

## *“Online-Travel Assistant” Project*

### *Problem description*

In our days, the primary tool used by budget travelers (such as college students) is the tour book, such as a “Let’s Visit Romania” guidebook, or a “Let’s Go” guidebook. These books are typically several hundred pages long, are updated once a year, and contain lists and short descriptions of points of interests such as landmarks, restaurants, and entertainment venues. They also contained some limited maps of the cities they cover, as well as cultural and historical summaries of covered regions. However, the most important components of the guidebooks are the maps, although they are limited for the interests of budget travelers.

In addition, because of the importance of finding a place to stay, the accommodations listings are also a very valuable resource. Furthermore, travelers also enjoy the cultural segments in guidebooks. There are a lot of complaints, however, that guidebooks are difficult to search, that the listings and reviews in guidebooks seem to reflect the interests of the authors, and not usually seem to match travelers’ interests, and that much of the information is outdated. Guidebooks, therefore, are the most common tool for budget travelers, and the maps and accommodations listings provide an invaluable resource for someone in a new city.

The goal of “E-Travel Assistant”, therefore, is to solve these problems, and will provide efficient access to large amounts of information, personalized information and ideas that reflect the interests and goals of the user, a means to collect information about users interests, cultural information, in-depth map coverage, as well as other useful resources.

In order to fulfill its goal, E-Travel Assistant provides the following services:

- A. Allow to a traveler to create its profile in which she/he enters in her/his preferences and interests about the music, sports, food, bars, restaurants, concerts and museums. Also the profile should contain information about the maximum cost of the lodging which the traveler is willing to spend, the kind of lodging (hotel, pension, hostel), the place in which the lodging is placed (near the shopping, university, mean of transportation), etc.

The information from profile will be memorized in a database that will be used by the system when advising the traveler about activities that closely match his or her interest.

The user can update his profile anytime to allow for a more flexible travel experience. If the user does not change his or her profile, the suggestions will be identical to all listings, because the profile contains default values that are chosen to not filter out any points of interest. As the user adjusts the profile, listings that do not meet the interests of the user would not be suggested.

- B. Allow to a traveler to find and book an accommodation in a specific city. In order to do this, the traveler inputs the name of the city in which he/she is, the time in which he/she will stay in this city and the number of people staying. The result is a list of all accommodations that match all criteria from its profile (taking into consideration his/her budget, the setting, the privacy (dorm vs. single), the quietness etc.) and those which the system asks the traveler to insert. The traveler will have the option to book online if he/she has Internet access.

- C. Allow to traveler to monitor his/her spending by letting him/her to input the amount of money he/she spent each day. The system will then automatically adapt his/her itinerary to new financial constraints; this may include recommending cheaper restaurants and free entertainment.
- D. Allow to locate a particular destination on a map. Currently, a traveler uses guidebooks to map a location he wants to visit. The problem with this approach is that those maps do not map all the possible locations, usually only highlight the landmarks, and do not give an estimate of the distances between locations. The system will resolve these problems providing maps to all the recommended sites including restaurants, bars, accommodations, etc. It will also provide an approximation of the distance to the location. Whenever a location is recommended or included in the itinerary, the user will be given the option to map it.

**Project Task: Design and implement the “Online-Travel Assistant” software system.**