The Application of Push Technology in Leisure & Sports Industry:
an Implementation of Bicycle Positioning System

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Abstract

In recent years, cycling in Taiwan has been rapidly emerged in sports and leisure industry. Governments and companies also regularly promote cycling to release the working pressure and keep physical and mental health of citizens. The safety of bicycle rider, however, is a most consideration for cycling activities. In this paper, an efficient push-pull system to locate bicycle position based on GPS and Google Maps GIS is thus designed. It helps track and locate the mobile devices, which equipped with bicycle rider, to push-and-pull message based on the user-specific rules while the condition is satisfied. The proposed system can timely transform the cycling condition to keep riders safety.

Keywords: bicycle locating, push-pull system, push-pull rules, sports and leisure industry, Google Maps