# USING RECOMMENDER SYSTEM AND GOOGLE MAP FOR INDONESIAN TOURISM DESTINATION

# **MOHAMMAD FADLY SYAH PUTRA**

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# USING RECOMMENDER SYSTEM AND GOOGLE MAP FOR INDONESIAN TOURISM DESTINATION

A thesis submitted to the Faculty of Information Technology in partial fulfillment of the requirements for the degree Master of Science (Information Technology), Universiti Utara Malaysia.

by Mohammad Fadly Syah Putra



## KOLEJ SASTERA DAN SAINS (College of Arts and Sciences) Universiti Utara Malaysia

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### **ABSTRAK**

Lembaga pelancongan Indonesia telah melancarkan tahun melawat Indonesia 2008, untuk promosi dan menarik pelancong asing dari seluruh dunia, untuk tujuan ini banyak usaha telah dijalankan. Penggunaan teknologi recommender system dan Google Map API boleh membantu pelancong yang belum berpengalaman untuk mencari destinasi pelancongan yang sesuai di Indonesia, berdasarkan keperluan pelancong. Teknologi recommender system telah dibangunkan menggunakan kaedah item to item content based filtering, yang menghubungkan kesamaan antara satu item dengan yang lainya. Google Map API telah dibangunkan dengan menggunakan JavaScript dan fungsi muat turun laman Google server, dengan penggunaan peta dinamik pelancong boleh mengetahui lokasi sebenar dan jarak antara satu destinasi pelancongan dengan lainya. Analisis tentang profil destinasi pelancongan telah di diperolehi dari lembaga pelancongan Indonesia. Untuk merekabentuk aplikasi ini use case diagram, sequence diagram dan database design telah dijalankan. Untuk menguji output dari aplikasi ini ujian use case telah dijalankan, sementara ujian kebolehgunaan telah dijalankan dengan memperolehi keputusan yang tinggi di pembolehubah fungsi dan rendah di pembolehubah ralat.

### **ABSTRACT**

Indonesian tourism board has launched visit Indonesia year 2008, to promote and attract foreign traveler from around the globe, for this purpose much work has been done. Using recommender system technology and Google Map API dynamic map might be helpful for assist inexperienced traveler for searching suitable destination in Indonesia, base on their preference. Recommender system technology has develop by using item to item content based approach, that correlate the relationship between one item with another. Google map API develop using JavaScript and loading page function from Google server, with using dynamic map user might be capturing and imaging the exact location and distance of one destination with another. Analysis of destination profile has been gathered from Indonesian tourism board. To design this application use case diagram, sequence diagram, class diagram and database design has been used. For testing the output of the system use case test has been used, while usability test has been done with resulting high usability in system functional and weak in error variable.

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### **CHAPTER 1**

### INTRODUCTION

### 1.1 Background of the Study

Tourism is a vital sector for several countries, due to possibly income generated by the consumption of goods and services by tourist, the taxes levied on business in tourism industry, and opportunity for employment in service industries that associated with tourism.

The dramatic change and development of Information and Communication Technology (ICT) has changed the way people search for and digest information. As the World Wide Web became prevalent around the globe, more travelers used the Internet as a medium for searching tourism information and planning their trips (Zhou & DeSantis, 2005)

The tourism information website or portal is contain of large data such as destination, attraction, event and other tourism related data, it is became a problem to the user who tend to be less attention, limited time and thus unable to collect relevant information from much of data. To address this problem, much work has been done on intelligently mining information from internet data, retrieving only what is requested by the user. Paris (2003) revealed that there is various method uses to filter user request and requirement, the objective is to develop personalized tourism application that can match what user needs. The application is developed to give service to the user when planning, on site, or after traveling. This research is focused on developing application that can give advice in the planning phase.

# The contents of the thesis is for internal user only

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