

**West Visayas State University**  
**COLLEGE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY**  
**La Paz, Iloilo City, Philippines**

CROWDSOURCED-BASED MOBILE APPLICATION WITH SENTIMENT  
ANALYSIS FOR LOCAL TOURIST ATTRACTIONS

An Undergraduate Thesis  
Presented to the Faculty of the  
College of Information and Communications Technology  
West Visayas State University  
La Paz, Iloilo City

In Partial Fulfillment  
of the Requirements for the Degree  
Bachelor of Science in Information Systems

by  
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June 2023

Approval Sheet

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### Abstract

Most tourists in Iloilo tend to opt for tourism mobile applications by visiting notable tourist destinations within the city. However, some of these destinations are not well developed or updated. Tourists typically provide feedback via online review systems after visiting notable tourist destinations within the city. Most problems in the tourism industry are related to collecting accurate demographic information and calculating the satisfaction rate of tourists. Thus, the researchers proposed a "Crowdsourced-based Mobile Application with Sentiment Analysis for Local Tourist Attractions." Combined with a global positioning system (GPS), the system will display a map for navigation and detect the nearest tourist destination based on the user's location through a check-in feature. It will utilize sentiment analysis to identify the crowdsourced information, whether it's positive or

negative. The system created aids the development of the tourism industry in Iloilo City as well as provide adequate performance for each tourist destination. The proposed system was found to be useful during festivals, events and holidays. Dart, Javascript, HTML, CSS, and Node JS were used for the development of the system. The developed application achieved an overall "Very Good" rating based on the ISO 25010 standard garnering an overall mean of 4.30. Furthermore, the system was able to meet the needs and requirements of end users.

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