

Android Application for Flood Prediction System

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Introduction

- ▶ Flooding is a crucial disaster for people and need to protect and reduce of damage from it.
- ▶ The Mone Dam is the most affected region of flood damage in Myanmar.
- ▶ It is situated on Middle West region of Myanmar and built across on Mone creek.



Introduction



- ▶ Myanmar faced on flood after 2015.
- ▶ It is necessary to develop flood prediction system for many dams
- ▶ This system can predict the affected flood conditions of dam, based on Markov Chain Model and estimate flood conditions

Objective

- ▶ To monitor the climate change and rainfall amount for water level elevation
- ▶ To predict the flood in study region for help people in that region
- ▶ To support decision for response emergency event
- ▶ To reduce and prevent from damage of flood

Motivation

- ▶ Myanmar faced severe flooding in monsoon at 2015 and 2016 and Torrential rains destroyed farmland, roads, bridges and houses.
- ▶ July 1 to August 18, 2016: Magway (204,365), Mandalay (107,200), Ayeyarwaddy (74,989), Bago (53,357) and Sagaing (27,996).
- ▶ Myanmar is weak for controlling in flooding and it is necessary to develop flood prediction system for preventing flood and natural hazard.

Study Area

- ▶ This system predict flood conditions for Mone Dam in Magway region which is one of the most affected region of flood damage in Myanmar.
- ▶ It built across on Mone creek.
- ▶ Mone creek can be overflow water due to torrential rain from Chin hill and Rakhine hill .
- ▶ It is an essential fact to develop flood prediction system for Mone dam.



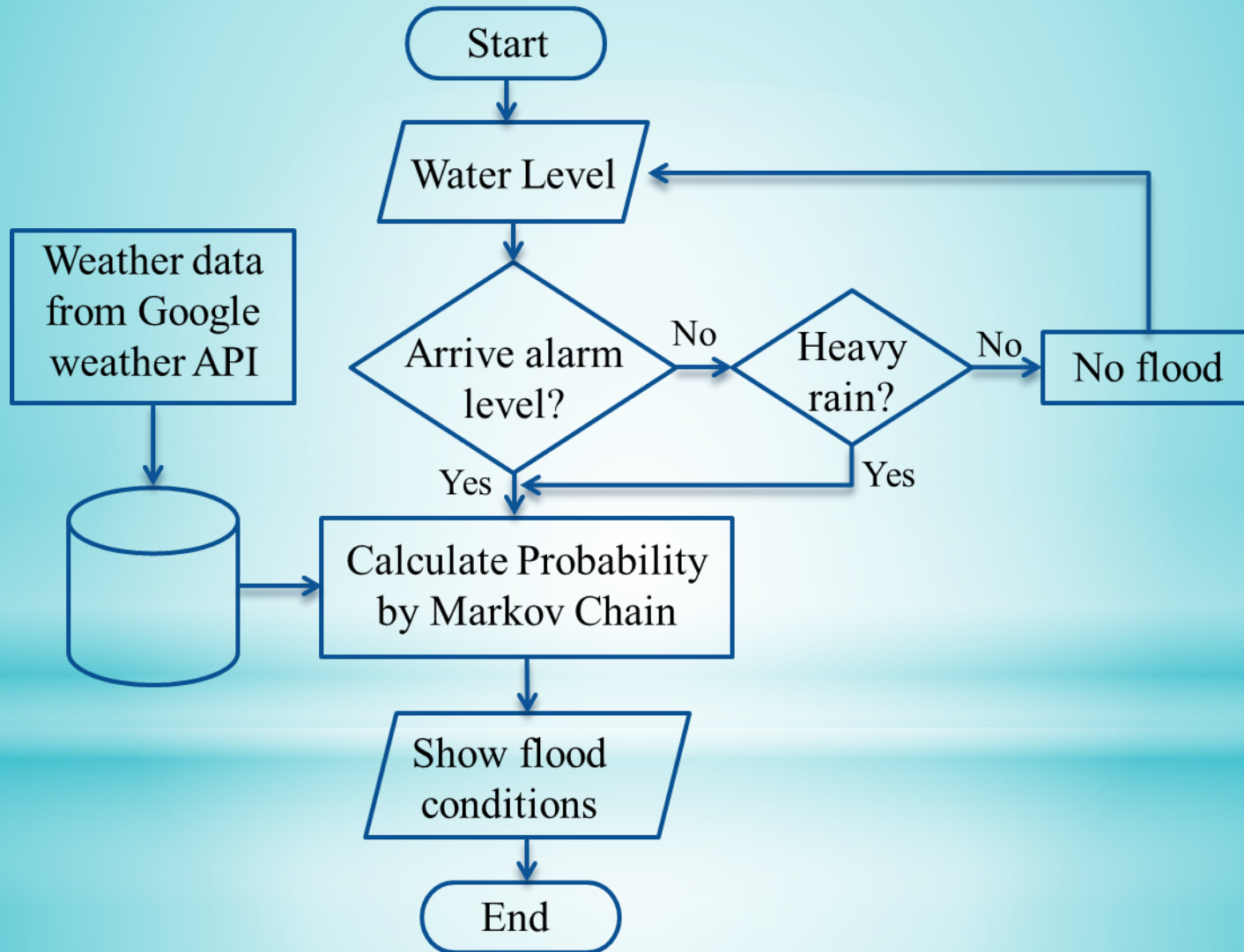
Figure1. Location of Mone Chaung Dam

Conditions of Flood in Mone Dam

- ▶ Heavy Rain in Rakhine Hills and Chin Hills
- ▶ Causing Storm in Bay-of-Bengal
- ▶ Dam cannot outlet the water from the spill way when the Ayeyarwaddy River is full of water
- ▶ Heavy Rain in Bangladesh



System Design (Cont'd)



Conclusion

- ▶ Flood is one of the most crucial disasters all over the world.
- ▶ Flood management system is important factor to prevent, control and reduce of damage hazard.
- ▶ The proposed system predict the flood conditions according to the threshold values calculated by the dam water level and weather condition.
- ▶ It will provide to inform people living in low laying region of Mone Dam to take precaution before facing the flood.



**Thank
You!!!**