APPROVAL PAGE

Approval of the School of Computing of Telkom University .

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master Informatics.

Date Sept 27, 2022 (*the date can be set manully)



(Dr. Setyorini, ST., M.T.)

Head of Master Informatics

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Informatics.

Date Sept 27 , 2022

(Ir. Ari Moesriami Barmawi, M.Sc., Ph.D.) Supervisor

Examining Committee Members. Date Sept 27 , 2022 $\label{eq:sept27}$

(Jimmy Tirtawangsa, Ph.D) (Chairperson of the jury) :_

(Thomas Anung Basuki, Ph.D) (jury's member)

(Dr. Arie Ardiyanti Suryani, S.T., M.T.) (jury's member) :