MAPPING OF PROTECTED FLORA AND FAUNA DISTRIBUTION IN THE SPECIAL REGION OF YOGYAKARTA USING GIS (GEOGRAPHIC INFORMATION SYSTEM)

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ABSTRACT

Protected flora and fauna in Indonesia are widely distributed across the archipelago, including in the Special Region of Yogyakarta. The issue addressed in this research is that the existence and conservation of protected flora and fauna are not matched by sufficient concern and curiosity. The objective of this study is to implement a web and mobile application for recording and disseminating information about the distribution of protected flora and fauna. This research employs a qualitative method. The web application is developed using the CodeIgniter version 4 framework in PHP, while the mobile application is built using Kotlin. The connection between the client and server utilizes REST API, and MySQL is used as the database management system (DBMS). The results of the study conclude that a web and mobile application has been successfully implemented, providing information such as common names, scientific names, conservation area locations, descriptions, and images of protected flora and fauna in the Special Region of Yogyakarta using GIS (Geographic Information System).

Keywords: Flora, Fauna, Application, Geographic Information System.