

Basic Details of the Team and Problem Statement

PSID: KVVH-013

Problem Statement Title: Tool for monitoring ground personnel

Team Name: MORSE CODERS

Team Leader Name: AKMAL FOWMILA A S

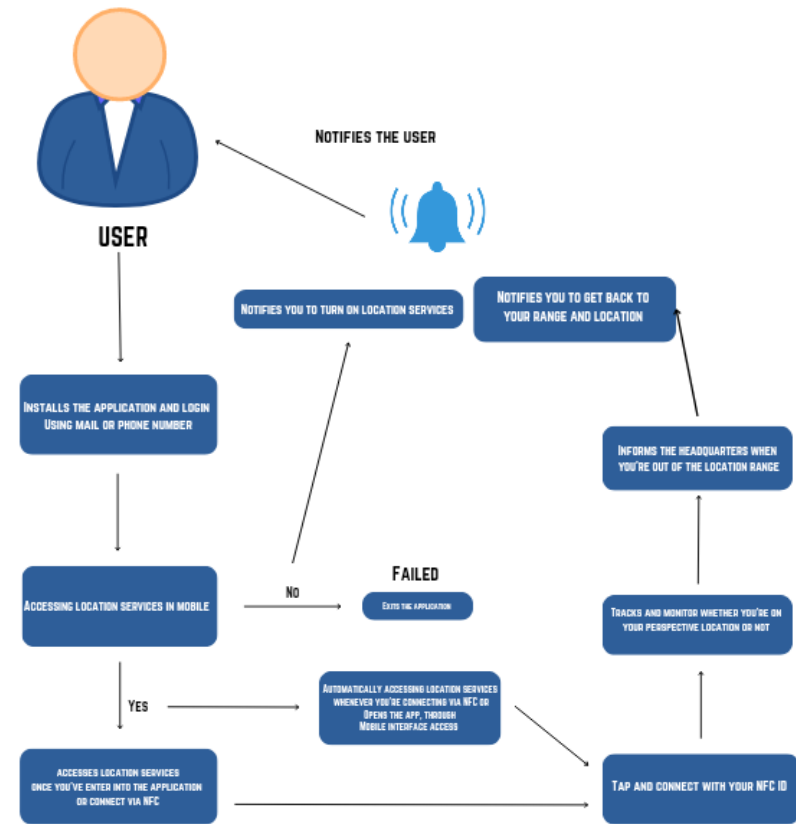
Institute Code (AISHE): 9213

Institute Name: PSNA College of Engineering and Technology

Idea/Approach Details

Describe your idea/Solution/Prototype here:

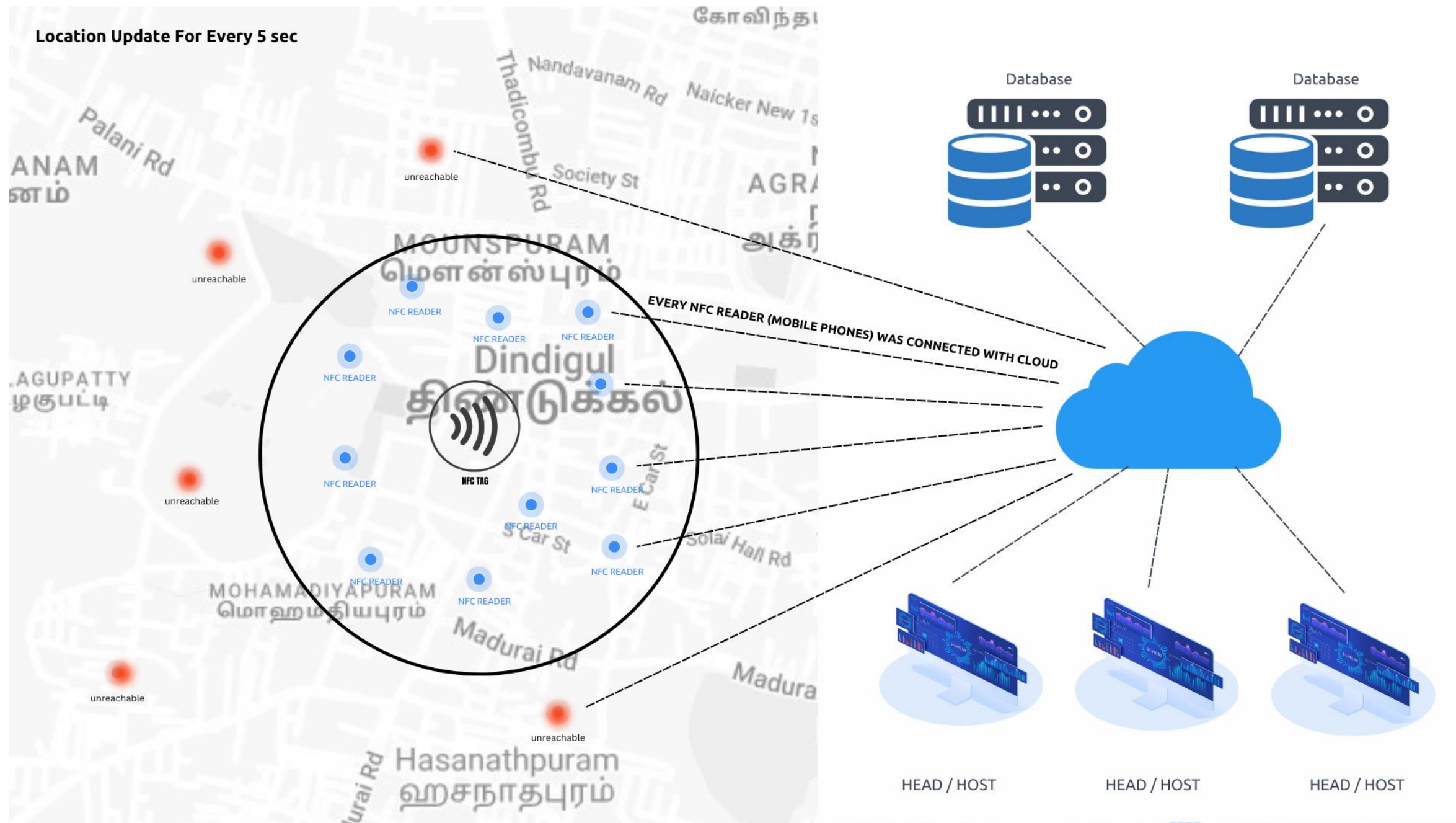
- A mobile application which verifies the police who are on bandobast duty by using NFC and tracks their location using GPS.
- Police head (Monitor) will assign polices to bandobast duty by adding their data in the specific NFC tag for the particular area.
- Police have to tap their NFC enabled phones on the NFC card to verify their presence, then their GPS will be ON to track their location.
- Their current location is tracked and updated in the database for every 5 sec.
- If the police go out of their allocated boundaries, app will notify them to go in to the allocated area.
- If the police are not present inside the boundary for more than 3 min then app will notify the head officer.



Describe your Technology stack here:

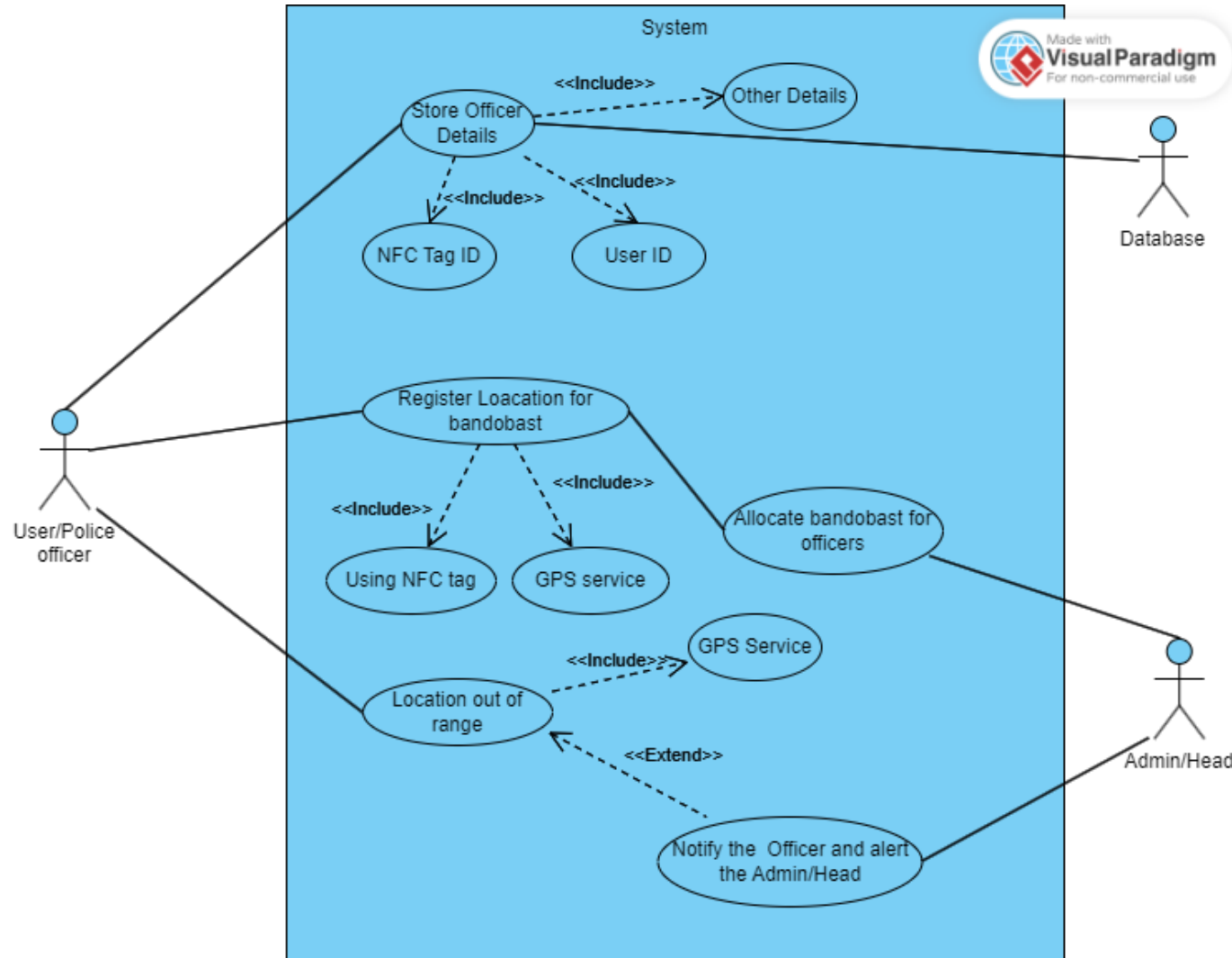
- Kotlin, Java
- Firebase database
- Fused location provider
- NFC
- Google Map SDK

Location Update For Every 5 sec



Idea/Approach Details

Describe your Use Cases here



ACTORS: Police, Chief Head (Monitoring person)

Chief Head (Monitor) : He has to allocate polices add their IDs in the NFC tags which is stored in the database. He monitors the police locations whether they are within boundaries. If not, monitor will get notification and he will contact the respective police to be present within boundaries.

Police: Has to verify their presence by connecting their phones to NFC card . Their location is turn ON and then tracking starts . Police will get notification if they go out of their allocated boundaries.

Describe your Dependencies / Show stopper here

- Need NFC tags
- Need NFC enabled mobile phones
- GPS location must be turned ON
- Database service.

Team Member Details

| Sr. No. | Name of Team Member | Branch (Btech/Mtech/Ph D etc): | Stream (ECE, CSE etc): | Year |
|---------|---------------------|--------------------------------------|------------------------|------|
| 1 | Akmal Fowmila A S | B.Tech | CSBS | 3 |
| 2 | Madhesh V | B.Tech | CSBS | 3 |
| 3 | Mansha S | B.Tech | CSBS | 3 |
| 4 | Hari Haran R C | B.E | CSE | 3 |
| 5 | Siva Prakash G | B.Tech | IT | 2 |
| 6 | Godwin Joe D | B.Tech | IT | 2 |

Team Mentor/s Details

| Sr. No. | Name of Mentor | Category (Academic/Industry): | Expertise (AI/ML/Blockchain etc): | Domain Experience (in Years) |
|---------|---------------------|----------------------------------|--------------------------------------|----------------------------------|
| 1 | Dr. S.Shahul Hameed | Academic | ML | 8 years |
| 2 | C. Preethi | Academic | AI | 5 years |