ABSTRACT

DESIGN AND DEVELOPMENT OF A GEOGRAPHIC INFORMATION SYSTEM FOR SOCIAL VULNERABILITY BASED ON WEBSITE USING SCRUM METHOD (CASE STUDY: REGIONAL DISASTER MANAGEMENT AGENCY OF BANYUMAS REGENCY)

By

Mukhamad Fatkhul Allam Ulya

19102226

In Banyumas Regency, the issue of social vulnerability arises due to its extensive territory and large population. Social vulnerability aspects are identified through two parameters: population density and vulnerable groups. Vulnerable groups encompass gender ratios, susceptible age groups, impoverished populations, and disabled populations. This research aims to facilitate community access to social vulnerability data and support the Banyumas Regency Disaster Management Agency (BPBD) in comprehending this issue through mapping. The initial steps of the research involve problem identification, data collection, system development using the Scrum method, blackbox testing, and conclusion. Study findings reveal that the implemented Scrum Method proves to be effective in developing a Geographic Information System (GIS) for social vulnerability, which encompasses various aspects of the social vulnerability issue. The Scrum approach enables developers to be more responsive to changing project needs. Consequently, this research significantly contributes to understanding and addressing social vulnerability in Banyumas Regency through an adaptive and efficient information technology approach.

Keywords: Banyumas, Geographic Information System, Social Vulnerability, Scrum, Black Box Testing.