

Mentorium Scenario Business Informatics 2 (PWIN) Summer Term 2021

Fachbereich
Wirtschaftswissenschaften

Institut für Wirtschaftsinformatik
Professur für Mobile Business & Multilateral Security
www.m-chair.de

Prof. Dr. Kai Rannenberg
Telefon +49 (0)69-798 34701
Telefax +49 (0)69-798 35004
E-Mail kai.rannenberg@m-chair.de

Peter Hamm. M.Sc.
E-Mail peter.hamm@m-chair.de

Aim and content of the Mentorium

The aim of this Mentorium is to practice and deepen the contents of the *Business Informatics 2 (PWIN)* lecture based on a fictitious service for the mobile Internet. For this, fundamental concepts of the mobile service *myPlace* are going to be developed, presented and discussed within the six Mentorium sessions.

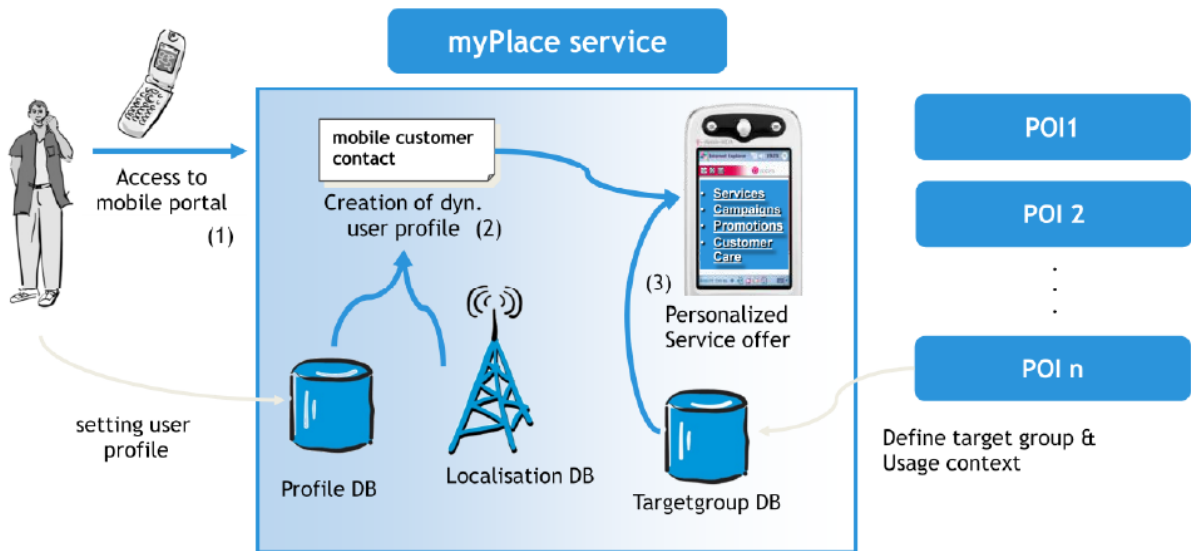
myPlace – A mobile location-based service

With the increasing success and availability of smart phones navigation systems (originally solely dedicated to cars) can now simply be downloaded and installed in the form of a mobile application on a mobile device. At the same time, navigation services for pedestrians are becoming more and more popular. Besides their classic routing service, they also help users to find and explore Points-of-Interest (POI) such as restaurants, ATMs, cinemas, pharmacies, etc..

The *myPlace* service is supposed to represent such a service and offers the following features and characteristics:

- Users have to sign up for the *myPlace* service using a stationary online website. In order to personalise the POI search according to their preferences, users can submit their gender, age, and personal interests (e.g. hobbies, favourite type of readings or movies, etc.). Based on this information, the *myPlace* service generates a user preference profile (UPP).
- When a user accesses the *myPlace* service, their mobile device is identified and automatically associated with the corresponding UPP. Furthermore, the current time of use and (assuming the user's consent) their current geographic location is determined. Finally, all obtained information is aggregated to a dynamic context-based user profile (DCUP).
- When actually using the *myPlace* service, a user is presented with an overview of various POI categories (restaurants, cinemas, etc.) or alternatively a text field for entering a search query.
- Once a user sends out a POI request for a category of his choice, the *myPlace* service generates a list of potential POIs based on their DCUP. Consequently, only those POIs in close proximity, open at the current time of day and matching the user's UUP are returned as search results.
- When a user selects a POI from the results list, the mobile device presents the POI location, a map and the corresponding navigation directions.

Process overview of the *myPlace* service



The figure outlines the basic usage process for the *myPlace* service

Before the actual service usage, a user creates their preference profile (gender, age, interests, etc.) (UPP) and POI owners define their potential user target group (genders, age range, interest categories, etc.).

In order to use the service, the user accesses the mobile portal of the *myPlace* service (1). The user's DCUP is created and stored in the *myPlace* database (2). By matching the DCUP with target group definitions of the POI owners, the user is presented with POI list personalised according to his current situation (preferences, location and time of day) (3). Now, the user can choose to be routed to his preferred POI.