## FOREWORD

Alhamdulillah, thanks to the Grace of Allah the Almighty, and encouragement from colleagues and fellow students, the author can arrange this Final Project as it is. Naturally, on this occasion, the author expresses his deepest gratitude to:

- Dean of the School of Industrial Engineering, Telkom University, who gave the author the opportunity to continue his education at the Telkom University Information Systems Department.
- 2. The Head of Study Program and all staff who have provided academic and administrative services to writers as students.
- 3. Mr. Muharman Lubis, Ph.D., IT. as a guardian lecturer since the beginning and has provided guidance and direction to the class.
- Mr. Taufik Nur Adi, S.Kom., M.T., Ph.D and Mrs. Rachmadita Andreswari, S.Kom., M.Kom as the Final Assignment Supervisor who is full of sincerity giving guidance on writing the Final Project to the author.
- Lecturers, fellow students of the Information Systems Department who have contributed thoughts through interpersonal discussions during lectures and outside of class hours.
- 6. Papa, Mama, Uncle, Aunt, Brothers and Sisters who patiently accompany the writer in living life, especially while studying.
- 7. All the partners and parties who helped the author who cannot be mentioned one by one here.

May Allah SWT, the Rahman and Rahim, always bestow His blessings of wellbeing and guidance on all of us in this world and in the hereafter. Aamiin Yaa Rabbal Alamin.

Bandung, March 24, 2023

Author