

## ABSTRACT

Geographic information system (GIS) or Geographic Information System (GIS) is an information system designed to work with spatially referenced data or geographic coordinates or in other words, a GIS is a database system with specific capabilities for handling spatial referenced data (spatial) working in conjunction with a set of operations.

East Ilir I was a district in the city of Palembang, South Sumatra, Indonesia. Eastern District of Ilir I in this globalization era in great need of information technology in the management of the data where there are health clinics in the district of East Ilir I was, where there are few people in the district of East Ilir I know a place/location of the existing health clinic in the district of East Ilir I was.

Applications built using waterfall method. Geographic information system was created with the manual system (analog). Manual information systems usually incorporate some data such as maps, stacking transparencies to overlap (overlay), aerial photographs, statistical reports and reports of field surveys. All of the data is compiled and analyzed manually with a tool without a computer. Programming language to be used is PHP programming language that will be assisted in dealing with the MySQL database and its ajax.

Of design and testing of geographic information systems at district clinics ilir east I palembang, geographical systems are made capable of doing the mapping map Palembang, district maps and maps of villages and the existence of clinics used in the testing perkelurahan. Metode black box testing and white box testing .

Keywords: geographic information systems, waterfall method, Black box testing and White box testing.