

# ***DESIGN AND DEVELOPMENT OF A MOBILE-BASED MOBILE-BASED CATHOLIC CHURCH OF THE REDEEMER OF SUMBAWA***

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## ***ABSTRACT***

*The Sumbawa Redeemer Catholic Church is a church originating from Sumbawa Besar Regency, West Nusa Tenggara Province. This Catholic Church is the only church in Sumbawa Regency. Churches still have difficulty managing church information systems. This research aims to assist in the management of church officers. In building this system, this application uses the waterfall design method. The data collection method was carried out using the Unified Modeling Language (UML) method, use cases, activity diagrams and class diagrams were used as analysis and design tools. The programming languages used include Kotlin and Java, the software used includes the IDE Android Studio 4.0, MS. The test results with Black Box Testing are an application that can help officers manage church scheduling, church information, daily reflections, and church data collection, and can be run on an Android smartphone. For testing church scheduling, church information and daily reflections can display mass schedules, information containing church announcements, and several church reflections. Meanwhile, the results of the congregation data collection test are able to display data on congregation members who have registered with the church.*

*Keywords: Catholic Church, Android Studio, Firebase, Java and Kotlin*