TAIS Client Application Improvements and Optimization for Tablets

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Abstract— This paper presents improvements of a tourist attraction information service (TAIS) for supporting a tourist in a region. The service has been developed to recommend attractions to the tourist that could be interesting for him/her based on the current situation. Main changes that have been implemented in the service provide new user interface for client application and several background improvements in the service.

I. Introduction

TAIS has been developed under joint project of European Union, Finland and Russian Federation to provide crossborder e-tourism framework in Karelia and Oulu region [1]. The main purpose of the service is to recommend attractions to the tourist that could be interesting for him/her based on the current situation. Attractions, their descriptions and images are extracted from open, free of charge Internet sources (like Wikipedia, Wikivoyage, Panoramio) that allows to provide the service for any tourists' regions. List of attractions is ranged by the recommendation estimation provided by component of the service. Recommendations are based on ratings set by the TAIS users. The TAIS is recommended by the FRUCT community for finding way to the FRUCT conference venue and exploring places of interest around it (Fig. 1).

Service architecture is based on Smart-M3 information sharing platform that implement smart space concept. It makes possible to significantly simplify further development of the system, include new information sources and services, and to make the system highly scalable.

II. APPLICATION IMPROVEMENTS

The main improvements that have been implemented in TAIS can be divided on two groups: background and client application changes.

The main background changes lies in replacing of semantic information broker implementation used in service. Now the CuteSIB [2] is used. One of the preferences of the CuteSIB is a higher stability and performance in compare to the RedSIB implementation of semantic broker [3].

Client application has been revised to provide better user experience during the interaction with service. The main tasks of the client application are: share information about tourist context, profile, and actions; communication with smart space; provide results to the tourist; and share tourist ratings of attended attractions, browsed descriptions and images with

the smart space. Hence the main focus has been given to the UI elements organization and interaction between them.



Practical Information

The 17th FRUCT conference will be held in the main building of the Yaroslavl State University. The building is located in the centre of Yaroslav city at the Krasnaya Ploshad (Red Square). The address is: Yaroslavl, Sovetskaya strett, You can get there from any site of the city using a public transportation that goes to the "Krasnaya Ploshad" stop.

**Transportation: Yaroslavl has a vast public transportation system with a mild price of 18 roubles for a single ride. Vou can buy tylects only by cash from conductors inside a vehicle. Botus cschemes of public transport are available on web page http://yargortrans.ru/schemes.php (in Russian). The current location of municipal transport can be viewed using service http://yargortrans.ru/schemes.php (in Russian). Avaigation: In order to page http://yargortrans.ru/schemes.php (in Russian). Avaigation: In order to page http://www.ordfs.ru/ (in Russian).

Navigation: In order to plan a route inside the city you can use RusAvtobus (http://mas.vandes.ru/ or 2615 https://mas.vandes.ru/ or 2615 https://mas.vandes.ru/ or 2615 https://mas.vandes.ru/ or 3615 https://mas.vandes.ru/ or 3615

Sightseeing: Yaroslavi is an old city (founded in 1010) that has a lot of historic monuments. It is the key town of the historical Golden Ring of Russia. We encourage you to take an opportunity and see old churches, visit the embankment and take picture of yourselves inside the pavilion. The location and brief description of sites can be found in the following web pages: https://www.yar.ru/ (all in Russian).

All conference participants are welcome to take part in the walking guide tour in the historical part of Yaroslav downtown that will be held after end of main session on April 22 (Wednesday) starting at 18.00, we meeting in the front of the conference main room.

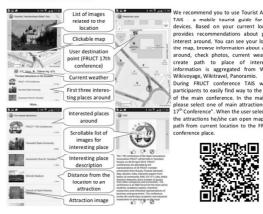


Fig. 1. Copy of the FRUCT 17th Conference program

New design of the client application is based on the Material Design paradigm by Google Inc. It allows to organize information on screen in a way to be comfortable for perception and interaction by the user. User interface has been optimized for different screen sizes, up to 10.1 inch tablets. Developed application is accessible for download in Google Play market for Android devices.

III. CONCLUSION

Updating of semantic information broker implementation allows to increase performance and stability of service. Interface updates allow to provide new experience to the tourist while exploring attractions with assist of TAIS. Information provided to the tourist is organized in a way to be more help-

ful in the current situation. Tablet interface optimization allows to use TAS on wide range of Android-driven devices.

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