WOMEN SAFETY BOT

TEAM MEMBERS

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Problem Statement

Women often cannot call for help during emergencies without drawing attention. Existing safety apps require visible actions and lack intelligent, discreet assistance—creating a need for a stealthy AI chatbot that can detect danger, share live location, and alert contacts without compromising privacy.
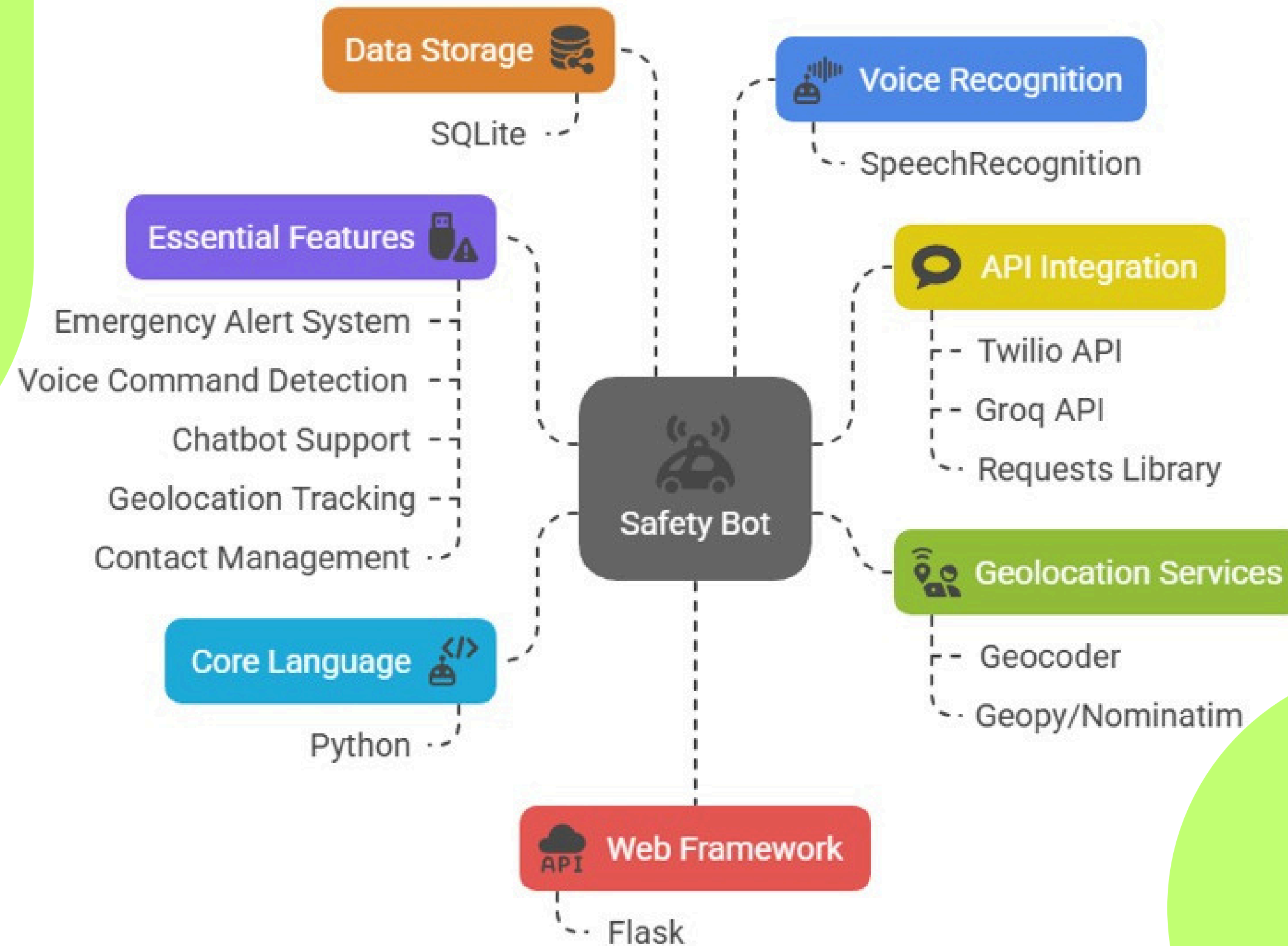
Critical Statistics on Women's Safety
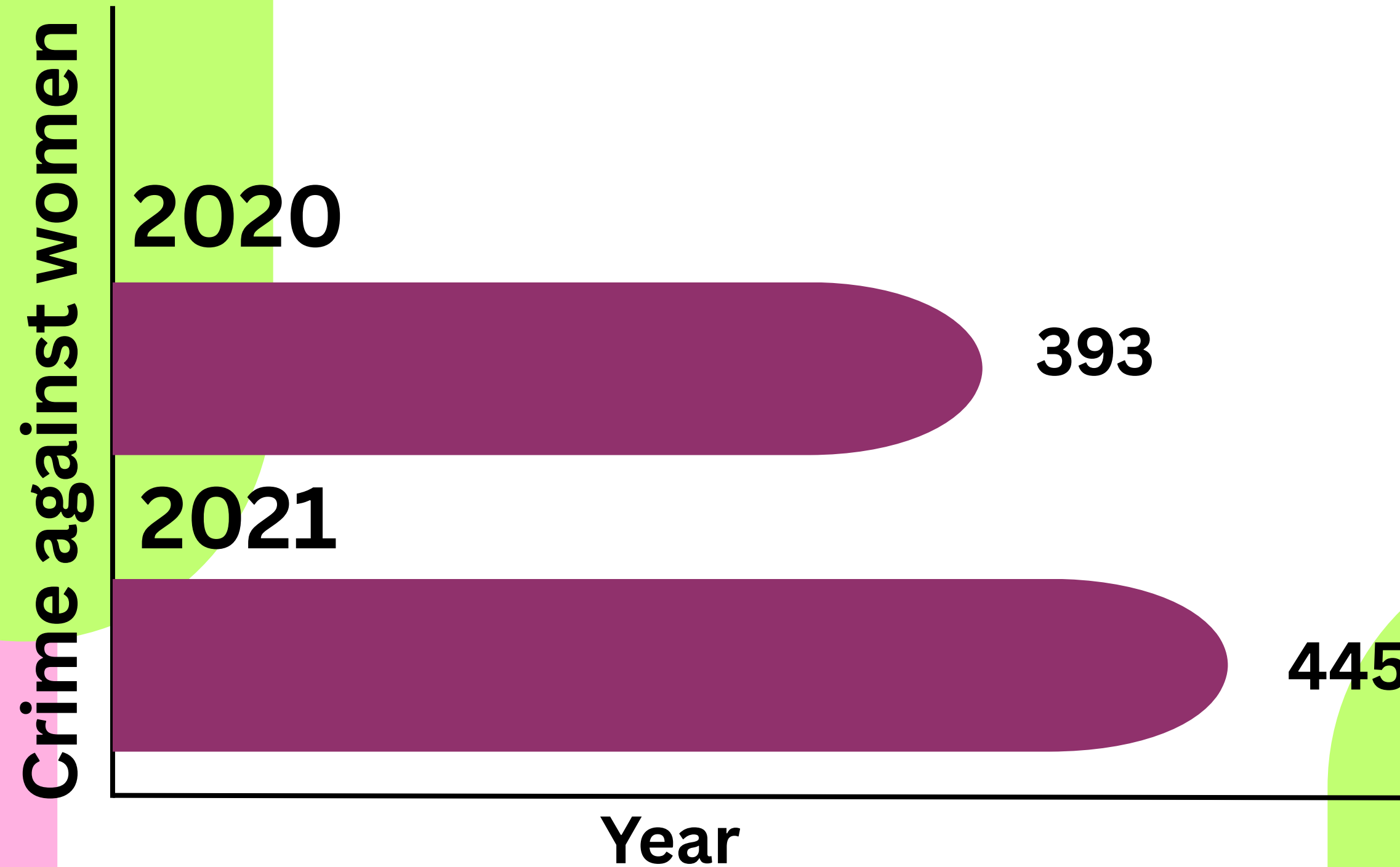
Solution

The Women's Safety Chatbot empowers women with real-time assistance and safety features to combat the urgent issue of violence against women by guiding them through chats using Ai

Key Features

Data Storage
- SQLite

Voice Recognition
- SpeechRecognition

Essential Features
- Emergency Alert System
- Voice Command Detection
- Chatbot Support
- Geolocation Tracking
- Contact Management

API Integration
- Twilio API
- Groq API
- Requests Library

Safety Bot

Geolocation Services
- Geocoder
- Geopy/Nominatim

Core Language
- Python

Web Framework
- Flask

Feature	Algorithm Type	Library/API
Location Detection	Geolocation & Reverse Geocoding	geocoder, geopy
Emergency Alert	Routing (loop)	twilio
Chat Responses	LLM (Transformer)	Groq API, LLaMA 3
Database Handling	CRUD operations & SQL indexing	sqlite3
User Interaction	Request - response routing (WSGI server loop)	Flask
API Security	Token-based authentication	requests, twilio, groq
Voice Recognition	Speech-to-Text (STT)	SpeechRecognition, pyaudio

WORKFLOW
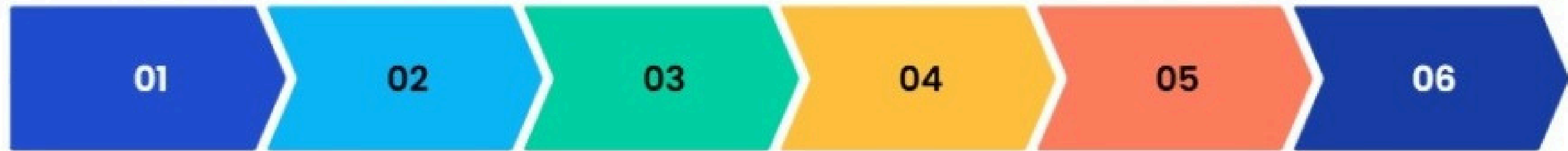
01
Initialization of the Application
The Flask app starts, sets up SQLite for contacts, and activates voice recognition for 'help'.

02
Emergency Response Activation
Upon detecting 'help' or user reply 'Yes', location is retrieved and alerts are sent via Twilio API.

03
Chat Interaction Process
User messages trigger responses, either activating emergency flow or processing via Groq API for chatbot reply.

04
Contact Management Options
Users can view, add, or remove emergency contacts stored in SQLite database.

05
Voice Activation Listening
The bot continuously listens for 'help' using SpeechRecognition to initiate emergency response.

06
API Security Measures
Sensitive data like API keys are securely stored, and location data is protected from unauthorized access.

THANK YOU!