ABSTRACT

Existing tourism information systems only provide information about facility and site map of a tourist attraction. A lot of tourists from other cities or country will have a trouble finding the attraction they want to go because of not knowing the route to go there. Online Travel Guide consists of several sub-systems that designed into a complex system to facilitate the tourists visiting the tourist attraction. This final project will focus on tourism in Surabaya as a study case. A good design of the system is required to optimize it despite its novel size and complexity. System’s design including technology choosing, algorithm and system’s security. This system not only will recommend a route suggestion to tourists but also visualize it in 3 dimensional map so that the tourists seemed to be in that place. Another feature of this application is tourists can estimate the travel's budget by only inputting maximum budget of travel in this application (adaptable budget). The tourist will obtained an online lodging reservations with E-Ticketing and info of typical sales of goods in accordance with the existing budget. System budgetting feature will implement adaptable Knapsack Greedy algorithm. This algorithm was chosen because it provides the best of the best solutions regardless of the consequences in the future. This algorithm will provides two types of tour packages according to the Greedy Knapsack optimum minimum and maximum optimal. E-Ticketing System using MD5 encryption algorithm to make the reservation code. The encryption code will be divided into three parts, the key server, public key, and Private key. When processing reservation code, an inter-server communication process will occur, ie main server send the public key to the hotel server. To secure the data communication process, servers will use HTTPS protocol to encrypt the data which being transmitted. Given the variety of existing facilities at Online application Travel Guide, travelers will be greatly helped when travelling in Surabaya.

Keywords: tourism, travel online, e-ticketing, adaptable budget, three-dimensional maps, route search, encryption