

**TRYK: A MOBILE TRANSPORTATION APPLICATION
USING BELLMAN FORD ALGORITHM**

A THESIS
presented to
The School of Graduate Studies
Central Philippine University
Jaro, Iloilo City, Philippines

In Partial Fulfillment
of the Requirements for the Degree of
MASTER OF SCIENCE IN COMPUTER SCIENCE

By

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October 2020

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ABSTRACT

Tryk is a mobile transportation application for a transport service provider that facilitates communication between the commuters and tricycle drivers regarding transportation services with the localities. Tryk is linked to the global positioning system (GPS), a navigations satellite system that provides location, velocity and time synchronization. The main features of the system conveniently allows to connect the commuters and drivers for transportation services, uses the Bellman Ford Algorithm to determine the shortest path from pick-up point to travel destination based on LTFRB transport fare and travel distance, provides the users with an interface for selecting point of origin, destination and ride type and administering particularly on ensuring the validity and reliability of transport services by the registered tricycle drivers. The Rapid Application Development model was used as modification of the modules throughout the process of development caters to the needs of the software without affecting the end product. It has the facility to frequently receive feedback from the users directly interfacing with the application during the development process.

Experts and users feedback showed that the application was able to conveniently connect commuters and drivers for transportation services in determining the shortest path.