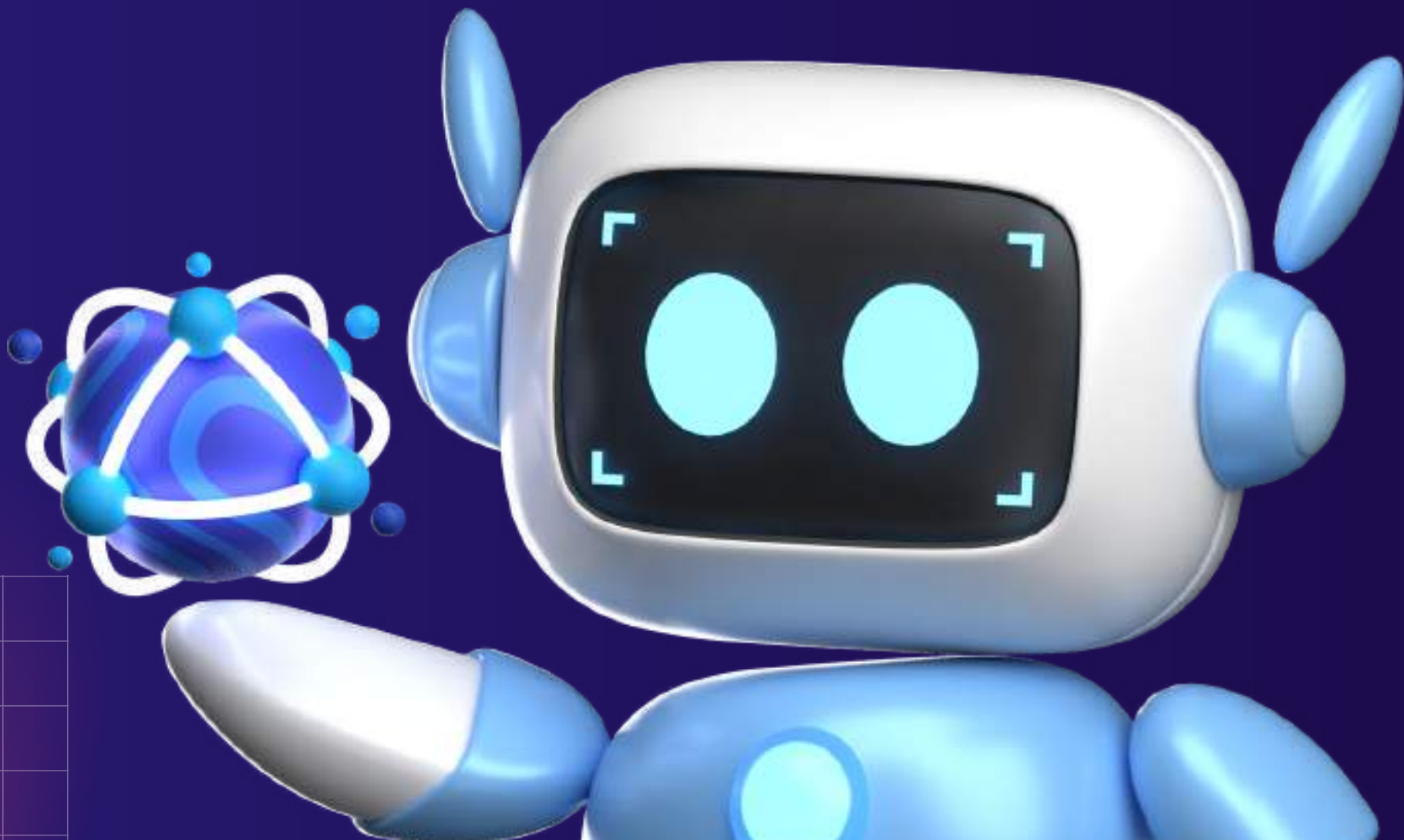
**How?**

Participants can find existing VLLM models, and fine-tune them for the task.



## How?

Test a model with some documents. Compare them, see what works best. Fine tune to figure out what can improve the model further. Iterate until you are satisfied!





## Step 2

# Create an MVP

Students are requested to develop a minimum viable product (MVP), that utilizes the VLLM that they just optimized.

We do not mind how you make it as long as it works!





**MVP Focus**

# EdTech

**EdTech is the combined use of computer hardware, software, and educational theory and practice to facilitate learning and teaching.**



**MVP Focus**

# EdTech

**Example projects could be:  
grading exam papers, reading  
academic papers etc.**



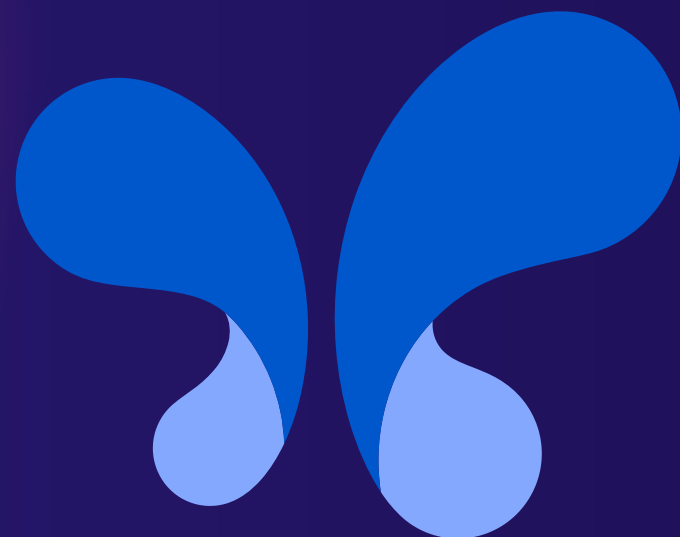
## Task Overview

# Build with AI

Utilize Google's Generative AI technologies while building a project.  
Create impactful products that will create innovation in the chosen field.



Vertex AI



Gemini

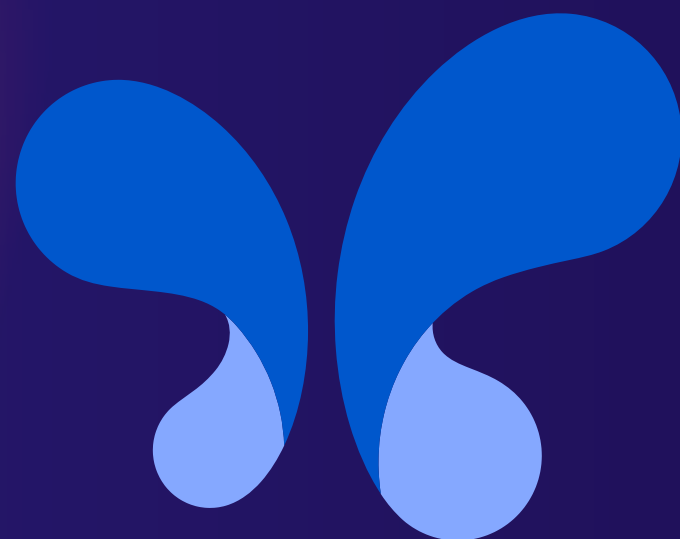
## Task Overview

# Build with AI

You must utilize one Google AI tool for your project.  
Either for the VLLM development, or the MVP.



Vertex AI



Gemini

## Task Overview

# Free Google Cloud Credits!

Scan the QR code to access free tier products of Google Cloud.

Scan the other QR code for a presentation on how to use the credits.

Credits Here



Tutorial Here





# Submission

## Deliverables:

- A Github Repository with the project
- Video - 3 minutes
  - About technical aspects of your VLLM and MVP
- Submission Form



More details can be found in the submission criteria document.



# Criteria

Grading Breakdown	Score
Problem & Project Description - 10%	
Video - 20%	
VLLM Quality - 40%	
Final Product - 30%	
Total score	

\*Using a Google AI Tool is mandatory and the technology should be mentioned in the form and video.

# Recap

**1** Develop a VLLM for extracting and localizing

**2** Develop an MVP that utilizes your VLLM.

**3** Use Google technologies while doing so!





Prizes

1st Place

Direct Interviews from



 lector.ai

Fast-track application processing.  
Skip the coding challenge!

+ Special trophy :)



**Prizes**

**First Three Teams**

**GDG Goodie Bags**

**Filled with a lot of merchandise!**



# Troubleshooting

Our mentors and tech support team are around to  
help you!

For online support, join the Discord server!

