

# WeCommunity: a mobile application supporting small smart communities

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**Abstract.** This paper describes the architecture of an app that aims at supporting needs of and interactions among the members of small urban communities and/or small to medium sized communities operating in territorially and/or temporally limited ambits. The application has been designed to allow for the access to multiple "small smart communities" and has been integrated with a modular and community-based web environment which can be flexibly adapted to the needs of communities of various kinds. Indeed examples of possible applications to learning communities, tourism and neighborhood community will be provided.

**Keywords:** Small Smart Communities, People Centered Design, Mobile Apps, Web Community Based Environments, Smart Campus, Tourism, Neighbourhood Community, Social Interaction.

## 1 Introduction

As well know the web is crowded with generalist applications supporting social interaction and allowing also, if needed, to create more protected environments as, for example, groups reserved to a limited number of participants. Generalist environments, however, do not allow to support the expectations of the "small communities" characterized by very glocal 'needs'. Nowadays web 2.0 environments are very effective in supporting the establishment of "tribes", but scarcely effective in supporting the communities that express glocal and specific needs.

The need for environments able to support the development and cohesion of small and often localized communities is clearly pointed out by the well-known difficulties of interacting with the "neighbors" in the urban environment of cities and towns, where it is quite easy to lose identity and sense of belonging and where social integration may result very difficult.

The need to support integration and territorial cohesion does not characterize only the urban environment but it is strongly felt also in rural and mountain communities [1]. It is not by chance, in fact, that Europe started to pay attention to such issues and support the development of dedicated projects [2,3].

Here we present a modular web-mobile infrastructure that has been designed and whose development started few years ago to innovate the architecture of the on-line

learning environments and foster a transition from content-based to community-based environments. Over the time, the modular environment has proved to be highly flexible and reusable in all contexts in which the focus is represented by a community with common interests and specific needs. After learning communities, in fact, the environment has been applied to the touristic domain - weTourist project [4] - to support the experiential and narrative exploration of a territory, while more recently its adaptation to support neighborhood communities has started, together with the development of the mobile app - weCommunity - to the description of which is devoted the rest of this contribution..

## **2 weCommunity**

weCommunity is a multiplatform app and it has been designed in order to allow access to all "small smart communities" to which one belongs and that use the web environment described above. The architecture of the app allows you to keep separate functions/services offered by each community and, thus, to jump among their private area or, in alternative, to access an "open place", that works as an aggregator of all info/services that each single community has decided to expose publicly.

In the vast majority of cases, the features offered by each community's app can be classified under three general categories: services - visualization facilities - insertion of inputs. In the case of weTourist (tourist application), however, the app do not allow immediately to access them but requires a preliminary choice between two main macro-categories - places and events - and that of one of the places/events already included in the user's portfolio. After this preliminary step the user is let free to use a functional organization similar to that of the other communities or a timeline representation that maps the various features needed during the territorial experience according to a three phases representation: before - during - after.

weCommunity also allows, with permission, to send data on the activities performed by the user and to geolocalize them.

## **3 Riferimenti**

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