Intelligent Tourist Guide System

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Abstract- *The main idea of this was to design a system that would run on almost every mobile device or computing device which will be helpful when visiting some new places and cities. This system should be able to find a route and best hotels as per user's criteria.In view of the forgoing, the system was implemented using Rational Unified Process as the adopted software development process, whereas MySQL, HTML and PYTHON were the implementation tools used in the development of the system. Upon completion, the system was able to provide information by fetching information from the web pertaining to the subject of interest to assist tourists in decision making process. It was also able to act intelligently by using hybrid recommendation technique to recommend tourist locations based on their preference.*

Keywords- Tourism; Intelligent; Tourism Management; System.

I. INTRODUCTION

The proposed system is a web application which is built in PYTHON. It fulfils most all needs such as hotel ratings, domestic and international places and their costing. Also, it provides an information like maps of a city, parking places, points of interest (museums, art galleries, restaurants, monuments and many more) with their description, cost of entrance, time needed to visit and at least one photo of these places. It also provides the routes to the nearest restrooms. Each nations are rich in their culture so we plan on also showing the information of the festivals that are upcoming since tourist are really interested in finding out more about the culture of the places they visit.

The goal of this research is to design and implement intelligent platform that will aid tourists in all over the globe to have access to information on tourist locations thus help fasten their decision-making process.

II. LITERATURE REVIEW

There are plethora of tourism projects and researches are available on Internet but some of the detriments and functions are left over. Those existing system is failed to propose a much-needed navigation system and description of the places and accommodations. As well as some drawbacks are less efficient, slower, outdated information and many more.

Author	Topic	Remarks
P.K. Jithin, M. Vishnuram, P. Prasath, J.T. Thirukrishna	Tourist Guide for Tamil Nadu	It does not contain multiple destination option, does not support cross-platform.
Dedape Jitendra R., Jadhav Bhagyashri R., Gaidhani Pranav V., Vyavahare Seema U., Achaliya Parag N.	Smart Travel Guide	Outdated Map view, no route option, does not support cross-platform.
Krzysztof Jele	Intelligent tourist information system	Older version, does not support cross-platform.

Thus, I have taken so many references, many project inspired me. The common issue among all project is cross-platform is not supported. So, my idea is to improving navigation system and other details of the places and hotels. Hence, this system is entirely new idea from other existing projects.

Finally, my project stands unique among existing projects in many ways. Our new also promising methodology of creating web application that will support cross-platform in future, easy to add new feature. The main thing is improvised navigation system and provide the details of places, accommodation, and costing of the trip.

III. THE PROPOSE METHOD

Entity relationship diagram as depicted in Figure 1, is a graphical representation of entities and their relationships with each other. It is also referring to as the organization of data within the database or system on the logical representation of the database on Intelligent Tourist Guide System.

A. Entity Relationship Diagram

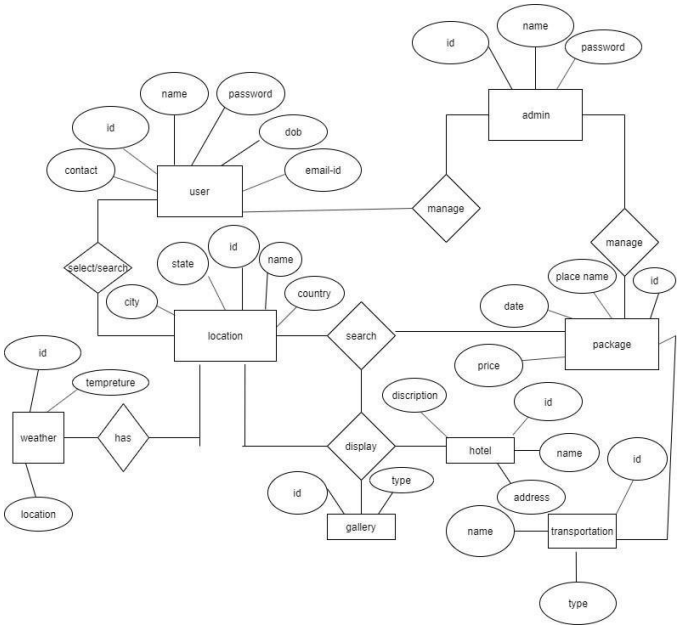
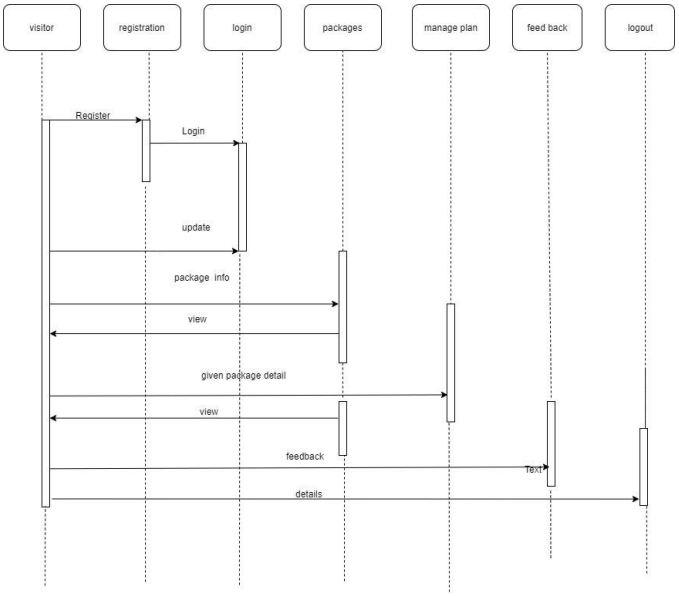


Figure 1. Entity Relationship Diagram for ITGS



Hardware and Software characteristics

Hardware Requirements

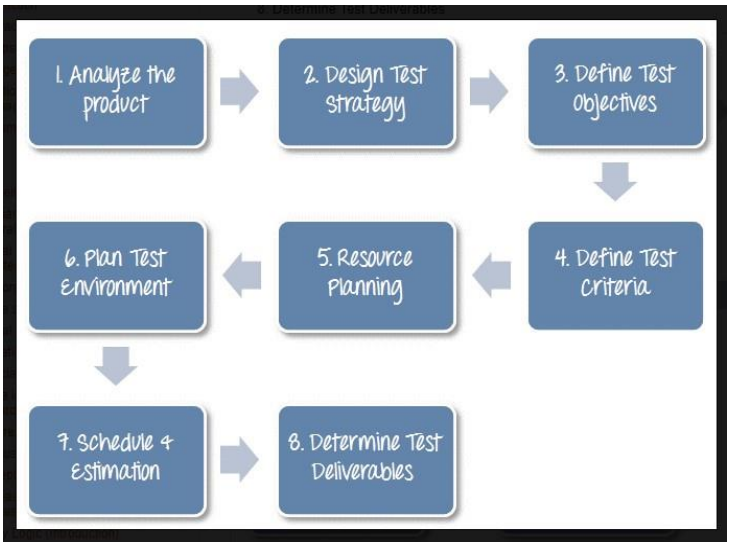
- Processor: Minimum 1 GHz; Recommended 2GHz or more.
- Ethernet connection (LAN) OR a wireless adapter (Wi-Fi)
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more.
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above.
- Graphics card Minimum 2GB DDR4 or above

Software Requirements

People often ask what browser they should use. There is no single answer for this. Use whichever browser works best on your computer. However, we recommend downloading Firefox and/or Chrome in addition to having Internet Explorer.

B. Sequence Diagram

TESTING



- Unit Testing

It is a software development process in which the smallest testable parts of an application, called units, are individually and independently scrutinized for proper operation. Unit testing is often automated but it can also be done manually. Unit testing can be time-consuming and tedious. It demands patience and thoroughness on the part of the development team. Rigorous documentation must be maintained. Unit testing must be done with an awareness that it may not be possible to test a unit for every input scenario that will occur when the program is run in a real-world environment.

- Integration Testing

Data can be lost across on an interface, one module have an adverse effect on the other sub functions, when combined may not produce the desired functions. Integrated testing is the systematic testing to uncover the error within the interface. The testing is done with simple data and the developed system can run successfully with this simple data. Here the major intention is to find the overall system performance.

- Validation Testing

After testing all the aspects in ideal condition, interfacing error has been uncovered and corrected and the final series of tests that is validation begins. The validation test can be defined by the following simple definition that validation succeeds when the software functions in a manner that can be reasonably accepted by the customer.

- Output Testing

After performing validation testing the next step is the output testing. The system cannot be useful if it does not produce the required output. Asking the user about the format in which the system is required, test the output that is displayed or generated by the system under consideration. Here the output format is considered in two ways. One is on screen format and the other is the printed format. The output format on the screen is found to be correct as the format was designed in the system phase according to user names. As for the systems which we used, the output comes according to the specification requested by the user. Here the output testing doesn't result in any correction in the system.

- User Acceptance Testing

User acceptance testing of the system is the key factor of the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with the prospective system at the time of development and making change whenever required.

<u>Application Screenshot (Website Name: "DESTINO")</u>

I. Client Side with Description

Home Page

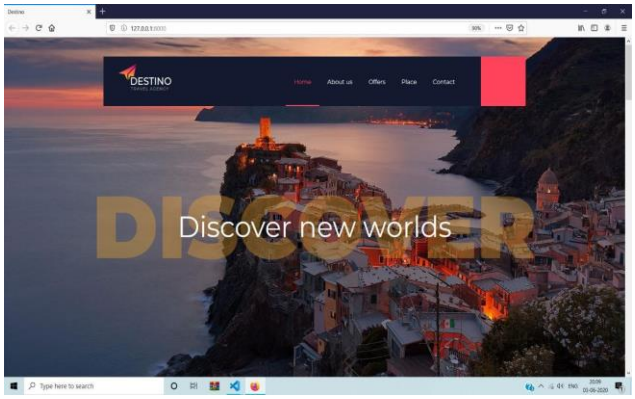
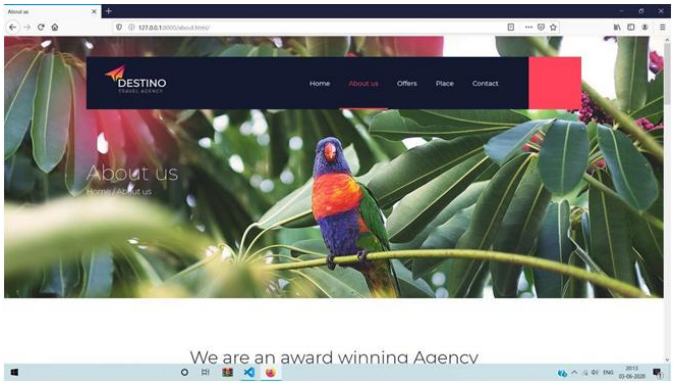


Fig.1 Home Page



Login Page (Admin Side Only)

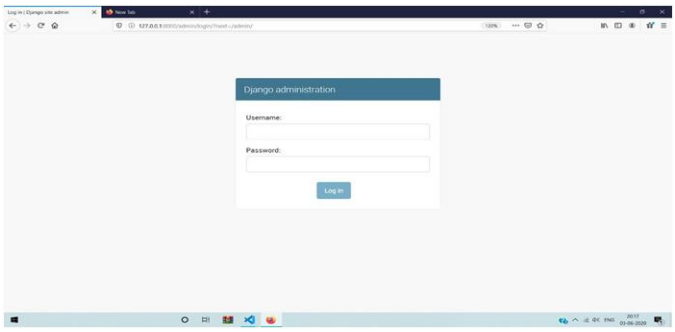


Fig. 2. Login Page

Offer Page

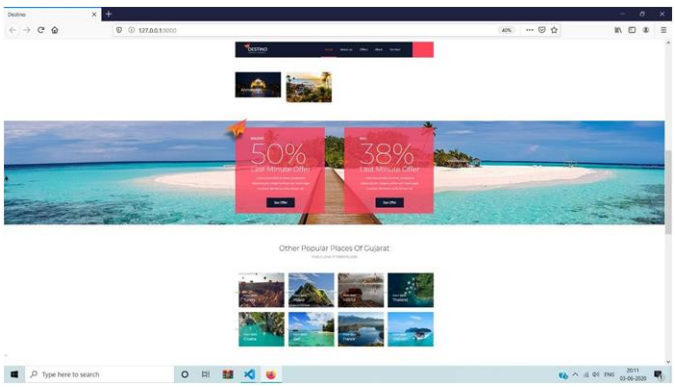
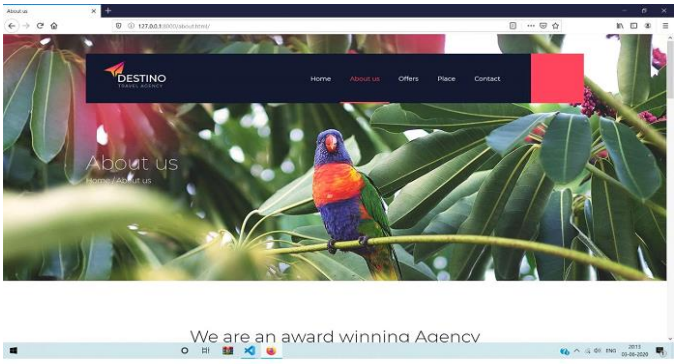


Fig. 3. Offer Page

About Us



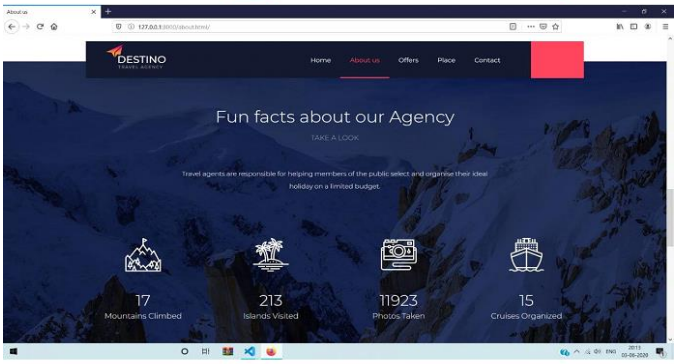


Fig.4. About Us

Various Tags

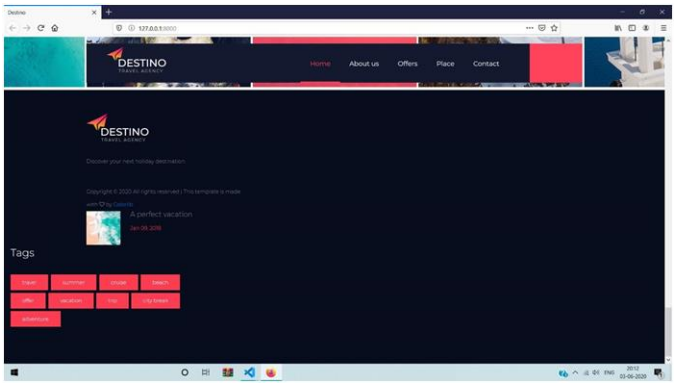


Fig. 5. Various Tags

Best Places

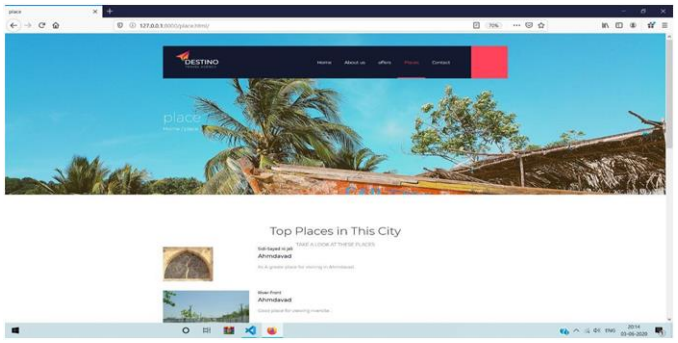


Fig.6. Best Place

Best Offers

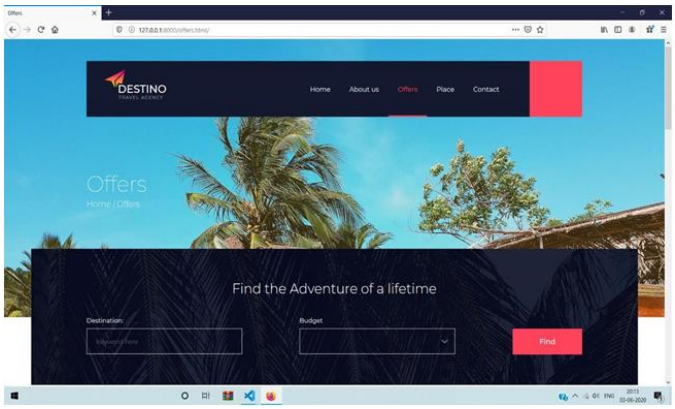


Fig. 7. Best Offers

Contact Details

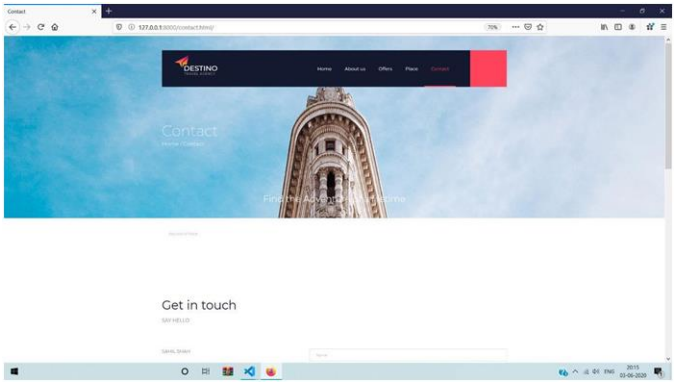


Fig.8. Contact Details

Admin Side

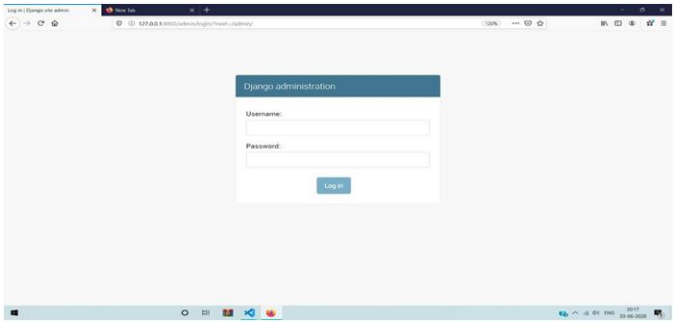


Fig. 9. Admin Login Page

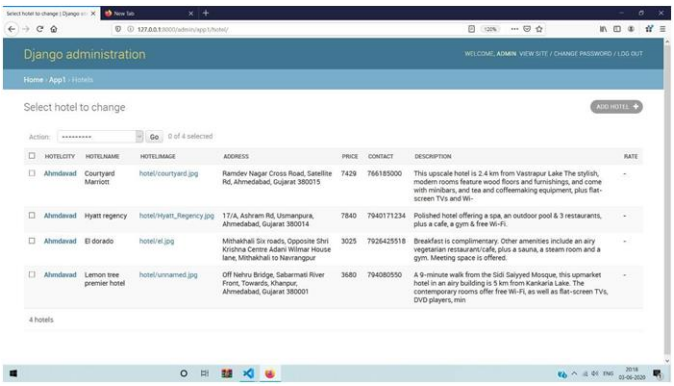


Fig. 10. Description Details

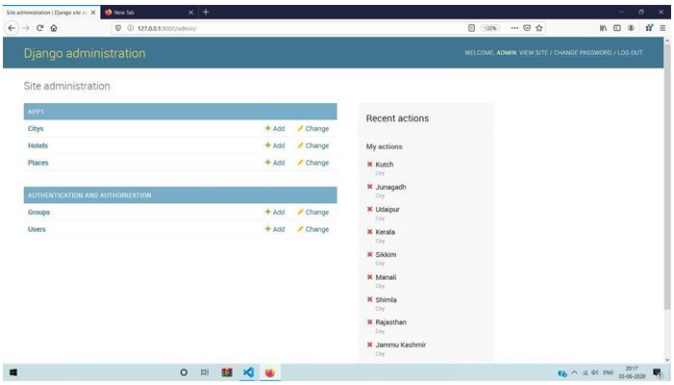


Fig. 11. Administrative Page

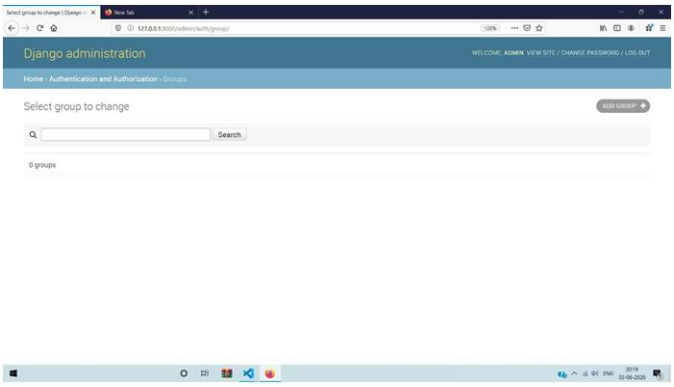


Fig. 12. Editing Page

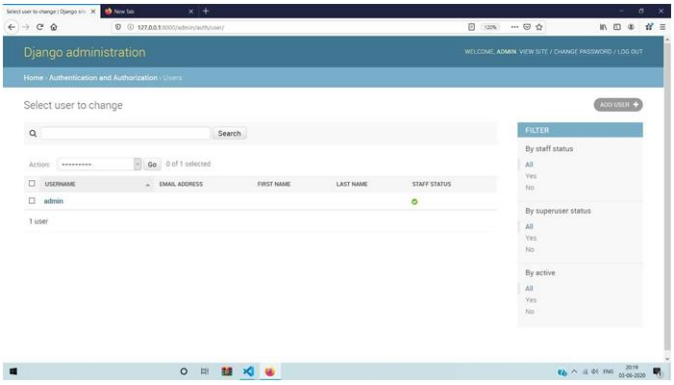


Fig. 13. Admin Side Page

IV. FUTURE WORK

As the next stage of this research project, the main focus is on enhancing the application for both IOS and windows phones, using cross-platform development. Furthermore, accuracy level and the performance level can be increased using newly coming technologies by adapting to those and system will be modified according to the requirements. Since the system comprises of a question-based feedback engine, the focus will be given to increase the domain that the users can ask questions, by enhancing the Naïve Bayes classifier model. Considering security levels of the application, converging on implementing user logins for each user level.

- Future Enhancements In future we can integrate this system in various other processes and carried out many task. We can develop this system on mobile platform and make this process more convenient for any common man who wants to establish their business.

- Further we will provide the online transactions and payment methods so the payments will get easier. We will provide the consultant for the business development and for the growth of the business.

- By the help of the guide even the middle class or common can establish their own business and can stand on their own feet.

V. CONCLUSION

The system provide information query of the hotel, scenery, restaurant, traffic and so on. The system is a combination of smart phone and Internet services and will help tour and life for user. Positioning support (GPS), highlights the user's current position on the map. Exchange of tourist's reviews/suggestions with other tourists, especially with those that share similar tourist's interest inclusion of emergency contacts in the city map (ATM, Restaurant, Police Station etc.). And search facilities to locate depending on the current location of user. Quickly search the location of user without wasting of time. Easy to find out National Conference-Ekalavya-2k15, Special issue published by Multidisciplinary Journal of Research in Engineering and Technology, location in the city as per user interest. It is compatible, reliable system for future; also it is life for user.

VI. ACKNOWLEDGMENT

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REFERENCES

[1] Aho Alfred V., Hopcroft John E., Ullman Jeffrey D. – Data Structures and Algorithms Bell Telephone Laboratories (1983)
[2] Babin S. – Developing Software for Symbian OS. An Introduction to Creating Smartphone John Wiley & Sons (2006)
[3] Cormen Thomas H., Leiserson Charles E., Rivest Ronald L., Stein Clifford – Introduction to Algorithms, Second Edition The MIT Press (2001)
[4] Digia Inc. – Programming for the Series 60 Platform and Symbian OS John Wiley & Sons (2003)
[5] Grewal Mohinder S, Weill Lawrence R., Andrews Angus P.– Global Positioning Systems, Inertial Navigation and Integration John Wiley & Sons (2001)
[6] Praca zbiorowa – System nawigacyjny GALILEO. Aspekty strategiczne, naukowe i techniczne Wydawnictwa Komunikacji i Łączności WKŁ (2006)
[7] Sanders P. – Symbian OS – the Open Mobile Phone Operating System (article from http://www.symbian.com, last visited January in 2007)
[8] Wirth Niklaus – Algorytmy + Struktury Danych = Programy (org title Algorithms + Data Structures = Programs) Wydawnictwa Naukowo Techniczne (2002)
[9] http://ec.europa.eu/dgs/energy_transport/galileo/, last visited in June 2007
[10] http://en.wikipedia.org/wiki/SiRFstar_III, last visited in May 2007
[11] http://en.wikipedia.org/wiki/Windows_Mobile, last visited in February 2006
[12] http://en.wikipedia.org/wiki/Windows_Mobile, last visited in February 2006
[13] http://opie.handhelds.org/cgi-bin/moin.cgi/WhatIsOpie, last visited in February 2006
[14] http://pl.wikipedia.org/wiki/Palm_OS, http://en.wikipedia.org/wiki/Palm_OS, last visited in February 2006
[15] http://www.trolltech.com/products/qtopia/, last visited in February 2006