

## GRATITUDE NOTE

Praise and gratitude the author prays for the grace and blessing of Allah SWT, finally the author can complete this undergraduate thesis. In the preparation of this undergraduate thesis, the author received a lot of help, guidance and support by several parties who made this undergraduate thesis complete as it should be. Therefore, the author would like to express deepest gratitude to:

1. **Allah SWT**, as the most merciful, who provides knowledge and enlightenment, who has provided sustenance and healthy blessings so that the author can complete this undergraduate thesis to completion. May Allah SWT always provide and make it easier for His servants who always help each other with patience and sincerity, may your kindness be rewarded infinitely by Allah SWT.
2. **Rasulullah SAW**, as the author role model in living this life, the most perfect being in this universe. Which is also a guide for every human being in pursuing and achieving happiness in this world and the hereafter.
3. **Dewi Lestari and Zuli Fathullah**, as the parent of the author who always provides support in any form, who has prayed, and who always struggles so that the author can get to this point. Thank you for giving the best love to the author, may Allah SWT. provide double sustenance. Thank you for carrying out the duties of parents well, hopefully mom and dad will always be given sustenance in the form of abundant health so that they can see the author become a more successful person in the future.
4. **Tazkya Amanda Aurellia Zulfa, Hafizh Nathan Aurell Zulfa, Tsabit Nayef Aurell Zulfa**, as the brother and sister of the author who has prayed for the author to be carried out in completing this undergraduate thesis. May you always be given health so that you can be a devoted child to mom and dad.
5. **Suhartini**, as the grandmother of the author who has prayed for the author to be carried out in completing this undergraduate thesis. I hope you are given more health so that she can see the author reach a more successful point than now.

6. **Dr. Nyoman Bogi Aditya Karna, S.T., MSEE.**, as supervisor I of the author who has guided, provided direction and provided the best solution when working on the undergraduate thesis. Thank you to Mr. Bogi who has always been patient and sincere in guiding the author and making the author to be in his current position, sorry if the author has wrong words or behavior that is not pleasing to Mr. Bogi's heart, may Mr. Bogi always be given health and always be a role model for other students and always be blessed by God.
7. **Mr. Arif Indra Irawan, S.T., M.T.**, as supervisor II of the author who has guided, provided direction and provided the best solution when working on the undergraduate thesis. Thank you to Mr. Arif who has always been patient and sincere in guiding the author and making the author to be in his current position, sorry if the author has wrong words or behavior that is not pleasing to Mr. Arif's heart, may Mr. Arif always be given health, facilitated in all business.
8. **Ms. Yunendah Nur Fuadah, S.T., M.T.**, as the author class lecturer from semesters 1 to 4 and is currently continuing her education to get a doctorate in South Korea, hopefully she will always be given fluency.
9. **Mr. Dhoni Putra Setiawan, S.T., M.T., PhD.**, as the author class lecturer from semester 5 until now who has helped the author in obtaining information about lectures.
10. **Assoc. Prof. Dr. Eng. Khoirul Anwar, S.T., M. Eng.**, as a PKIP lecturer of the author who has guided the author on how to write a good and critical thesis, a very valuable knowledge. Hopefully Mr. Khoirul is given health and given ease in all his affairs.
11. **Sultan, Fahmi, and Aldi**, as the group partner of the author who has helped the author in compiling this undergraduate thesis. Thank you for taking the time to work and discuss together until we finally achieved our goal even though yesterday there was a little problem. Good luck to the three of you in the future.
12. **Ultramilk Team**, as the closest friend and family of the author in studying while at Telkom University, who has been through hardships and joys together. Which is also the home of the author when the author had no one in Bandung. I hope that you will also be given the convenience in writing this undergraduate thesis. Thank you for everything. See you on top guys.

13. **Atika Nurani Dewi**, as the author second home who always accompany and provide endless support to the author. Thank you for always being patient and helping the author so far. Thank you for taking the time to accompany the author, thank you for providing good support in any form to the author, and thank you also for all the thoughts that have been poured out to the author. May all your dreams come true.
14. **Aldi Sulthony Susilo**, as the best brother during college, who has helped a lot in writing this thesis and have also provided support in any form. Hope you become a manager at Huawei soon, bro.
15. **Moza Aurelia**, as a friend of the author who has always listened and provided solutions to all the complaints that the author told. Wishing you abundant health and good luck in the future.
16. **TT-42-INT Class**, as a classmate of the author who has become a friend of the author during college. I wish you all success. See you guys on top.
17. **Elkom Laboratory**, as the last family and also who has taught the basics of an organization to the author. I wish you all success.
18. **Other**, as those who have helped and filled the author's day in completing this lecture. We apologize profusely that cannot be mentioned one by one. May good things always be with all of you friends.
19. **Myself**, last but not least, I wanna thank me. I wanna thank me for believing in me. I wanna thank me for doing all this hard work. I wanna thank me for having no days off. I wanna thank me for, for never quitting.

May Allah SWT always provide and make the path easy for his servants. May all goodness be rewarded infinitely by Allah SWT.