

## **ABSTRACT**

*Stunting is a child growth and development disorder caused by recurrent infections and malnutrition with symptoms in the form of a child's length or height below standard. Various internal factors such as unbalanced food consumption, genetic factors, non-exclusive breastfeeding and early complementary feeding and external factors such as socioeconomic conditions, lack of maternal understanding of nutrition and health, limited availability of health services, and poor sanitation conditions can increase the likelihood of stunting. In an attempt to reduce stunting rates, various applications dedicated to handling stunting have been developed.*

*However, out of these many applications that have been developed, there are still a few that have implemented GIS (Geographic Information System) based demographic mapping features for the distribution of stunting. The use of this feature can be very useful because it can provide deeper insight into areas that have a high prevalence of stunting. This factor is the background for the author to conduct research on the development of stunting applications in Indonesia.*

*This research focuses on developing a stunting application with GIS (Geographic Information System) based demographic mapping features for the distribution of stunting in Bandung City. This application development uses Extreme Programming, Black Box Testing and User Acceptance Testing methods. Testing was done as a 3 iteration. The first iteration scored 83.2%, the second iteration scored 86.4% and the third iteration scored 89.6%.*

*Keywords: Stunting, GIS (Geographic Information System), Extreme Programming.*