Finite Laap
Inspire the Rest

NITTE
(Deemed to be University)

NMAM INSTITUTE
OF TECHNOLOGY

HACKFEST-2024

Team Name: Team Anuraksha

College Name: PES University Electronic City Campus, Bengaluru

Track: Open Innovation

Problem Statement:

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

Approach

Introducing **Anuraksha** PWA– Your <u>one-click</u> companion during emergencies

- Keep your saved contacts informed instantly and rally <u>nearby helpers</u> swiftly.
- Update volunteers and saved contacts with location, and relevant details (Eg. Medical History, Personal Details) via <u>notifications</u>, SMS, and voice calls.
- Log and store crucial information for future use, like insurance claims.
- Access and view nearby hospitals, clinics, fire stations, and police stations easily. Reach existing emergency response systems with ease.
- Speak your language with our app catering to <u>diverse communities</u>.
- SMS/Command-based/Click Interactive and <u>Immediate SOS Triggers</u>.
- View and interpret risky areas and roads, and promote targetted improvisation and management by associated agencies.
- Promote and explore healthcare and other useful emergency services through our platform.

Technology Stack

<u>Progessive Web Application</u>

Frontend
React.js
Typescript
Tailwind CSS
Redux

Backend
Node.js
Express.js
GraphQL

Monitoring
AWS Cloudwatch
Grafana
pm2

Data and Storage
AWS RDS (PostgreSQL)
AWS S3
Local/Session Storage

Infrastructure
Route53
Cloudflare
Nginx
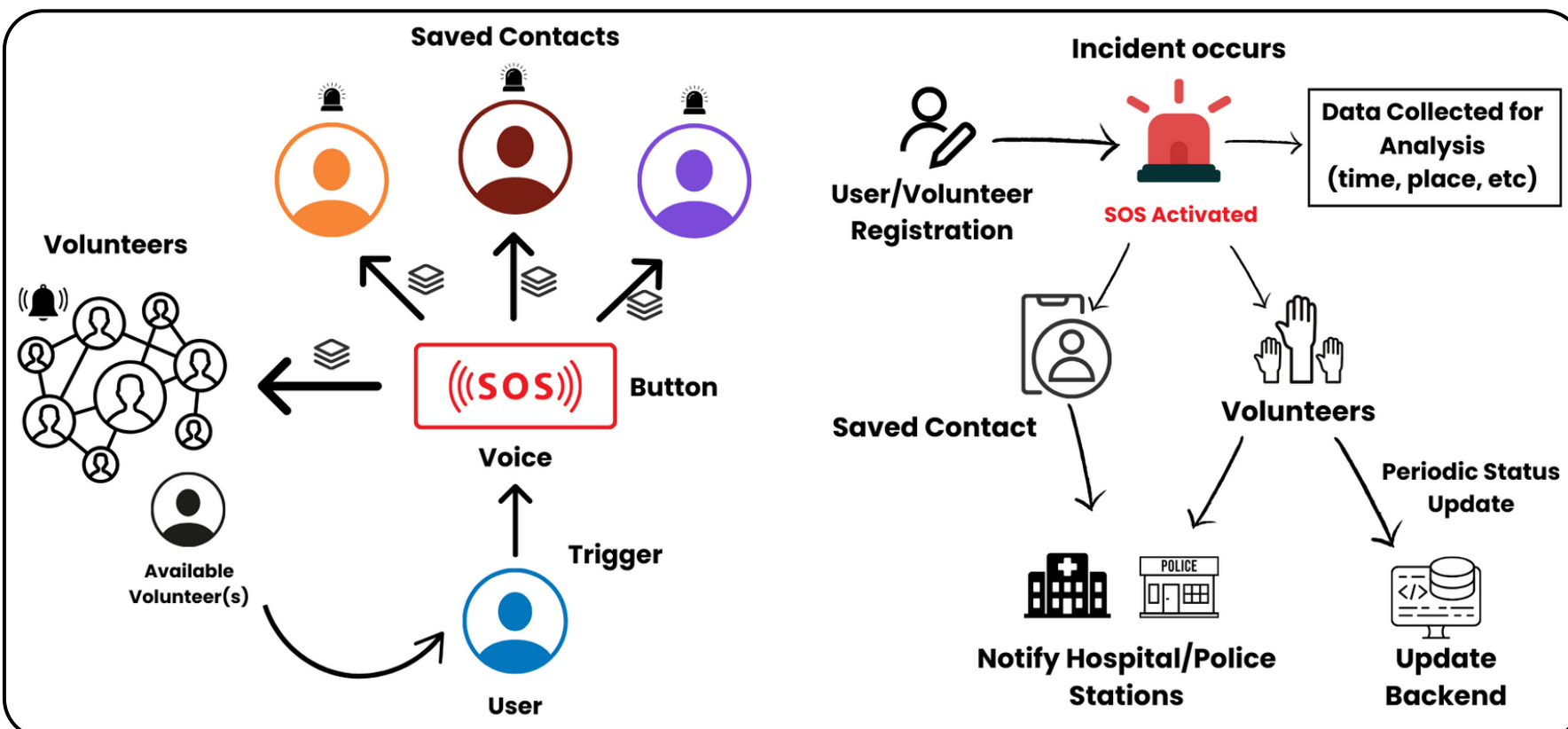EC2 Instances
AWS Cloudfront CDN

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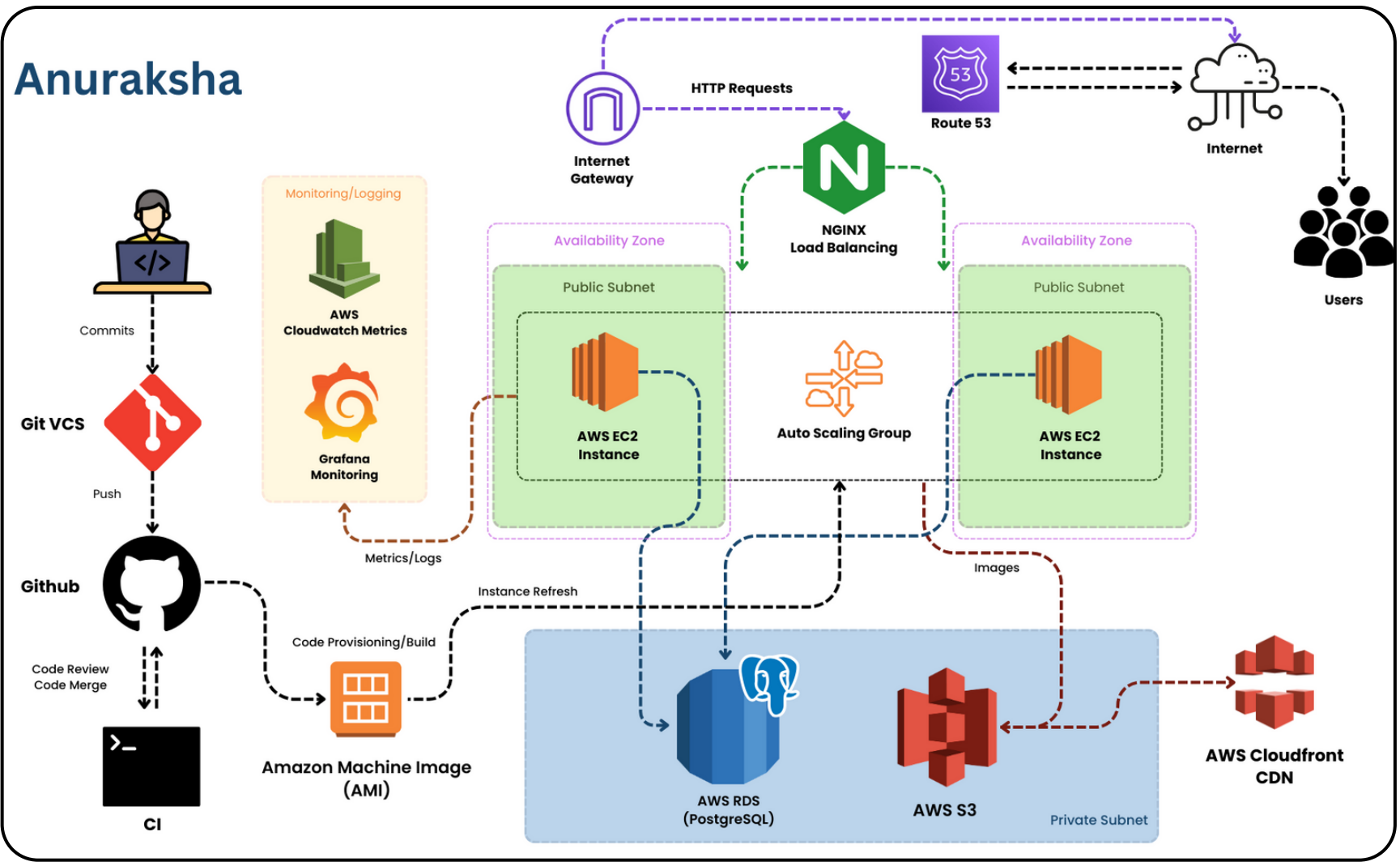Google Maps API/SDK
Messaging APIs (Fast2SMS, Ultramsg, Twilio)
Browser API's

Use Cases

- Ensuring In-Home Safety for the Elderly
- Rapid Response for Road Accident Victims
- Enhancing Women's Safety and Security
- Employees working remotely, or in potentially risky situations
- Streamlining Data Collection for future reference (Eg. Insurance)
- Generating Heatmaps for Proactive Safety Planning
- Collaborate with businesses, NGOs, and local authorities operating in these sectors.
- In-Platform Promotions and Awareness Campaigns
- Use acquired data for further analysis and improvements

Architecture

Client Workflow

Application Workflow

Anuraksha

Proposed Cloud Architecture

We're keen on using managed cloud services to streamline our development process. Doing this can let us focus on crafting a functional prototype and demonstrating the proof of concept. We can devote more attention to refining user interaction, adding features, and perfecting the flow and actions of our application.