

## Smart Safari: Safari Guidance Mobile Application

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**Abstract :** Safari traveling is one of the most famous hobbies all over the world. In Sri Lanka, 'Yala' is the second-largest national park, which is a better place to go for a safari. Many number of local and foreign travelers are coming to go for a safari in 'Yala'. But 'Yala' does not have a mobile application that is made to facilitate the traveler with some important features that the traveler wants to achieve in the safari experience. To overcome these difficulties, the proposed mobile application by adding those identified features to make travelers, guiders, and administration's works easier. The proposed safari traveling guidance mobile application is called 'SMART SAFARI' for the 'Yala' National Park in Sri Lanka. There are four facilities in this mobile application that provide for travelers as well as the guiders. As the first facility, the guider and traveler can view the created map of the park, and the guider can add temporary locations of animals and special locations on the map. This is a Geographic Information System (GIS) to capture, analyze, and display geographical data. And as the second facility is to generate optimal paths according to the travelers' requirements through the park by using machine learning techniques. In the third part, the traveler can get information about animals using an animal identification system by capturing the animal. As in the other facility, the traveler will be facilitated to add reviews and a rate and view those comments under categorized sections and pre-defined score range. With those facilities, this user-friendly mobile application provides the user to get a better experience in safari traveling, and it will probably help to develop tourism culture in Sri Lanka.

**Keywords :** animal identification system, geographic information system, machine learning techniques, pre defined score range

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