

Project 1:

Project Title: **FLOOD MONITORING**

Project Steps

Phase 1: Project Definition and Design Thinking

- **Project Definition :**

A flood monitoring system is used to monitor a rise in water levels. The system comprises sensors that are deployed in cities or any area of interest. The sensors can be connected to either the main electricity or can be solar-powered

DESIGN AND THINKING:

1. Project Objectives : The purpose of this project is to sense the water level in river beds and check if they are in normal condition.

2. IoT Devices Designs

3. Data Sharing Platform : How does flood monitoring system using IoT work?

The function of LCD and LED are to display and indicate the level of water. Based on flowchart in Figure 4, Smart IoT Flood Monitoring System is developed to alert the public closest to the area when there is upcoming flood. The process is starting when ultrasonic sensor measures level of water in the river.

4. Integration Approach: "Integrated Flood Management is a process that promotes an integrated, as opposed to fragmented, approach to managing floods. Derived from the activities and use of floodplains (agriculture, urban development, transportation, recreational use, etc.)