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An Effective QoS Based Web Service Composition Algorithm for Integration of Travel & Tourism Resources

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Abstract

Tourism is a major revenue making domain globally. Tourism is a kind of travel to obtain leisure-time, spiritual-trip, and family or job purposes, typically for a little span of duration. Here the biggest problem is lacking in obtaining the available tourism domain resources (Places to visit, Hotel, Pilgrims, and Airways etc). Webservices is playing a vital role in the software industry. Web services are the collections of software components and standards for the next generation technologies. It also supports over the internet based standard protocols such as SOAP and XML. These technology standards strongly support the multi channel resource handling scenarios. Similarly Geographic Information System (GIS) is a computerized technique intended to save, store, manipulate, explore, control, and present every kind of spatial data irrespective of various domains. In this paper we have designed the effective composition web service algorithm to integrate Multi travel and Tourism resources. The proposed algorithm integrates with GIS application to produce interactive interface for travel and Tourism Domain.

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Keywords: Web services; GIS; XML; SOAP; Spatial Data.

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1. INTRODUCTION

The term tourism is well-known by the World Tourism Organization (NSCB, 2004). This is the act of travelling for the purpose of recreation and the provision of services. It is in depth described that a tourist is a traveller who at least travels frequently from home for the purpose of recreation. To a normal man, tourism could just be the act of visiting other places for the need of sightseeing and enjoyment but the activities of tourism are more than that the Tourism is said to be the activities of people travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, commercial and other purposes related to the exercise of an activity remunerated from within the place visited. As a service industry, tourism consists of tangible and intangible components. The tangible elements contain basic infrastructures like transport, lodgings, tours, while the intangible elements contain education, culture, or simply escape and relaxation.

The tourism industry in India is a developing one and Tamil Nadu state is becoming a destination for tourists into the country. With this recent development, government of India is making efforts through the board of tourisms to develop and maintain this sector as a major source of revenue for the state and also country. With the global wide expansion in urbanization and the increasing stress of urban life, people look for places to ease their pressure and leisure and the natural sites in Tamil Nadu State are obvious choices.

Tourism is a major revenue making domain globally. Tourism is a kind of travel to obtain leisure-time, spiritual-trip, and family or job purposes, typically for a little span of duration. Here the biggest problem is lacking in obtaining the available tourism domain resources (Places to visit, Hotel, Pilgrims, and Airways etc). Web services is playing a vital role in the software industry. Web services are the collections of software components and standards for the next generation technologies. It also supports over the internet based standard protocols such as SOAP and XML. Similarly Geographic Information System (GIS) is a computerized technique intended to save, store, manipulate, explore, control, and present every kind of spatial data irrespective of various domains. In this paper we have designed the effective composition web service algorithm to integrate multi travel and tourism resources. The proposed algorithm integrates with GIS application to produce interactive interface for travel and Tourism Domain.

A geographic information system (GIS) is a computer-based tool for mapping and analyzing things that exist and events that happen on earth. GIS based technology incorporates common database operations such as query and statistical analysis with the unique visualization and geographic analysis benefits offered by maps. Provides access to GIS data or functionality over the internet in a standardized way. GIS web service is NOT an internet mapping application. A service can be consumed by, or integrated into, a web application. A web service can be thought of as an Interface, by which your application accesses the data or functionality. These technology standards strongly support the multi channel resource handling scenarios are handled by QoS based composition engine.

2. RELATED WORKS

1. OPPORTUNITIES AND CHALLENGES OF USING GIS IN SUSTAINABLE TOURISM DEVELOPMENT: THE CASE OF EGYPT[7]:

This paper explores the possible opportunities and challenges that face the implementation of GIS in Egypt sustainable tourism. This study explores him challenges deterring effective GIS application and classifies them into four constructs, each including sub factors.

2. THE APPLICATION OF GIS AND ITS COMPONENTS IN TOURISM[17]:

In this paper GIS has been established as a tool for collecting, analyzing, modelling and visual presentation of tourist data. Also, GIS is used for bringing the geo-referenced data (spatial and non spatial) of geographic location Zlatibor and Zlatar into digital maps. The each object is assigned in to a thematic layer. Each layer