CODE FOR WOMEN SAFETY APP IN PYTHON

from geopy.geocoders import Nominatim

from twilio.rest import Client

# Twilio configuration - Replace with your Twilio credentials

TWILIO\_ACCOUNT\_SID = 'your\_account\_sid\_here'

TWILIO\_AUTH\_TOKEN = 'your\_auth\_token\_here'

TWILIO\_PHONE\_NUMBER = 'your\_twilio\_phone\_number'

EMERGENCY\_CONTACT\_NUMBER = 'recipient\_phone\_number'

def get\_current\_location():

"""Get the user's current location using geopy."""

try:

geolocator = Nominatim(user\_agent="women\_safety\_app")

# Simulate a GPS location for the demo (you can use a GPS API for live data)

location = geolocator.geocode("Connaught Place, New Delhi, India")

if location:

return location.address

else:

return "Location not found."

except Exception as e:

return f"Error getting location: {str(e)}"

def send\_emergency\_alert(location):

"""Send an emergency SMS with the location using Twilio."""

try:

client = Client(TWILIO\_ACCOUNT\_SID, TWILIO\_AUTH\_TOKEN)

message\_body = f"Emergency Alert! I need help. My current location is: {location}"

message = client.messages.create(

body=message\_body,

from\_=TWILIO\_PHONE\_NUMBER,

to=EMERGENCY\_CONTACT\_NUMBER

)

print("Emergency alert sent successfully!")

print(f"Message SID: {message.sid}")

except Exception as e:

print(f"Error sending SMS: {str(e)}")

def main():

print("Press Enter to send an emergency alert.")

input() # Simple trigger to simulate panic button

location = get\_current\_location()

print(f"Detected Location: {location}")

send\_emergency\_alert(location)

if \_\_name\_\_ == "\_\_main\_\_":

main()

**How to Run the Project**

1. **Install required libraries:**

bash

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pip install geopy twilio

1. **Configuration:**
   * Replace TWILIO\_ACCOUNT\_SID, TWILIO\_AUTH\_TOKEN, and TWILIO\_PHONE\_NUMBER with your Twilio account details.
   * Replace EMERGENCY\_CONTACT\_NUMBER with the recipient's phone number.

**Sample Output**

mathematica

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Press Enter to send an emergency alert.

Detected Location: Connaught Place, New Delhi, India

Emergency alert sent successfully!

Message SID: SMXXXXXXXXXXXXXXXXXXXX

**Important Enhancements You Can Add**

* **Real GPS integration:** Use GPS APIs for accurate location retrieval.
* **Panic Button GUI:** Use libraries like tkinter for a graphical panic button.
* **Voice Command Integration:** Use speech\_recognition for hands-free alerts.