SMART EARLY WARNING SYSTEM (SEWS) APPLICATION WITH NOTIFICATIONS AND SIREN AS FLOOD MONITORING SYSTEM IN SEMARANG CITY

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Kata Kunci: Flood, Sensor, Application, Notification, Siren

Floods are ranked first as natural disasters in Indonesia and are the most frequent in most of the Central Java Region (BNPB, 2020). There are 10 (ten) subdistricts in Semarang City that are potential flood-prone (BPBD Semarang City, 2021). The *purpose* of this research is to make a prototype of a flood monitoring system based on applications, sirens and warning notifications for flood-prone areas. Where, this flood monitoring system can provide water level data quickly, accurately, easily accessible anywhere and anytime. The *results* of this study are: 1. The Smart Early Warning System (SEWS) can provide water level data quickly, accurately and easily accessible to the public because it uses an android-based cellular phone as an information medium for the flood monitoring system. 2. Warning notifications and sirens are issued when the water level reaches dangerous. 3. Monitoring data in the application can be read in a fast time, which is an average of 1,003 seconds every 1 (one) time of delivery.