BuitenBeter Data Mining

BuitenBeter is a mobile tool for citizens that allows them to report issues to their municipality. More than 10,000 reported BuitenBeter issues have not been assigned to a proper category by the citizen reporting it but are assigned to the default category “others”. In the past, uncategorized issues lead to difficulties and additional workload in the further procession steps by the city council. Therefore, a proper automatic categorization with meaningful categories is of great interest. From the perspective of computer science this leads to two research questions. How issues could be assign automatically to one of the categories? And, are there hidden new categories to which a majority of the uncategorized issues belong to?

For an automatic categorization process, a metric is needed that is able to compare the similarity between issues and single categories. For the discovery of hidden categories, a clustering algorithm is needed as well. Such a clustering opens the possibility of finding groups of similar uncategorized issues.

Both, the automatic categorization process and the clustering can be done with the help of the so called “vector space model”. In this model, natural language, like the issue texts, is transfered in a space of vectors filled with numbers. These numeric representation enables the performing of mathematical calculations which are not possible on plain text.

Since the issue description given by the user is very sparse, building the vector space simply on the raw text would not lead to the desired success. For this purpose the idea is to enrich the existing tickets with additional context information found on Wikipedia and OpenStreetMap. In the literature one can find various approaches on this subject. ESA for instance, is a well-known method to compute the relatedness between two texts with the aid of Wikipedia. The same concept also applies to OpenStreetMap. Instead of text in Wikipedia articles, there are GPS positions and features like crossings, playgrounds and pubs around the positions.

Our current work consists of combining all these sources of background knowledge and state of the art techniques to gain new insights in the BuitenBeter issue data set. As a first outcome, we already developed an extended version of the ESA algorithm and applied it to the BuitenBeter issue reports. There, we could already reduce the number of uncategorized issues and thus the workload of the employees in the city council.

Innovation in e-Government – thanks to an interdisciplinary approach

EuroSoc project team participated in a working group discussion on innovations for e-Government applications in Europe at the occasion of the bi-annually conference for public computing science in Berlin (20.03.2014).

The conference for public computing science and the symposium legal computing science have the aim to promote a pioneering dialogue between science, management practitioners and lawyers as well as consultants, by analysing concepts and experience and showing trends and implementation strategies for eGovernment. The conference is organized by the society for public computing science and the society for computer science every two years - 2014 for the tenth time. The conference is aligned in partnership with the University of Economics and Law Berlin and the Fraunhofer Institute FOKUS.

One central conclusion of the working group was that contemporary endeavours, especially in the field of eParticipation, suffer from a crucial flaw: it focuses heavily on technical developments without having equivalents on the administrative side. In other words, projects often have no comprehensive conceptual approach, which would structurally connect the organisational and administrative requirements with technical solutions.

EuroSoc project team claimed in contrast to that finding, that the EU funded Live+Gov project consequently tries to combine administrative modernisation with technological solutions by defining clear requirements of the administration and the citizens and providing the technical solutions for them. Therefore, the technical solutions developed by the project will serve specific purposes and have the strong intention to match both new and traditional administrative structures. This will safeguard the sustainability of the invested resources and paves the way for an innovative reform of citizen-state interaction.

More information about the conference and the full report can be found soon here: http://www.ftvi.de.

Live+Gov makes the City of Thessaloniki, Greece smarter

Live+Gov participated in the Apps4Greece competition organized by the City of

Thessaloniki (http://thessaloniki.appsforgreece.eu/) for collecting ideas, datasets and applications that would make the city smarter.

Live+Gov participation was based on the technologies and mobile app developed in the context of the Mobility use case (http://thessaloniki.appsforgreece.eu/app/mobilitysense), offering the citizens of Thessaloniki the potential to obtain traffic jam information, to share their everyday routes for helping the city to improve its network, to share information with their fellow citizens, as well as to receive alerts about the good service of the network from the authorities. Live+Gov contribution was very well-received by the organizers of the competition leading to the symbolic price of a tablet that was awarded to the team of CERTH.

Smartphones to Save Public Transit

Planning for Tomorrow's City Today

'Jij Maakt Utrecht' included as a best practice in the Eurocities report of eInclusion and citizen participation

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