ABSTRACT

DESIGNING SOFTWARE FOR CALCULATING OF PLANNED RAINFALL INTENSITY USING MONONOBE METHOD BASED ON ANDROID

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Rainfall intensity is the height of the rainfall in a period where the water concentrate. Intensity analysis performed to estimate the peak discharge in the catchment area, such as in planning the drainage system of the city, culverts, and bridges. Smartphone is a smart mobile phone that uses today's technology so that it can support a variety of activities that can be used in every circle. Scientific field of civil engineering, especially in the scientific clumps of water is also affected by the current technology is increasingly rapidly. There arose an idea to create a tool to process data into the rain intensity rainfall named PELICAN. The calculation in this application using the method proposed by Dr. Mononobe and use data from BMKG or BBWS and making it easier for users to process the intensity of the rain. This application is made by using the Java programming language to script code, and development kit using Android Studio, and Kotlin to design the template. PELICAN application has a view that is simple and easy to understand and has a 99% accuracy of the calculation so that the application is feasible to be used by users in the field of civil engineering for designing drainage.

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