

DEDICATION

This thesis is compiled with the support of my family. I praise GOD and thanks to all who have helped, directed, and supported this work. I dedicate the work to my beloved parents Lia Herliyanti and Kiki Sudiana, also Fitriah Syafira that has to be the number one support system.

Finally this thesis is dedicated to all informatics students in the world. I hope that this research may provide valuable contribution in Computer Science.

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