SHERLOCK'S PHOENIX GARAGE



Sherlock's Phoeniks

Sherlock's phoeniks is application to find missing person using combination of Generative AI models like ChatGPT / DallE/ Stable_Diffusion and Computer Vision and also computer vision models connected to internet.

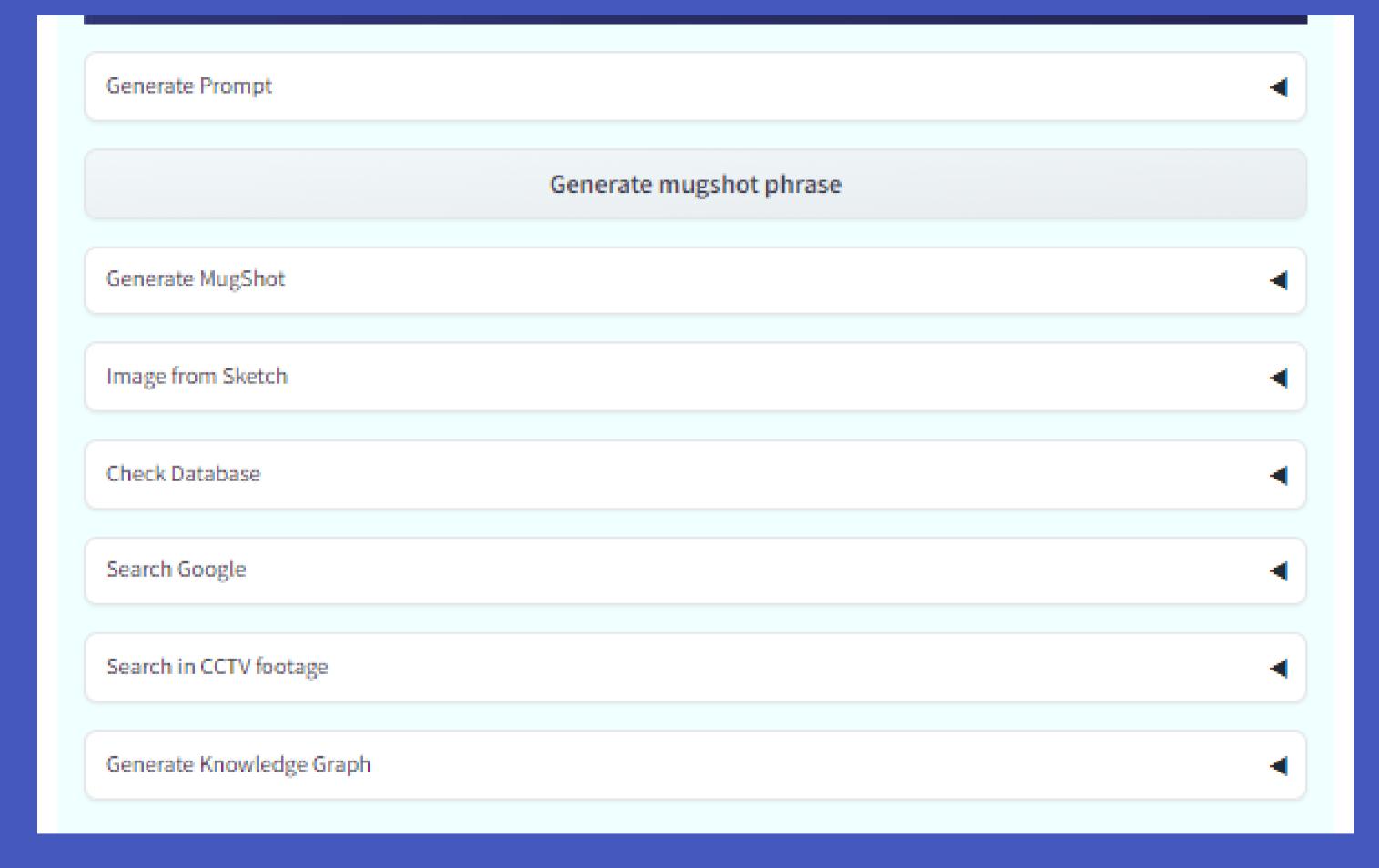
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Brief about the Idea:

Our Sherlock's Phoeniks Search Squad solution is a facial recognition system that utilizes generative AI models like ChatGPT and stable diffusion, as well as computer vision techniques, to identify and locate missing persons in real time. The system will take input in the form of text describing the appearance of the missing person, as well as raw images such as sketches, CCTV footage, or blurry photos. This algorithm will then generate a knowledge graph and search through internal databases and internet/social media platforms like Facebook and Twitter to find matches and potentially identify the missing person. This system has the potential to significantly aid Police and Investigating agencies in their efforts to locate and bring missing persons home.

Opportunity:

The proposed facial recognition solution is different from existing ideas in several ways. First, it utilizes the latest in generative AI models such as ChatGPT and stable diffusion, which allows it to analyze input in the form of text descriptions and images (Hand sketch and CCTV/blurry images)in order to identify and locate missing persons. This is a unique approach that sets it apart from other facial recognition systems that rely solely on image analysis in cost effective manner. In addition, the solution integrates with live databases and internet & social media platforms like Facebook and Twitter and live CCTV to search for matches, which expands its search capabilities and increases the chances of finding missing persons. Overall, this solution has the potential to significantly aid Karnataka State Police in their efforts to locate and bring missing persons home, as it combines advanced technology with a broad search scope to effectively solve the problem.



LINK to try the app - https://huggingface.co/spaces/CobaltZvc/sherlocks_pheonix

Feature diagram of Sherlock's Phoeniks

MUGSHOT DESCRIPTION

Create description of mugshots using NLP models

FEATURE 1

FEATURE 2

SKETCH-2-IMAGE

Generate
Photorealistic
image using SD
and Upscaling
model with
sktech/Raw image
as input

IMAGE SEARCH ENGINE

Search image of missing person on live data base/internet/social media . Retraining of models in fortnight.

FEATURE 3

ADVANCE SEARCH
Search image of missing person of CCTV footage of nearest last recorded location and time frame.

FEATURE 4

IMAGE SEARCH ENGINE

Search image of missing person on live data base/internet/social media. Retraining of models in fortnight.

FEATURE 5

KNOWLEDGE GRAPH

FEATURE 6

A Knowledge Graph enables us to get knowledge by organizing it in an ontology through data interlinking.

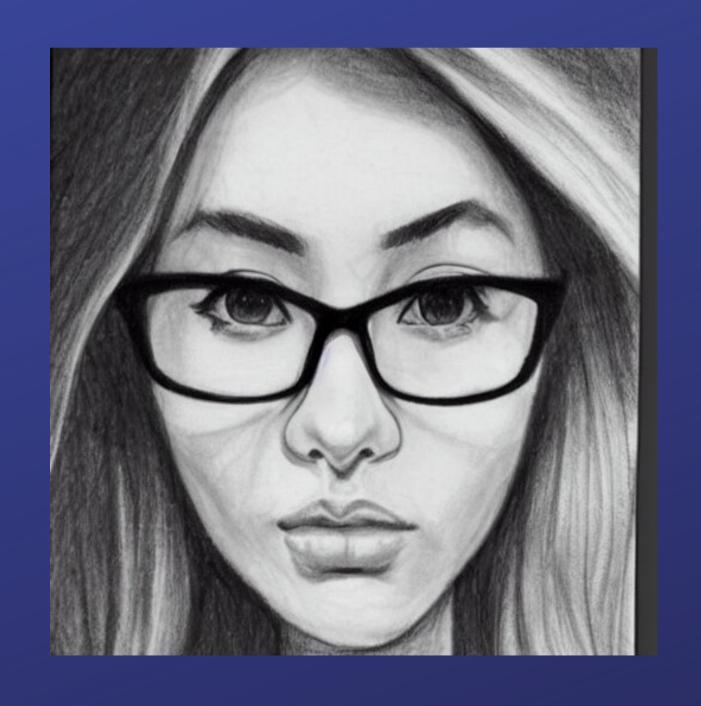
Text as input as input(Which auto-completes by generative model) in case of absence of initial image

portrait of 25-year bespectacled woman with long, curly skyblue eyes hair and bright green eyes. She has a small, upturned nose and a freckled complexion. She is approximately 5'5 tall and has a thin build.

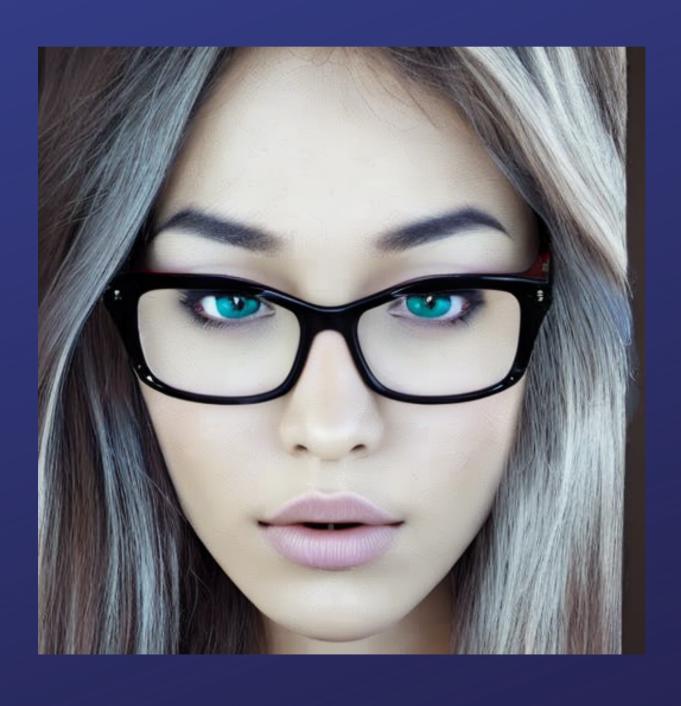




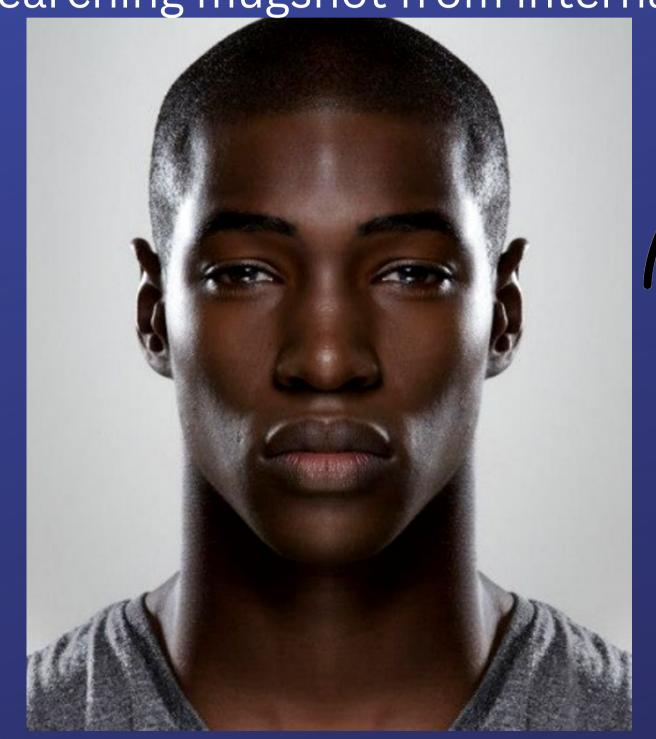
<u>List of features offered by the solution:</u> Sketch/Blurry CCTV Photo as input







Searching mugshot from internal databases



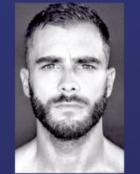








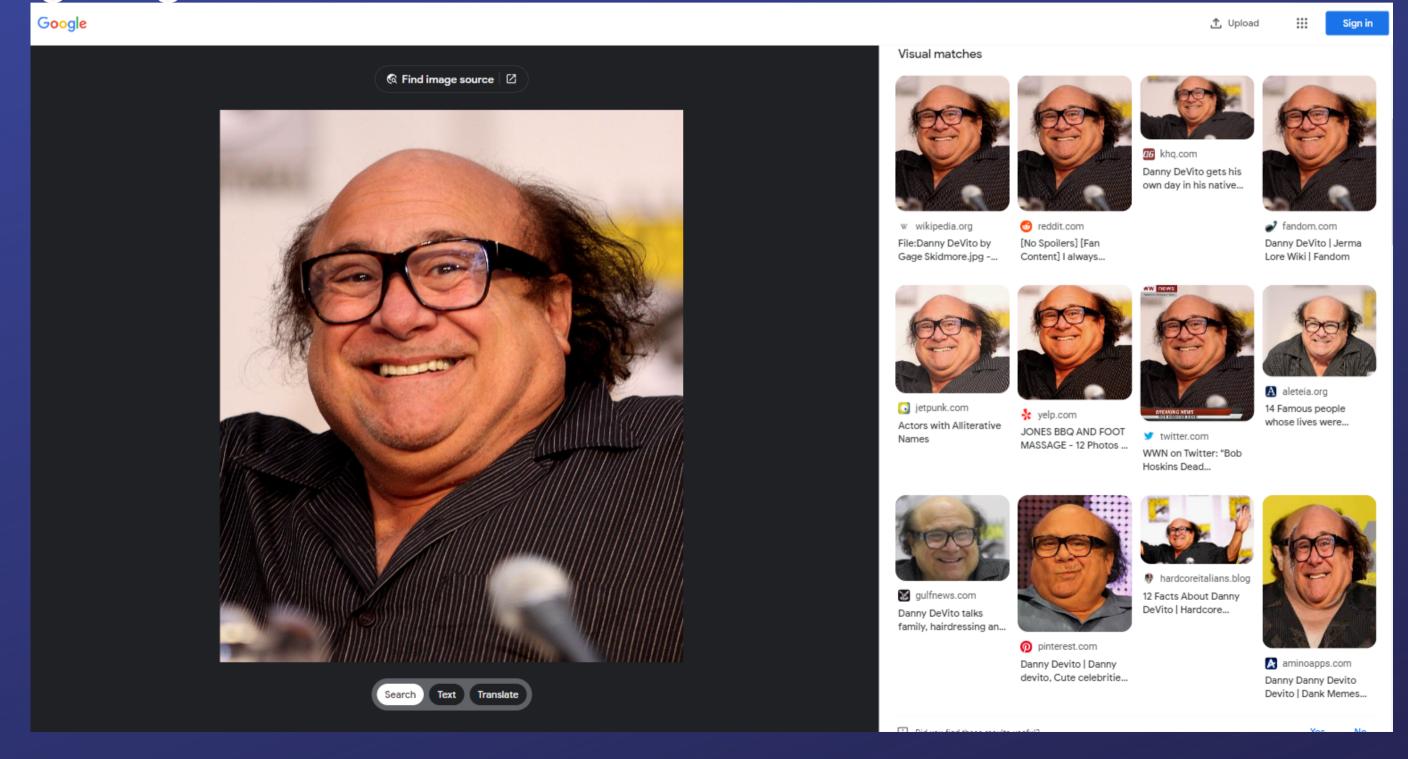






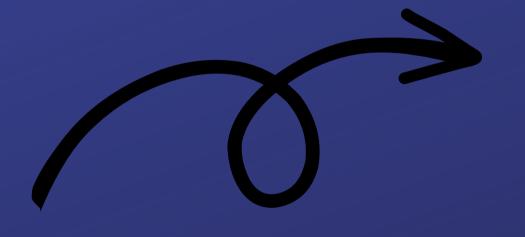


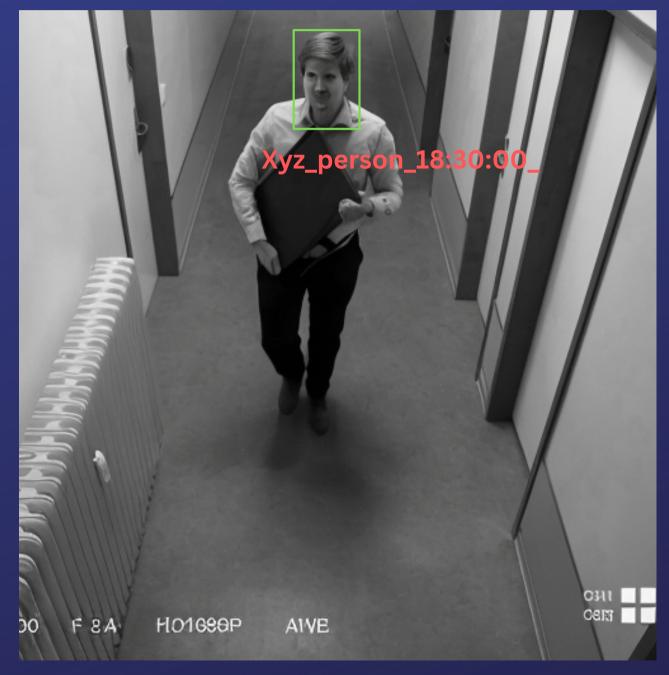
Searching images on internet & social media



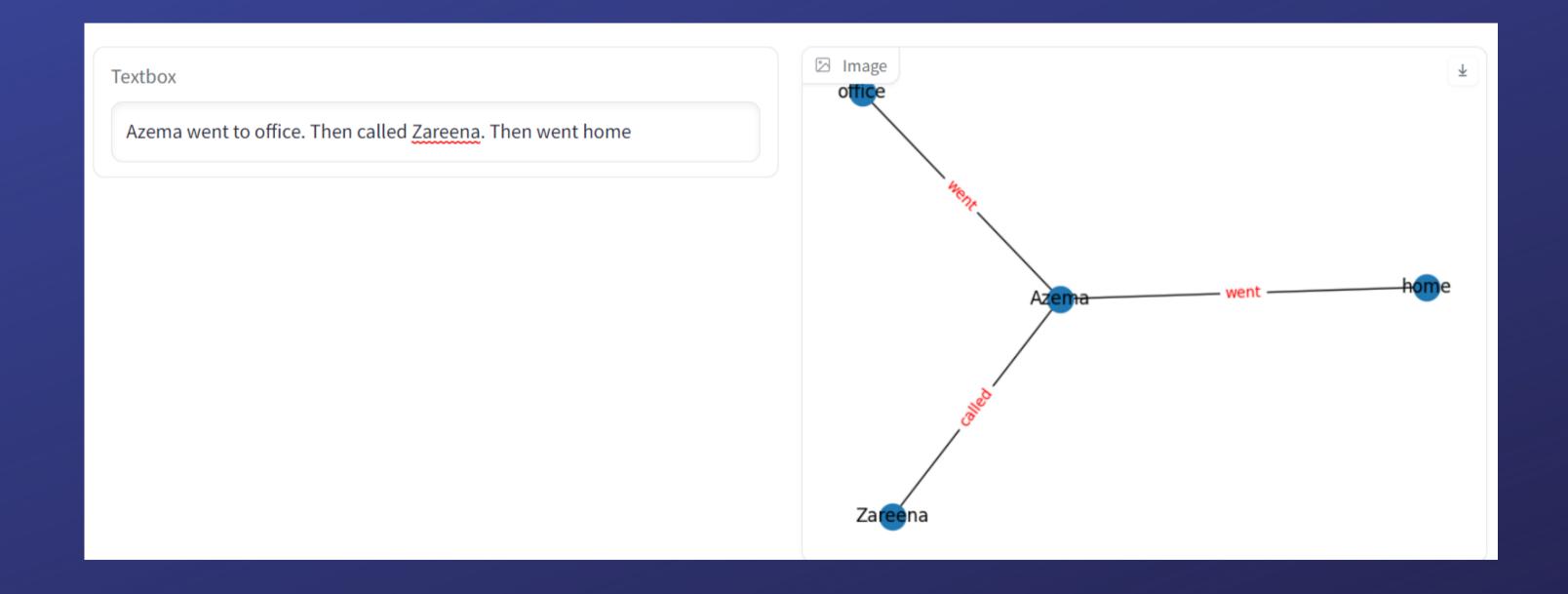
Searching images with live stream of cctv / video to detect and find missing person in real time.







A knowledge graph helps us get more insights into a person's whereabouts.



Business Logic of the solution:

Our proposed facial recognition solution is a cutting-edge tool that utilizes the latest in generative AI models and computer vision techniques to aid people in their efforts to locate and bring missing persons home. The solution takes input in the form of text descriptions and images, and integrates with live databases and internet/social media platforms to search for matches. Its unique approach and expansive search capabilities make it an effective solution to the problem of missing persons. Additionally, the use of advanced AI models and state-of-theart GPUs can make the solution more accurate and cost-effective than existing solutions on the market.

Technology used:

- 1. Generative AI models such as ChatGPT / GPT3 which are used to create description of mugshot and stable diffusion/Dalle to create photorealistic images
- 2. Computer vision models to iterate over image database to get most similar face
- 3. Integration with live databases and internet/social media platforms like Facebook and Twitter, through APIS and services like Google Lense.
- 4. Powerful GPUs which can improve the speed and efficiency of the solution, as well as potentially make it more cost-effective than existing solutions on the market.
- 5. Connection with databases and CCTV footage
- 6. Generation of knowledge graphs.

Estimated cost of/after implementing the solution:

It is difficult to provide an accurate estimate of the cost of implementing the proposed facial recognition solution without knowing more about the specific requirements and resources and scale of the project. Factors that could affect the cost of the solution include the size and complexity of the system, the type and amount of hardware and software required, and the availability of resources. We believe baseline model can be of cost close to 1 lac INR initial cost plus 50k for GPU rental person month if we use in house GPUS. If we are considering to send data to third party providers it will cost very less but trade off is data protection guidelines

Hope you had ②! Share your questions

Thank You!

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