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Crowdsourcing-based Mobile Application
for Local Tourist Attractions with
Sentiment Analysis

User Manual

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3.0 Contact Details

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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2.4. FAQs

1. Where will be our data stored?

The mobile application uses Firebase database to store and sync data between users in real-time.

2. Is the application available for IOS?

Unfortunately, no. The Adtour mobile application is only available for the Android operating system.

3. Is Adtour free to download?

Yes, the application is free to use and available to everyone who meets the system specifications.

4. Do I need the internet in order to use the app?

Yes, both mobile and web applications require internet connectivity to function including a permission for location access.

5. Where will be our data stored?

The mobile application uses Firebase database to store and sync data between users in real-time.

Disclaimer

This software project and its corresponding documentation entitled "Crowdsourced-based Mobile Application with Sentiment Analysis for Local Tourist Attractions" is submitted to the College of Information and Communications Technology, West Visayas State University, in partial fulfillment of the requirements for the degree, Information Systems. It is the product of our own work, except where indicated text.

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Table of Contents

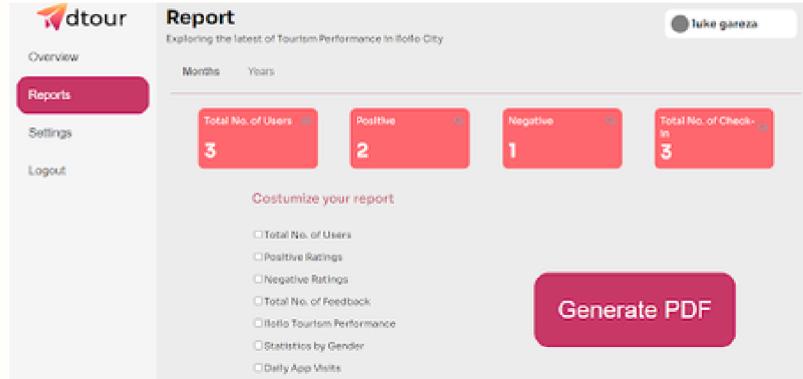
- ▶ **1.0** Getting Started
 - ▶ **1.1** Introduction
 - ▶ **1.2** System Requirements
 - ▶ **1.2.1** Hardware Specifications
 - ▶ **1.2.2** Software Specifications
 - ▶ **1.3** Installation
- ▶ **2.0** Using the System
 - ▶ **2.1** Mobile Application
 - ▶ **2.2** Web Application
 - ▶ **2.3** Troubleshooting
 - ▶ **2.4** FAQs (Frequently Asked Questions)
- ▶ **3.0** Contact Details

2.3 Troubleshooting

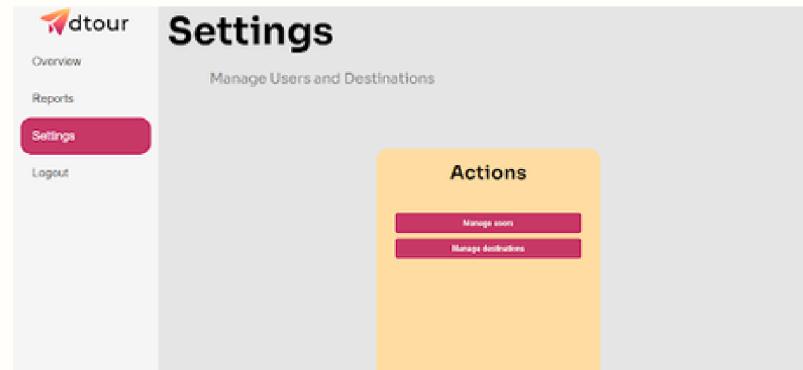
Sentiment Analysis accuracy rate

The application was trained using Google Colab to generate better accuracy for our sentiment analysis because the default dataset that the text classification had was about movies, so we gathered data from the internet about hotel reviews and museum reviews, combined and cleaned the data using Power Queries, and replaced the old data set with the one that we trained.

- c. Choose your preferred analytics report and generate it into PDF.



- d. Manage users and manage these sites by adding new tourist attractions.



1.0 Getting Started

1.1 Introduction

Derived from the Hiligaynon/Ilonggo word, *ádtō* means “it is there” or in some Panay Island provinces, it also means “let’s go there” combined with an English term, *tour* means “a journey for pleasure in which several different places are visited.”

The Adtour mobile application guides tourists in Iloilo City to notable tourist attractions with the aid of crowdsourced information from other tourists. To make it easier for tourists to access at a glance, this crowdsourced information will be classified as positive (green) or negative (red). It also includes a map feature to navigate tourist attractions and determine the nearest attraction based on the user’s location with the check-in feature.

1.2. System Requirements

Certain requirements and specifications are necessary for the system to be employed and agreed upon. These specific requirements must be observed to avoid unnecessary effects that may be encountered. In the following sections, the software and hardware specifications are presented.

1.2.1 Hardware Specifications

In the hardware necessities, the researchers used and tested the mobile application with an Android 8.1.0 version of the operating system, an Octa-core processor, 3.00GB of RAM, and a 32.0 GB device storage. For system admin, the researchers tested the application on a desktop with Intel(R) Core (TM) i5-3230M CPU @ 2.60GHz, 4GB RAM, and 64-bit operating system.

2.2 Web Application

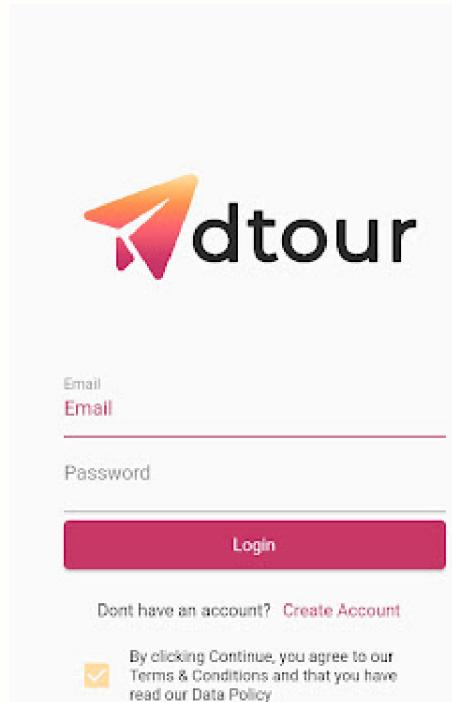
- Log-in as Admin



- Explore the overview page combined with Quantitative and Qualitative information.



j. You may log-out or log-in again if you want to use the app for another day of visit in some attractions of Iloilo. And yes! Your account is saved as data.



1.2.2. Software Specifications

The proposed system has certain software requirements that would ensure the systems accurate processing for it to work properly and employ the systems functionalities and to be in service. The software specifications describe the requirements of the developed system with relation to the software.

The system was developed using Visual Studio Code version 1.72.0 (user setup) with Dart version v3.50.0, Flutter v3.50.0. The VS Code is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. It helps the programmer write code, helps in debugging and corrects the code using the intelli-sense method. In normal terms, it facilitates users to write the code in an easy manner. Its features let the user modify the editor as per the usage, which means the user is able to download the libraries from the internet and integrate it with the code as per his requirements.

Dart is a programming language designed for client development, such as for the web and mobile apps. It is developed by Google and can also be used to build server and desktop applications. It is an object-oriented, class-based, garbage-collected language with C-style syntax.

Flutter is a free and open-source UI framework for creating native mobile applications from Google. Released in 2017, Flutter allows developers to build mobile applications with a single codebase and programming language. This capability makes building both iOS and Android apps simpler and faster.

The mobile application requires Internet connectivity to function including a permission for location access. The mobile app is compatible with Android devices running in Android 6 and above.

The system admin was developed using Simple React Snippets v1.2.7. The system can run on any updated browsers. React.js, more commonly known as React, is a free, open-source JavaScript library. It works best to build user interfaces by combining sections of code (components) into full websites. Originally built by Facebook, Meta and the open-source community now maintain it.

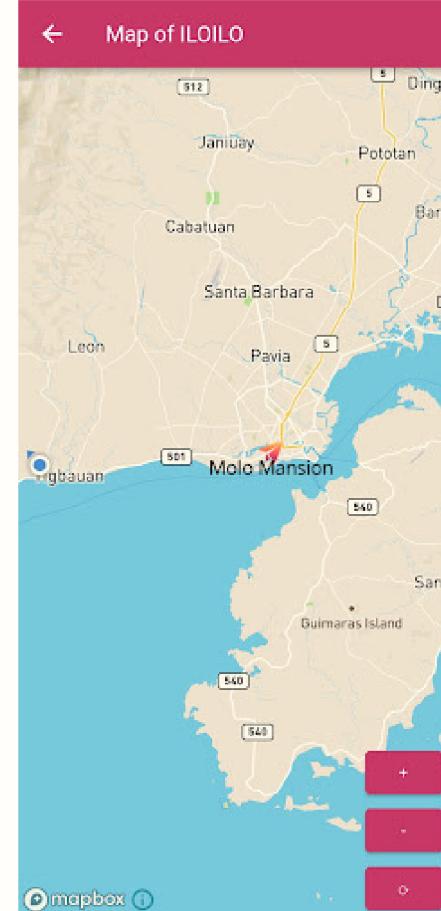
1.3. Installation of Mobile Application

- a. Download the Adtour .apk file at:
<https://bit.ly/WVSUCICT-AdtourAPK>
- b. After downloading, open your phone settings and under security tab, allow the "Install applications from unknown sources".
- c. Proceed to install the .apk file.

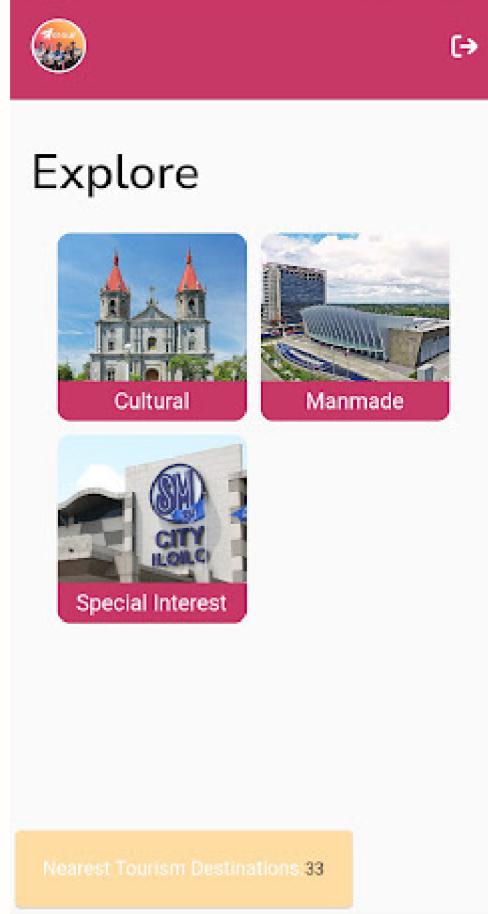
1.4. Configuration of Web Application

- a. Download the package via Github at
<https://bit.ly/WVSUCICT-Adtour>, and download ZIP.
- b. Extract the folder.
- c. After downloading, open the whole folder and load it through Visual Studio Code.
- c. Proceed to Terminal function, and type 'npm run'
- d. The web application will start in your local browser afterwards.

- i. If you are lost or in case you need to find where a tourist attraction is located, you can use the map button in the lower right side of the tourist attraction profile.



h. Visit other tourist attractions and click the check-in button to determine the nearest location. You may submit another feedback afterwards.



2.0 Using the System

2.1 Mobile Application

a. Install the APK and fill out necessary information

First Name

Last Name

Age

Phone Number

Gender:

Male Female

Email

Password

Sign In

Already have an account? [Login](#)

By clicking Continue, you agree to our Terms & Conditions and that you have read our Data Policy

b. Fill-out the tourist demographic information.

You're
Almost
there!

Are you an **International Tourist?**

Select your country

Are you a **Local Tourist?**

Select your country

CONTINUE

g. In order to see the submitted feedback, visit the tourist attraction profile and check if your submitted feedback is positive or negative.

zone. Around the plaza are old colonial houses of sugar baron and Hispano-Filipino house of the elite that still stand. The Jaro Cathedral is also found in the Jaro Plaza Complex

Address

Jaro, Iloilo City

Reviews

- Angie
2022-11-23

"I hate to leave this place."

Negative
- Angie
2022-11-23

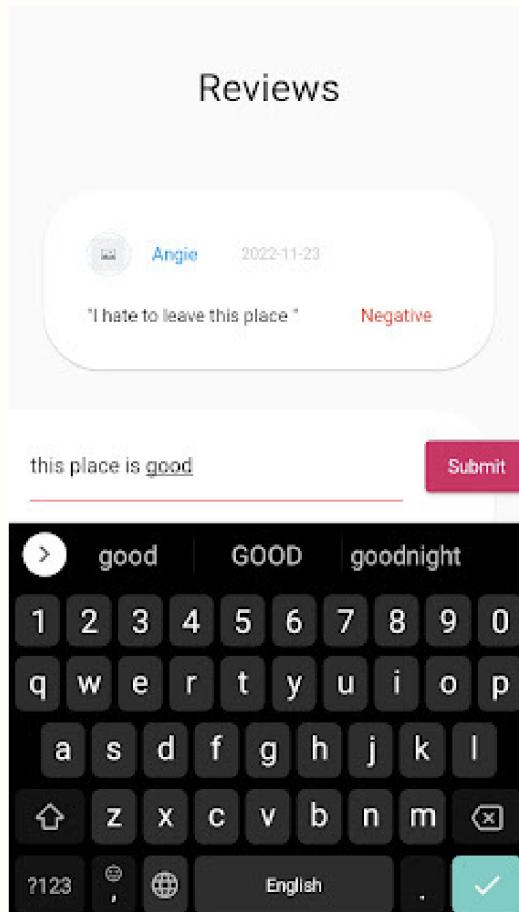
"the place is nice"

Positive
- Dion Rey
2022-11-23

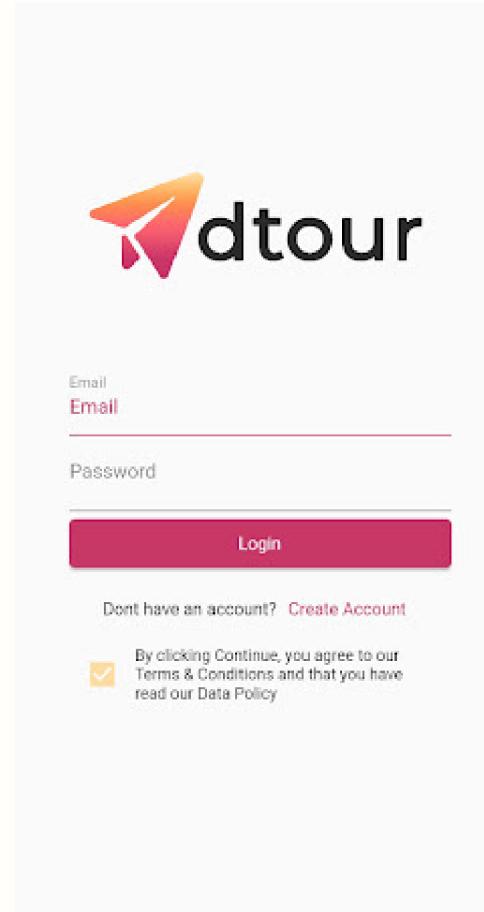
"this is a nice place"

Positive

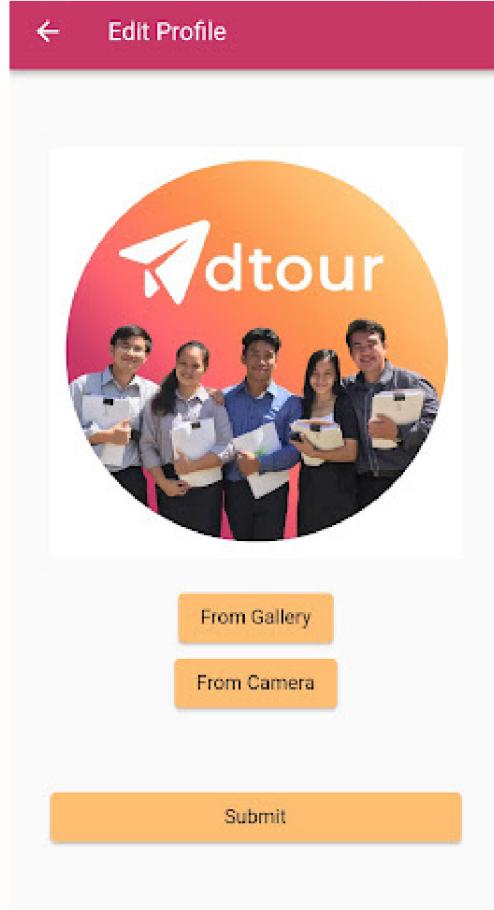
f. If confirmed, you may submit feedback or the crowdsourced information. Once submitted successfully, the feedback will be part of the tourist attraction profile.



c. Log-in Screen Interface shows the sign-in screen of the mobile application.



d. Profile Interface shows the profile interface of the mobile application wherein the user can choose to submit a photo from the gallery or the camera.



e. Click the check-in button for the nearest attraction and turn on your location.

