

## GRATITUDE NOTE

The author would like to thank profusely to all parties who have helped work on this final project, either directly or indirectly

1. Tuhan Yesus Kristus, for all the love, guidance and forgiveness in every mistake that the author has ever done.
2. My Parents, Angelica Irwanda and all my family, Throughout my thesis work, I've received unwavering support and encouragement from them.
3. Mr. Dhoni Putra Setiawan, S.T., M.T., serves as the primary supervisor, while Mr. Edwar, S.T., M.T., acts as the secondary supervisor, consistently offering guidance and assistance throughout my final project.
4. Umar Muazzad Hasibuan, S.T., and Gilbert Ginting, S.T., provided invaluable assistance and shared their knowledge, enabling me to successfully complete my thesis.
5. The dedicated lecturers at Telkom University, who actively contribute to the educational process, play a crucial role in shaping students learning experiences..
6. Special mention to Nandi Riyandani S.T., Jeremy Matthew S.T., Firman Manggasa S.T., and Petrik Sidauruk S.T. These wonderful individuals have been my companions, sharing laughter and fun throughout the days.