

## Basic Details of the Team and Problem Statement

*Ministry/Organization Name/Student Innovation: Ministry of Rural Development*

*PS Code: SH1022*

*Problem Statement Title: Identification of Flood Prone Roads*

*Team Name: Ones and Zeros*

*Team Leader Name: SHAKTHI.A.S*

*Institute Code (AISHE): 1116*

*Institute Name: R.M.K. College of Engineering and Technology*

*Theme Name: Agriculture, FoodTech & Rural Development*

## Idea / Approach Details

- By integrating Google Maps, our application primarily focuses on identifying flood-prone PMGSY roads.
- Will be collecting real time updates on Rainfall and Dam water levels from National Weather Service and trusted Organizations
- We could forecast the likelihood of flooding based on past data and real-time meteorological updates.
- Reporting Floods is an add-on function in our application.

## Technical Stack

- Android Studio
- Google Map Services
- Google API Services
- Google Earth Pro
- Google Sheets
- Java

## WORK FLOW

START



If the application didn't show the warning of flooding the local authorities can report the floods

Start the app



## Use Cases

1

### Rainfall

*Flooding in low-lying and flood-prone roads is caused by excessive rainfall.*

2

### Opening of Dams

*Flooding is a major concern in areas near dams and along river banks.*

3

### River Overflow

*Flooding occurs when rivers overflow owing to various climatic factors.*

## Dependencies

1

Google Map Services



2

Google Cloud API



3

App Script



Google Apps Script

4

Google API



## Show Stopper

*Reporting Floods is an Add-on feature in our application*



# Team Member Details

Team Leader Name: Shakthi A S

Branch : BE

Stream : CSE

Year : III

Team Member 1 Name: Sowmya V

Branch : BE

Stream : CSE

Year : III

Team Member 2 Name: Harish Kumar R J

Branch : BE

Stream : CSE

Year : III

Team Mentor 1 Name: Kathija Nasreen A

Category: Academic

Expertise: ML

Experience: 1 year

Team Member 3 Name: Kamal Rajeswar S

Branch : BE

Stream : CSE

Year : III

Team Member 4 Name: Haari Prassana P

Branch : BE

Stream : CSE

Year : III

Team Member 5 Name: Akhash N

Branch : BE

Stream : CSE

Year : III

Team Mentor 2 Name: Senthil Prakash P N

Category: Academic

Expertise: Data Analytics

Experience: 10 years