# Anuraksha

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## Local responders network for emergencies

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# Problem Statement

The need for a local responders network for swift help during an emergency via accessible technology

# Problem Elucidation

Existing support systems fall short during emergencies, leaving individuals and their close ones overwhelmed. Immediate help is necessary, yet lacking.
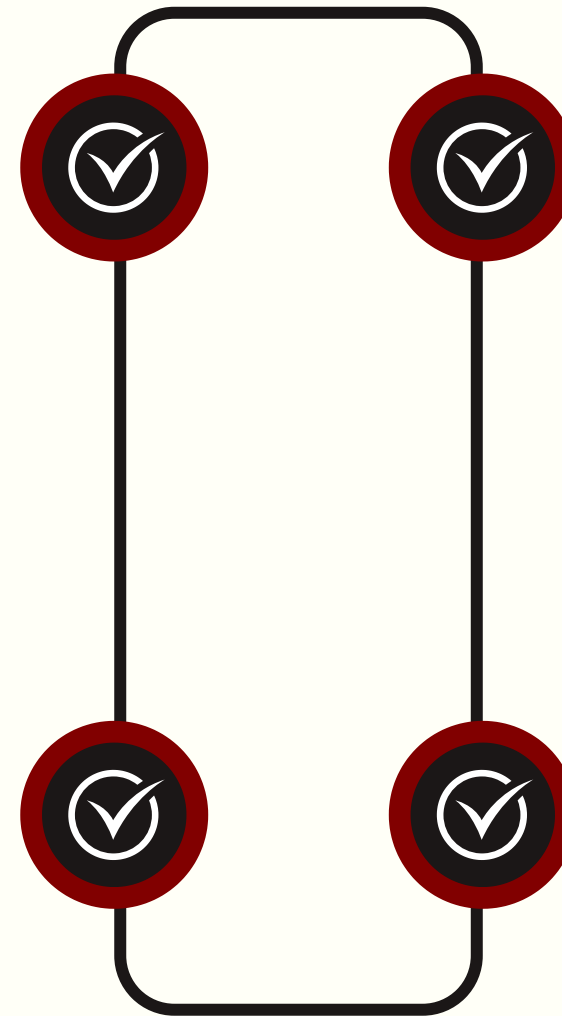
There is a need for a network of <u>rapid responders</u> within local communities, facilitated by <u>accessible</u> technology.

Existing emergency systems remain fragmented, underutilized, and lacking integration, hindering faster and more reliable assistance where it's most needed.

# Objectives

Strengthening local emergency response with accessible technology to address existing system deficiencies.

Utilizing accumulated data, we aim to analyze high-risk areas through heatmaps, bolstering long-term prevention efforts for community safety

Achieve a user-friendly experience and provide comprehensive multilingual support

Keeping contacts informed, rallying nearby helpers swiftly, and promoting targeted interventions for better emergency management.

# Proposed Features



Rapid Volunteer
Response Network



Send instant SOS
alerts to saved
emergency contacts
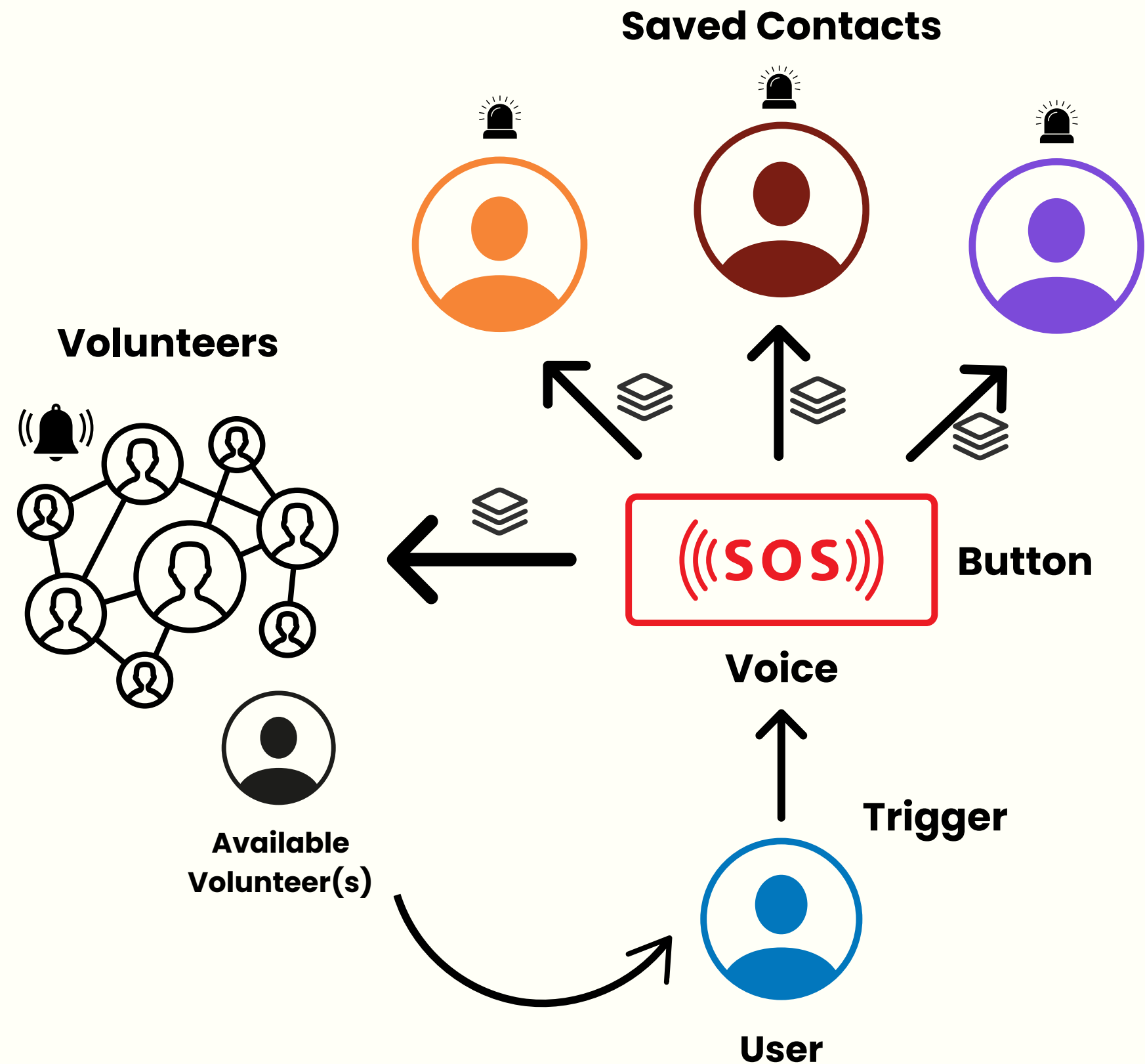


Gathering data on
time and location for
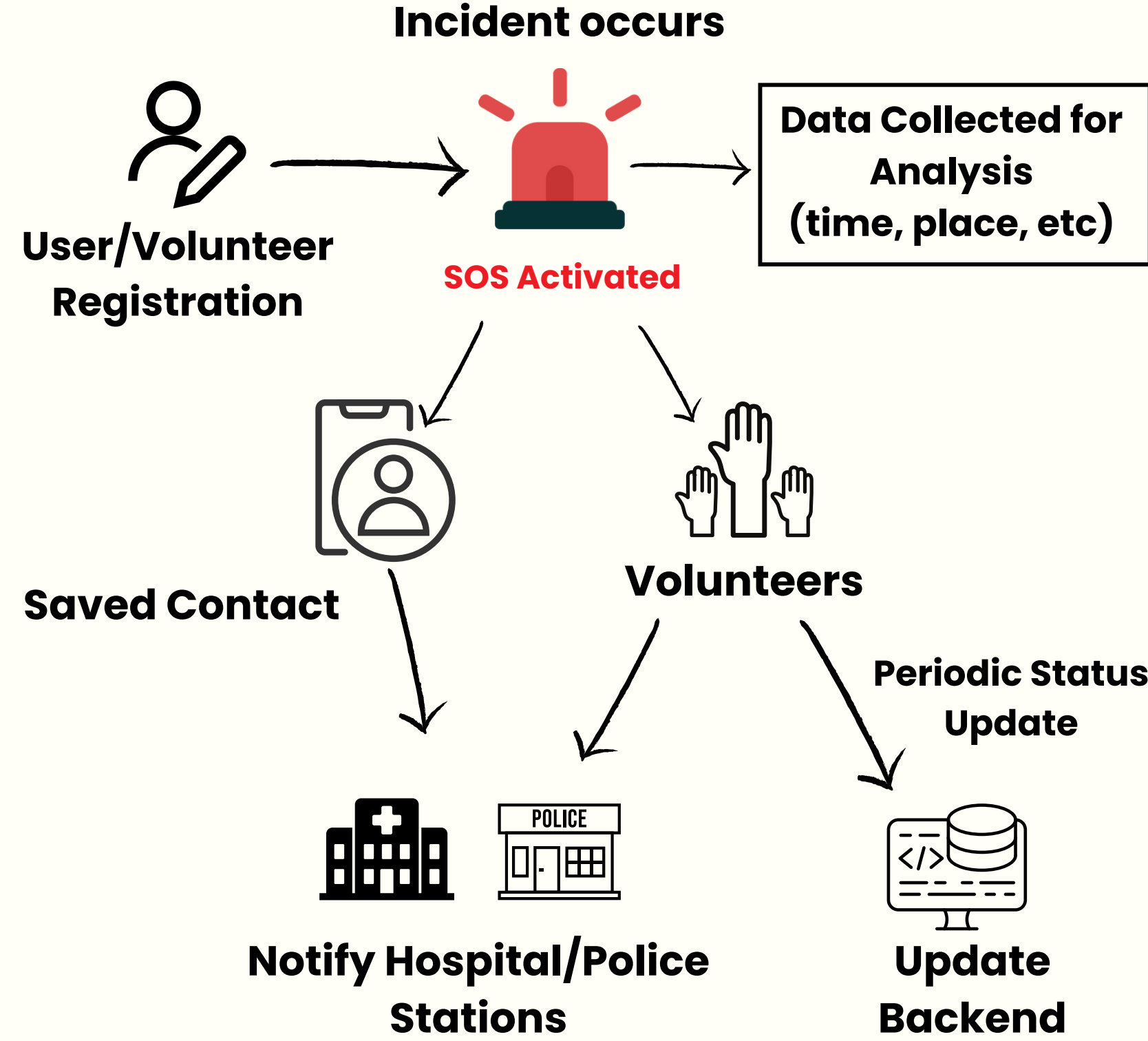future analysis



SOS Alerting with
Location Tracking



Generate heatmaps to
target high-risk areas

# Client Workflow



Saved Contacts

Volunteers

Button

Voice

Available
Volunteer(s)

Trigger

User

Client Workflow

# Application Workflow

Incident occurs

User/Volunteer Registration

SOS Activated

Data Collected for Analysis (time, place, etc)

Saved Contact

Volunteers

Periodic Status Update

Notify Hospital/Police Stations

Update Backend

Application Workflow

# Tech Stack

## Backend

- Node.js
- Express.js
- GraphQL

## Frontend

- React.js
- Typescript
- Tailwind CSS

## Data and Storage

- AWS RDS (PostgreSQL)
- AWS S3
- Local/Session Storage

## API/Services

- Google Maps API/SDK
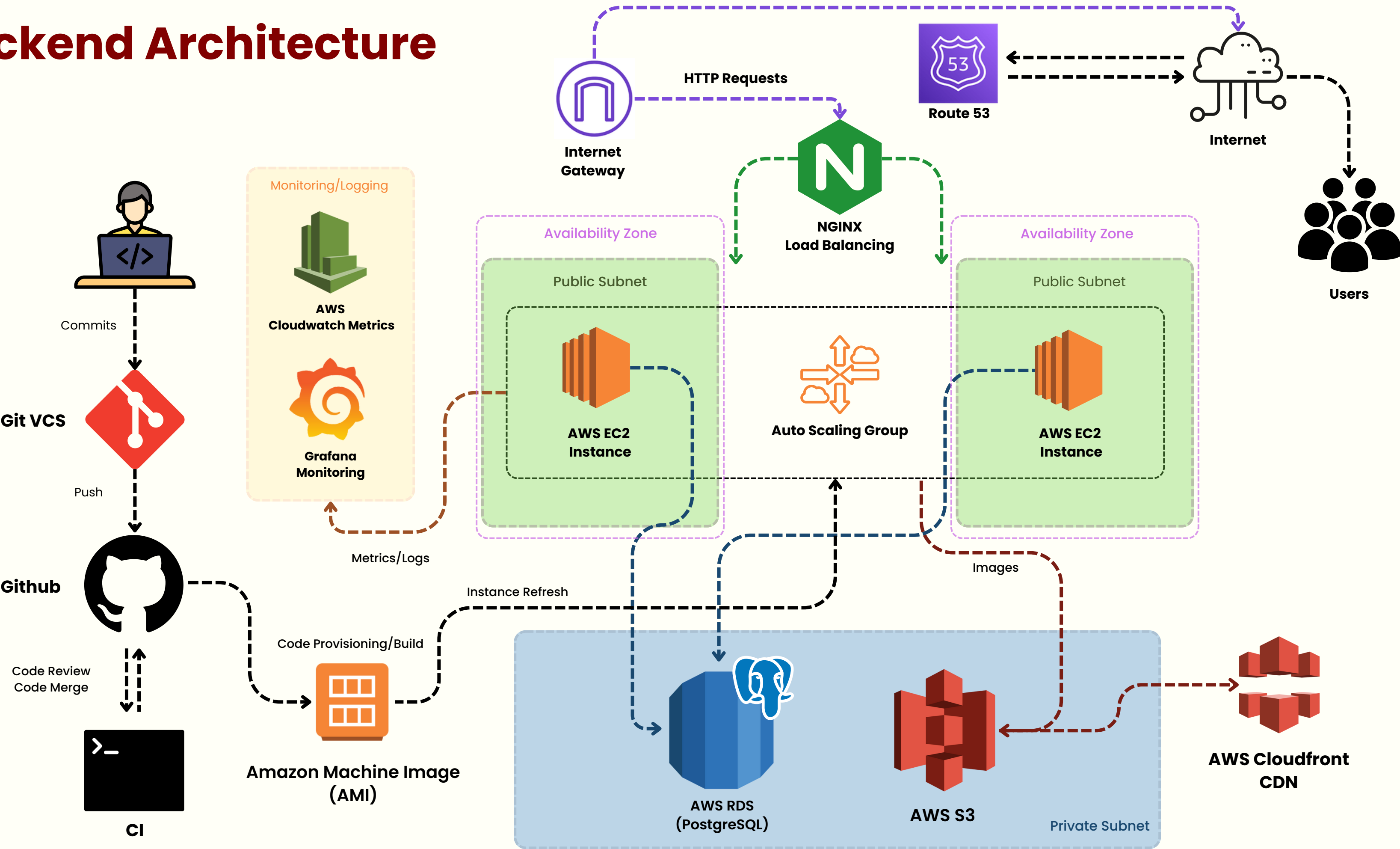- Messaging APIs (Fast2SMS, Ultramsg, Twilio)
- Browser API's

## Infrastructure

- Route53
- Cloudflare
- Nginx
- EC2 Instances
- AWS Cloudfront CDN

## Monitoring

- AWS Cloudwatch
- Grafana
- Pm2

# Backend Architecture

# THANK YOU