

AUTHORIZATION

We hereby declare that we are the sole author/s of the thesis.

We authorize the Polytechnic University of the Philippines and the College of Computer and Information Sciences to lend this thesis to other institutions or individuals for the purpose of scholarly research.

We further authorize the Polytechnic University of the Philippines and the College of Computer and Information Sciences to reproduce the thesis by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

Dapitan, Joshua S.

Lasala, Anjanette R.

March 2016