# CREATING RESPONSIBLE AI SOLUTIONS USING AZURE AI CONTENT SAFETY

Naveen Kumar M



# ABOUT ME

#### **Naveen Kumar M**



- Data Engineer
- 13 + Years of Experience
- 2 x C# Corner MVP
- 4 x Azure Certified
- Technical Blogger
- Speaker & Mentor





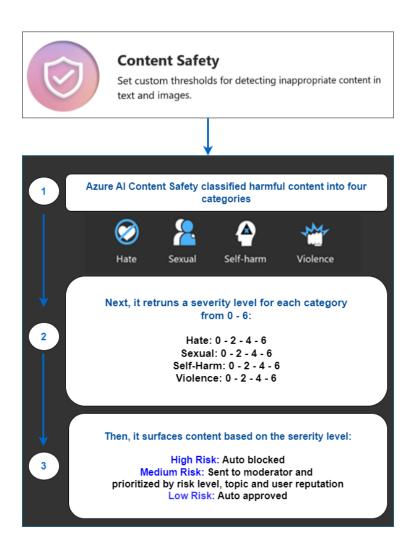
### **AGENDA**

- Regulate Text Content
- Regulate Image Content
- Regulate Multimodal Content
- Detect Protected Material in Text
- Detect Protected Material in Code
- Utilize Prompt Shields
- Monitor Online Activities
- Implement Responsible AI in Content Safety Studio

### AZURE AI CONTENT SAFETY

- Azure AI Content Safety service detects harmful user-generated and AI-generated content in applications and services.
- It provides text and image APIs that allow you to detect harmful or inappropriate material.

### AZURE AI CONTENT SAFETY



### AZURE AI CONTENT SAFETY API'S

Scans text for sexual content, violence, hate, and self-harm with multi-severity levels. Scans images for sexual content, violence, hate, and Image **Detection API** self-harm with multi-severity levels. **Text Blocklist** You can create blocklists of terms to use with the Management Text API. API

### CONTENT SAFETY STUDIO

#### ## Azure Al | Content Safety Studio

#### Get started with Content Safety Studio

#### Safeguard your text content with built-in features

Leverage our abilities to identify harmful text content across over 100 languages, and address concerns related to jailbreaking, hallucinations, and copyright infringements.



#### Moderate text content

Run moderation tests on text contents. Assess the test results with detected severities. Experiment with different threshold levels.

Try it out



#### Groundedness detection

Groundedness detection detects ungroundedness generated by the large language models (LLMs).

Private preview - sign up.



#### Protected material detection for text

Use protected material detection to detect and protect third-party text material in LLM output.

Try it out



#### Protected material detection for

PREVIEW

Run tests on code generated by LLM and identify whether the code already exists in GitHub repo.

Try it out



#### Prompt Shields

Prompt Shields provides a unified API that addresses Jailbreak attacks and Indirect attacks.

Try it out

#### Safeguard your image content with built-in features

Utilize these abilities to identify damaging content within images or multimodal formats such as memes.



#### Moderate image content

Run moderation tests on image contents.

Assess the test results with detected



#### Moderate multimodal content

PREVIEW

Run moderation tests on image and text

### SEVERITY LEVELS

Set the severity thresholds for each category and select Run test to see how the results change.

Reset to default

Severity ① SAFE LOW MEDIUM HIGH

Violence ① W P P P

Self-harm ① W P P

Sexual ① W P

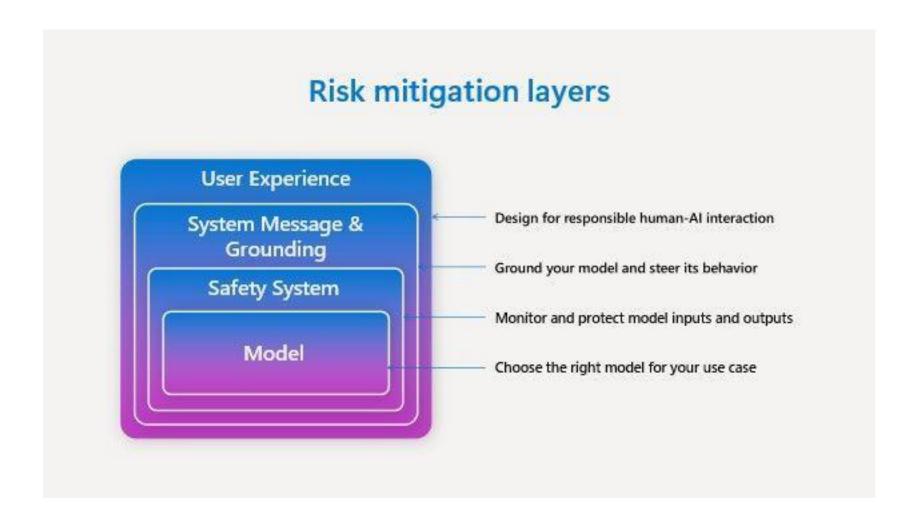
Hate ① W P P

Sexual ① W P

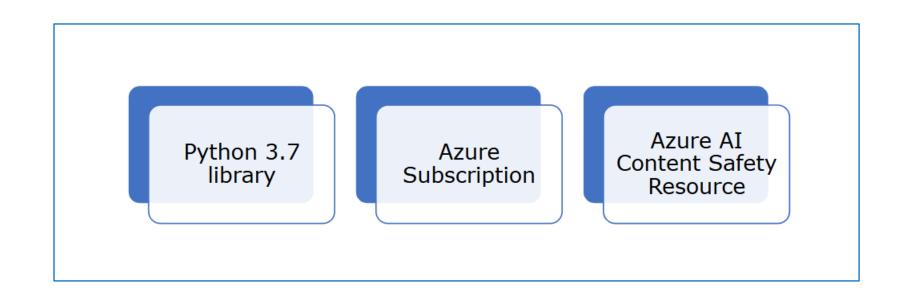
Hate ① P

View code Configure filters Use blocklist Set the Severity thresholds for each category. Content with a severity level less than the threshold will be allowed. Learn more about categories and threshold Threshold level Category D Medium ✓ Violence Allow Low / Block Medium and High Medium ✓ Self-harm Allow Low / Block Medium and High Medium Sexual Allow Low / Block Medium and High Medium ✓ Hate Allow Low / Block Medium and High

### RESPONSIBLE AI FOR AZURE AI FOUNDRY



# **PREREQUISITES**



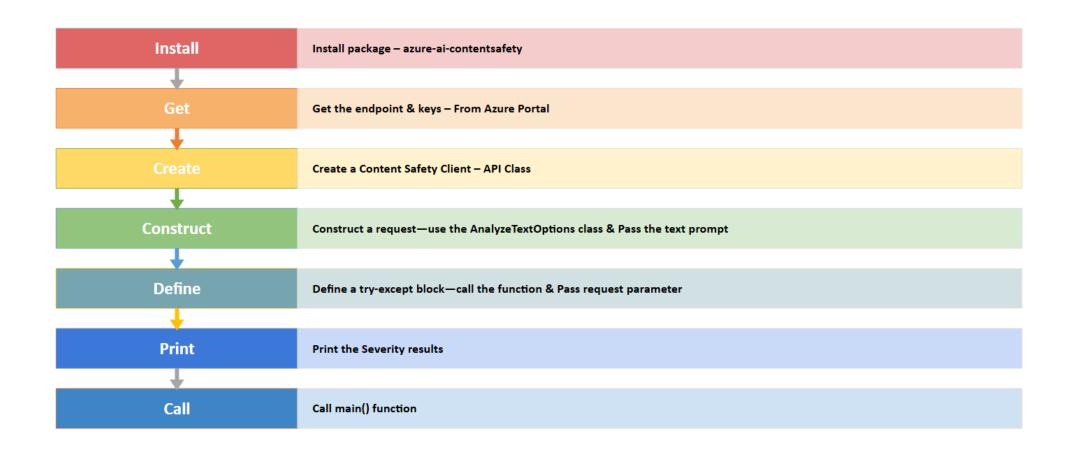
### CLIENT LIBRARY FOR PYTHON

Azure AI Content Safety Client Library for Python

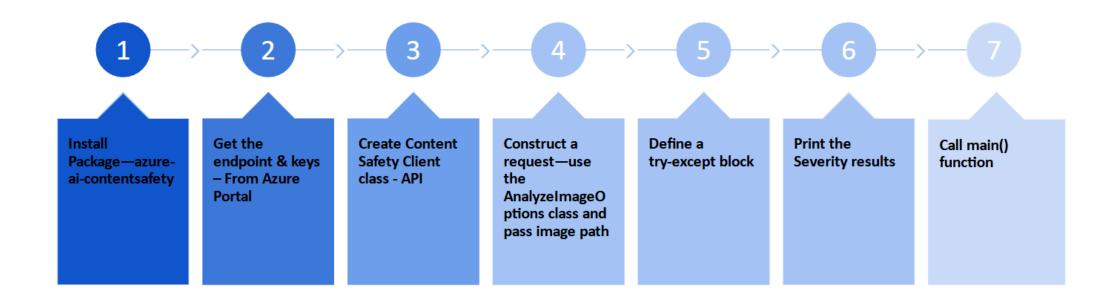
```
PROBLEMS OUTPUT DEBUG CONSOLE <u>TERMINAL</u> PORTS AZURE COMMENTS

PS C:\Users\navin> pip install azure-ai-contentsafety
```

# CREATING TEXT MODERATION



### CREATING IMAGE MODERATION



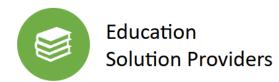
# CONTENT SAFETY USE CASES











# CONTENT SAFETY USE CASES



Online marketplaces: Moderate product catalogs and other user-generated content.



Gaming companies: Moderate user-generated game artifacts and chat rooms.

Social messaging platforms: Moderate images and text added by their users.



Enterprise media: Implement centralized moderation for their content.



K-12 education: Filtering out content that is inappropriate for students and educators.

# **PRICING**

Region:		1	Currency:	
	East US 🗸		United States – Dollar (\$) USD	~

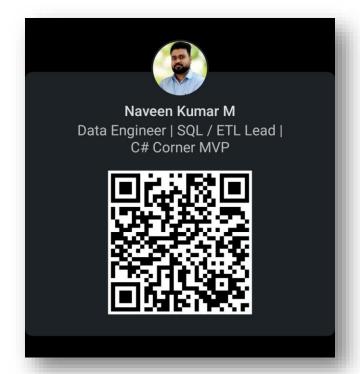
Instance	Features	Price
Free – Web	Text Prompt Shields Protected material detection Groundedness detection	5,000 text records per month <sup>1</sup>
	Image Multimodal	5,000 images per month
Standard – Web	Text Prompt Shields Protected material detection Groundedness detection	<b>\$0.38</b> per 1,000 text records <sup>1</sup>
	Image Multimodal	<b>\$0.75</b> per 1,000 images

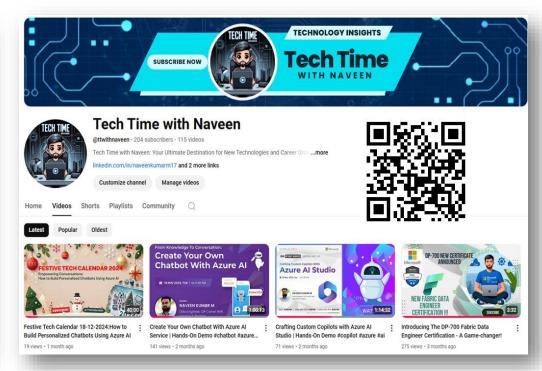
<sup>&</sup>lt;sup>1</sup>A text record in the S tier contains up to 1,000 characters as measured by Unicode code points. If a text input into the Content Safety API is more than 1,000 characters, it counts as one text record for each unit of 1,000 characters. For instance, if a text input sent to the API contains 7,500 characters, it will count as 8 text records.













@ttwithnaveen

