

Abstract

Drainage is one of the complementary road structures designed as a system to reduce and drain water from one place to the final disposal site, so that community activities can run well. However, if drainage experiences problems such as the occurrence of blockages due to garbage piles or excess water capacity, the drainage system will not work properly. The impact caused by this can damage the road. Therefore, damaged drainage needs to be maintained and repaired so that the drainage system can function properly. However, if many drainage locations are damaged, priority for repairs is needed with limited budget and time limits. So that a SI Drainage system is built that uses the Simple Additive Weighting (SAW) method that is integrated with the Android application through the Web Service to prioritize drainage repairs based on the level of damage, volume of damage and repair time. The final result of this study is to build an Android application for reporting and prioritize repairs in accordance with the calculation results using criteria with the data determined using the SAW method and testing using the QUIM model of 77.78%.

Keyword : drainage, android, simple additive weighting, web service