



INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

BEng. (Hons) in Software Engineering

Final year Project 2017/2018

Final Report

For

Ceylon Trip Organizer

By

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Abstract

Sri Lanka is one of the top travel destinations in the world. Today, it is common to leave a review about the travelers' experience online. Each destination around the Sri Lanka consist of reviews from travelers all over the world. People usually use platforms like google places and foursquare to review places. The reviews are valuable to a person who wants to travel to a new destination they might like but never visited before or even heard of. It would consume time to read reviews at each destination around the country. This is where Ceylon Trip Organizer (CTO) comes handy, it will read the reviews for you and give you the best destinations around the country according to your preferences. This saves valuable time that would take to read hundreds of reviews just to find one destination.

CTO interfaces with the users through a chatbot. Users can input their requirement to the chatbot by typing. They can be precise about the destination they prefer, and the user will be provided with a list of destinations that matches to their preference. CTO makes use of Natural language processing and parse trees to identify the requirements of the user through the conversation text between the chatbot and the user. CTO will use the identified requirements and search through reviews platforms like foursquare to find suitable destinations for the user. The CTO prototype is built on a microservice platform, and has been tested, evaluated by experts to prove to be an effective solution.

Subject Descriptors:

I.2.7 Natural Language Processing

Language parsing and understanding

Text analysis

Key Words:

Natural Language Processing, Parse Trees, Sentiment analysis, Chatbot