

ACKNOWLEDGEMENT

Alhamdulillah, on this occasion the author would like to thank all those who have helped the author in the work of this Master Thesis directly and indirectly.

1. **Allah SWT** for all the Favours and gifts that have been given as well as smoothness in tests and trials where this final project can be completed.
2. **Both Parents**, who always provide a lot of support, motivation, prayers, and financially to the author AND WAITING PATIENTLY during college and work on this Magister Thesis.
3. **Dr. Ir. Heroe Wijanto, M.T.** as the first supervisor who has provided support, direction, and motivation, advice and new knowledge, to the author in this class and Master Thesis.

“Terima kasih pak telah membawa saya dari S1 sampai S2 selalu setia menjadi PBB1, maafkan saya kalo suka molor dan suka terlalu inisiatif banyak ide banyak 😊, semoga dari ilmu yang pernah bapak kasih bisa saya lanjutkan ke jenjang selanjut-nya”

4. **Dr. Bambang Setia Nugroho, S.T., M.T** as the 2nd supervisor who has provided support, direction, and motivation, advice and new knowledge, to the author in this master’s class and Thesis.
5. **Assoc. Prof. Dr. LEVY OLIVIA NUR, S.T., M.T.** as the first examiner who has tested the results of my thesis that I have done and provided input and revisions by giving the best value.
6. **Dr. LINDA MEYLANI S.T., M.T.** as the 2nd examiner who has tested the results of my thesis that I have done and provided input and revisions by giving the best score.
7. **RAGUNAN SIGINT** from **National Cyber Crypto Agency** who have shared their experience and limited things, AVI, RUH, edwrd, BKY, Rory S, and another DevOps and Backend team.

8. **Keeposat ID** which always has a lot of stories and drama while we exchange ideas with Om Arifin (YB2SAT), Om Joe (YC8NYJ), Havid (YD2CLX).
9. **RAPI Millenium, RSI West Java, AMSAT, ODJ , ORDA JABAR, SLW-DXH, IDvACC** who have helped share stories of happy, sad, joyful, funny, and fisticuffs.
10. **Master's friend's fighters S2 RMT 2021** who have been friends to chat with, towards Master. Bang Andika, bang Rogers, Bang Fajrul, Bang Lutfi, and other S2 friends who I can't mention all of them.
11. **YD2DAY & YD2COD** who have helped with page and book formatting issues.
12. **YE1AFR, YB1AUI, YG1AQL, YD1NDX, YF1AR, YG1AQJ, YD2UWF, YB2LLT, YB2CPQ, YD5BAG, YC0BIU, YC0AQN, YC0ACY, YB3BBD, YC1DOH, YF5NAF, YD5NCM, YD0ADY, YG2BOY, YG2CAS**
13. **YB0OIL, YB1RQX, YB1LLF**