FLOOD MONITORNING AND EARLY

WARNING SYSTEM

PHASE 1: PROBLEM DEFINITION AND DESIGN THINKING

INTRODUCTION:

The scope of this document is brief explain about problem which is flood disasters because of this many people loss their life and properties. To overcome problem we come with the solution which is flood monitoring and early warning system. This system using IOT sensors it will send alert message to both public and emergency response team.

PROBLEM DEFINITION:

Floods are caused by overflow of water comes from river. Floods are often caused by heavy Rainfall. Problem is when floods are comes it destroys the people live and property. It mostly happens because of not able to early warning the public and emergency response team.so to control the floods we come with solution which is flood monitoring and early warning system. In this system we using IOT sensors to check water level of water bodies. when the level of water increases above normal level it will send warning to public and rescue team. By doing this they can take appropriates action to save people lives and reduce the damage caused by floods.

DESING THINKING:

1. By using ESP32 it will send data for real-time flood monitoring then it can send a early warning message for public safety, and emergency response coordination.
2. IoT Sensor Network Design: IOT sensors which used in this system is water level sensors it will send alert message whenever level of water increases above normal level.
3. Early Warning Platform: for public use we Design a web-based platform to display real-time water level data and issue flood warnings by doing this we can alert the people then they can prepare themselves to save their live from floods.
4. Integration Approach: using fastest and affordable communication devices for internet by doing this IoT sensors will send data to the early warning platform in real time.

CONCLUSION:

Flood monitoring and early warning system is able to identify floods before it come so we can take appropriates action like send alert messages to people and emergency recuse team. People can save their lives and properties. This system also can send real time data. This system can help prevent excessive damage and loss as result of flooding and possibly save many lives.