A MOBILE APPLICATION FOR CALCULATING THE MOST EFFICIENT ROUTE IN SOUTH JAKARTA

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Abstract

The number of citizen as well as the number of cars in Jakarta has increase rapidly in every year where the exponential growth that occurs every year has caused the inevitable traffic jammed in every area of Jakarta. This situation got worse when the special events occurred where the unpredictable traffic situation usually even supported by the traffic when people go home in the weekend, severely climate change, accident in traffic, and many other variables which might create even worse condition in traffic.

This research is mainly aimed to implement a new mobile application system which developed in java J2ME environment in order to gain the suitability to every mobile phone platform which uses the java environment. The application itself should be able to calculate the best route from the main location to the destination which depends on several variables retrieved from the main website www.rutebagus.com where the data mining process is completed by retrieving the database of the main server which technically was inputted by the user of the application them self.

The calculation algorithm used for the calculation methodology inside the mobile application is implemented using Dijkstra algorithm where the Dijkstra is calculating the best path based on the lowest cost which already set earlier by forming nodes on each place in Jakarta.

Having those result the application has successfully provide the feature of best path calculation of Jakarta’s best route which none of the mobile application this days specifically do to accomplish the task.

Key Words
J2ME, Java Environment, Data Mining, Dijkstra Algorithm, Nodes, Mobile Application,