



# UNIVERSITÀ DEGLI STUDI DI MILANO

# The University of Milan contribution

C3PLACES project - using ICT for co-creation of inclusive public places ERA-NET Cofund Smart Urban Futures H2020 Partners: UL/CeiED – Universidade Lusófona, LNEC – National Laboratory of Civil Engineering, Lisbon Mykolas Romeris University, Lithuania Ghent University, Belgium Urban Planning Institute of Slovenia

https://c3places.eu/



# Rita Pizzi Department of Computer Science Università degli Studi di Milano

In collaboration with:

- Prof. Paolo Ceravolo Department of Computer Science
- SHuS Sustainability and Human Security Center of Coordinated Research
- Civic Milan Network Foundation
- Sustainable «Study City» Campus Project



- Roads, squares, markets, parks, free open areas, parking spaces, sports centers: the quality of public open spaces remains fundamental for the quality of life and the development of a community's cultural identity.
- In the last decade ICTs have become an important socialization tool and have the potential to influence the social and cultural cohesion of communities and their active participation in the qualification of public spaces.



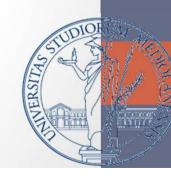
- Examples of interaction between ICT and open public spaces: totems and displays, wi-fi in parks and squares, tourist information, interactive play and artistic activities, etc.
- Tourism is now planned via the web and user feedback is becoming the main decision criterion. Visitors send photos and experiences via social networks to networks of friends or other potential tourists.



- The use of mobile devices is significantly changing the way people interact with other people and the surrounding areas.
- The geolocated digital traces of the users and their comments can be used for statistics and metrics on social behavior, and to improve and design open spaces.
- The objective is therefore to achieve through ICT a virtuous exchange of data and information between public space and citizens.



- Social media play a fundamental role in communicating with users and allow for creative participation and education in the concept of community. Users can share news, present their opinions, needs and desires.
- The *flashmobs* proved to be very efficient for organizing events in public spaces: not only musical and sporting events, but also public participation actions, such as strikes and events.
- Events on Tahrir Square in Cairo (Egypt) and Taksim Square in Istanbul (Turkey) were possible thanks to social networks.



- The availability of public hot spots in public places can be seen as a social service.
- But this infrastructure should become only a starting point for the supply of public services, ideas, creativity, opportunities for co-creation and collective cultural and social
  interchange, promoting sustainability, responsibility and knowledge of nature, the city and citizenship in its cultural diversity.
- A participatory will on the part of the citizens themselves is also necessary. For this purpose, ICT is a powerful tool available to the community, with its ability to connect all citizens in a simple and cheap way, giving the opportunity to actively participate in social life.



### The University of Milan contribution

#### University of Milan main task:

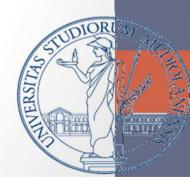
- Development of a co-creation platform providing a scientifically validated framework for citizens' interaction in and with public spaces, leveraging on their diversity potential of co-creation.
- The cooperation framework will also propose tools to assess impact through data aggregation and advanced analysis methods.



#### The University of Milan contribution

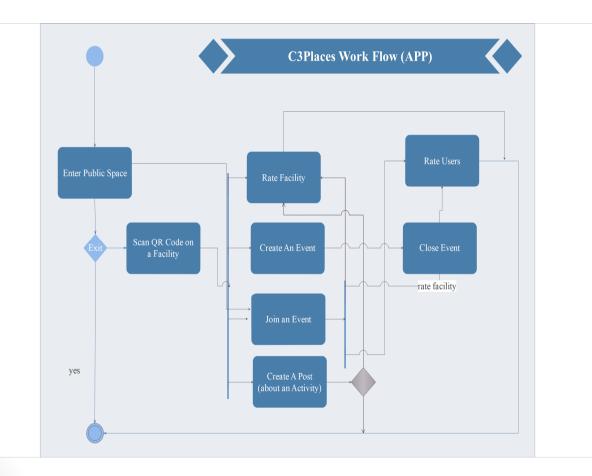
- The C3PLACES European Project provides for the development of a platform for the creation of inclusive and open public spaces through interaction with shared ICT tools and information exchange as an added value service for the community.
- The platform should provide a context for positive interaction between citizens in public spaces, exploiting their different potential for co-creation.

Hence the idea of developing a case study in the Città Studi ("Study City") Campus, with the aim of improving the sustainability and inclusiveness of the University life.

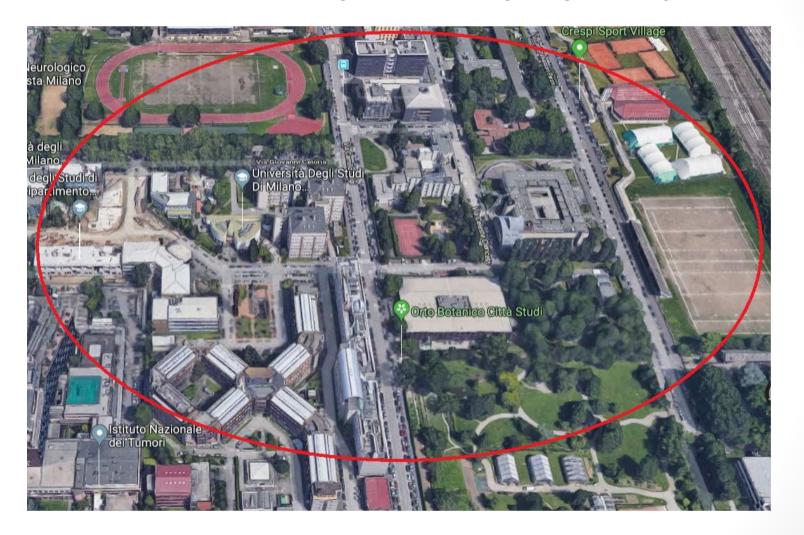




#### **General Workflow of the proposed model**



- Whenever a person enters a public space it gains experience by the virtue of using that space.
- Upon entering a public space, it is possible to join an activity or event scanning a QR code of a point of interest.
- It is possible to update about activities he/she performs in that space and an event can be created. The users can rate activities or points of interest.



























RSJ











- The whole area is covered by free wi-fi (Eduroam).
- In this area the QR codes (replaceable in the future with beacons) will be placed near different points of interest.
- The QR codes will communicate with a dedicated web app.
- The free web app, which is accessed after registration, geolocates the QR code and allows the user to access useful information on the corresponding point of interest, for example: name of the Department, link to the site of the Department, map with class numbers, services, forecast events, utilities nearby, etc.



- The user can affiliate to one or more points of interest and enter the corresponding community, where he will find a series of social features:
- Shared bulletin board, in which to publish requests or offers (rooms, roommates, books, joint study, organization or participation in events, etc.). The user who posts on the bulletin board can be contacted in private chat.
- The superusers or the users can propose events. An event is any type of activities which involves more than one person. Jam sessions, yoga classes, discussion groups etc. are some examples of the events.
- Users can share photos of their activities in the area, which will be geolocated.
- To foster this service, pictures from Instagram geolocated in the area will be automatical loaded.

- Public chat is available, with the possibility of private chat.
- The public chat allows to propose new themes and communities (for example a group concerning a specific course, an interest group (music, sports, etc.), which will be privately managed by users or created as a new stable category of the point of interest
- Publication of local events with the possibility of joining
- More detailed useful information on the points of interest can be provided by users
- Other features can be evaluated. A dedicated space allows the proposal of new features by users.
- The user can register to several communities related to different QR codes/points of interest.



- The purpose of the installation is the aggregation of users around points of interest.
- Users can co-create a community that uses information, provides others and starts communicating creating opportunities for interaction.
- The space is open to all citizens, even if its use is more related to University students, professors and employees.
- We are using open source software to develop the social environment and QR stickers on suitable supports located in specific locations of the area.
- The number of QR stickers (or beacons) will grow in time.
- Users can propose new aggregation points.



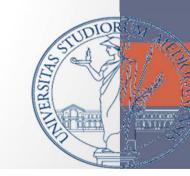
# **Data Analysis**

- Data will be collected and will constitute a rich base for analysis.
- With data mining techniques we will be able to ask questions and get answers on the students' interests, on the pitfalls of the ICT platform itself and of the University services, on the possible improvements, on new ideas, etc.



# **Crowd Emotional Analysis**

- Al techniques can be applied: as an example of possible use of the data collected, photos uploaded by the users can be automatically classified.
  - It will be possible to use images and the Google AI engine to perform emotions analysis of the Social Campus communities.
  - A degree thesis is under way on this topic.



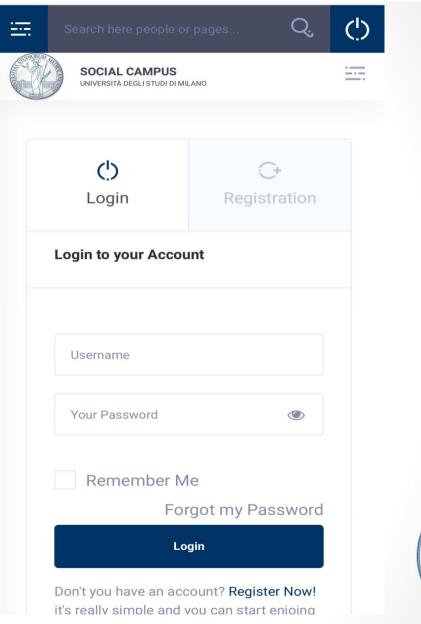
# Realization: the Social Campus https://sites.unimi.it/socialcampus/

- Content Management System: WordPress (<u>https://wordpress.org/</u>)
- Olympus Responsive Community & Social Network (<u>https://themeforest.net/item/olympus-responsive-community-social-network-wordpress-theme/22788499</u>), WordPress Theme
- Visual composer Premium Licence (<u>https://visualcomposer.com</u>), plugin to manage pages
- WPML (<u>https://wpml.org</u>), plugin to manage different languages
- Events Calendar Pro (<u>https://theeventscalendar.com/product/wordpress-events-calendar-pro/</u>), plugin to manage event creation



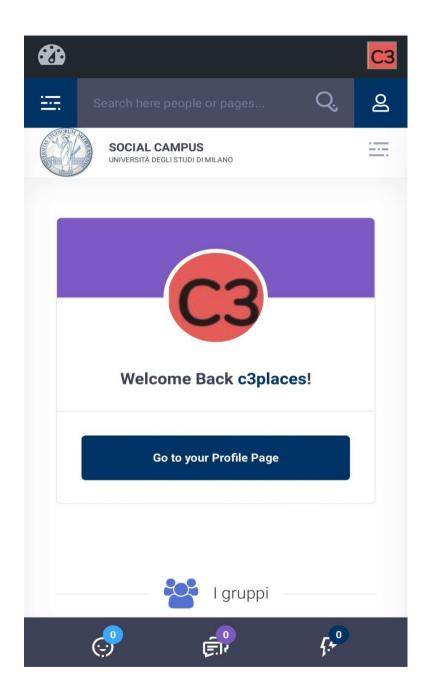
# **Realization: the Social Campus**

#### https://sites.unimi.it/socialcampus/





# Login





# Login

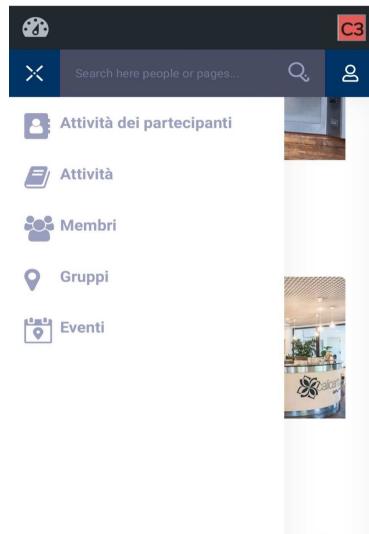
User name: c3places

Login : c3places

pw c3places



#### Menu

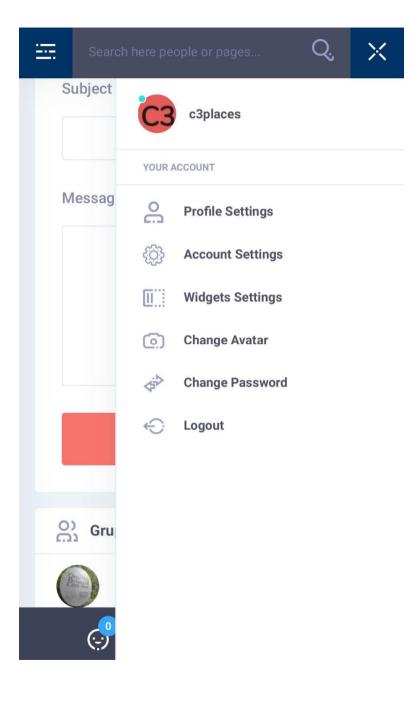








#### Menu



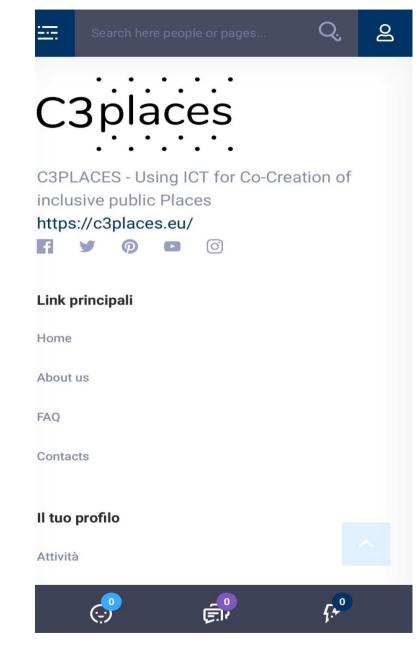


# Menu

	C3
c3places	
Modifica il tuo profilo	
Esci	
<sup>4</sup> Attività	
<sup>●</sup> Profilo	
Notifiche	
<sup>⁴</sup> Messaggi	
<sup>4</sup> Amici	
<sup>4</sup> Gruppi	
Forum	
Discussioni avviate	
Risposte Create	
Discussioni preferite	
Discussioni sottoscritte	

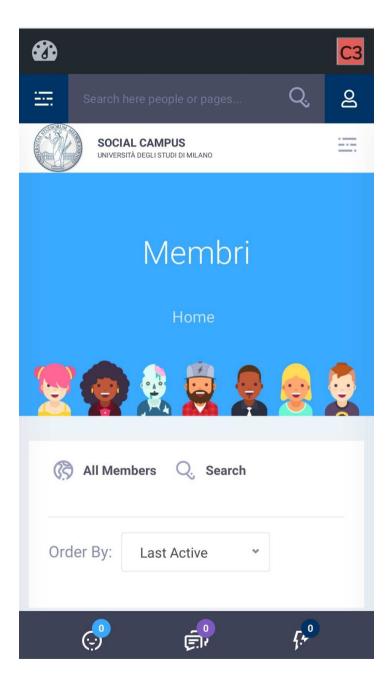


#### Menu



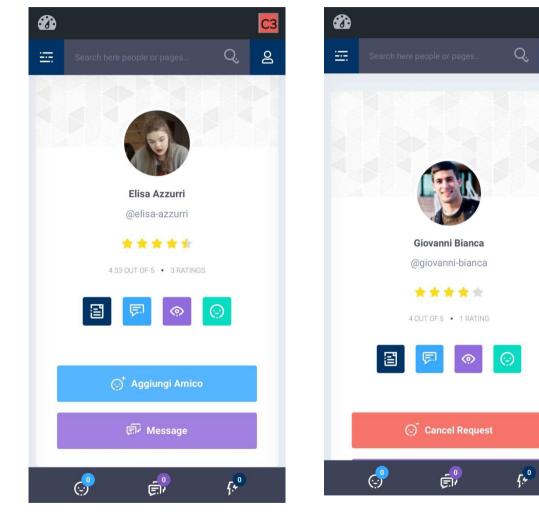


### List of members



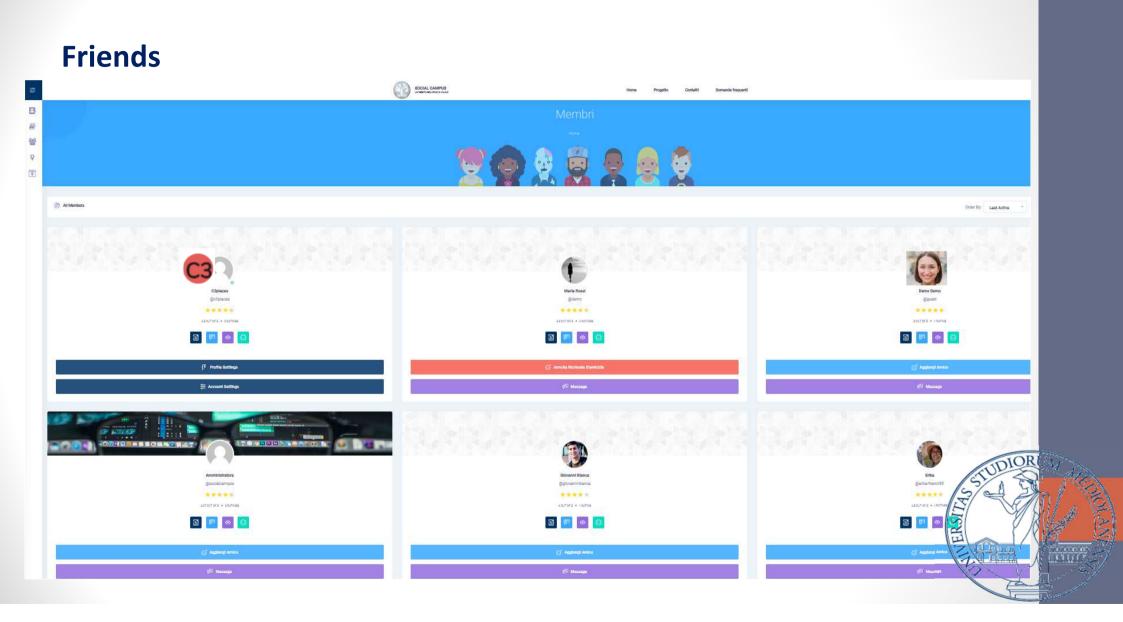


## List of members

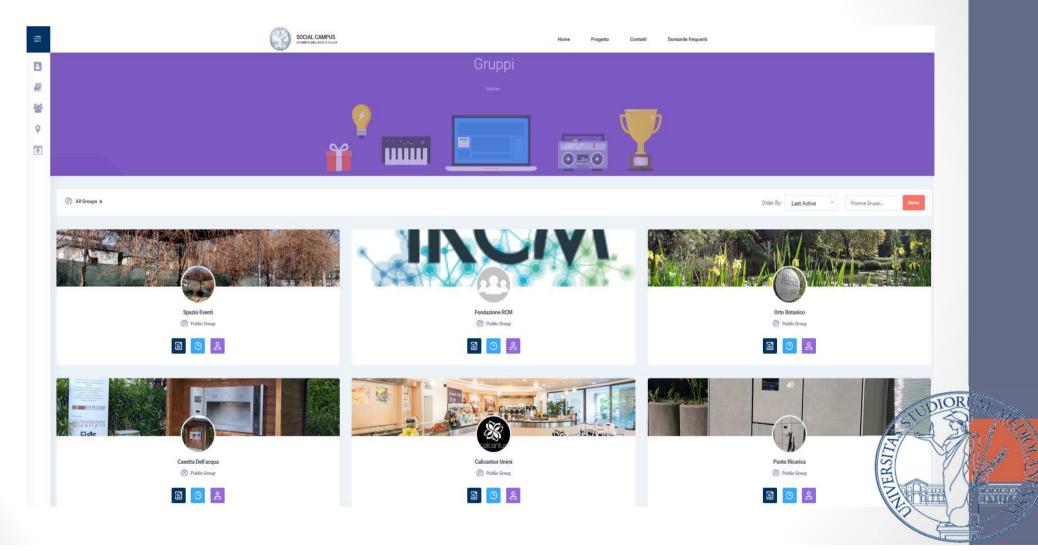


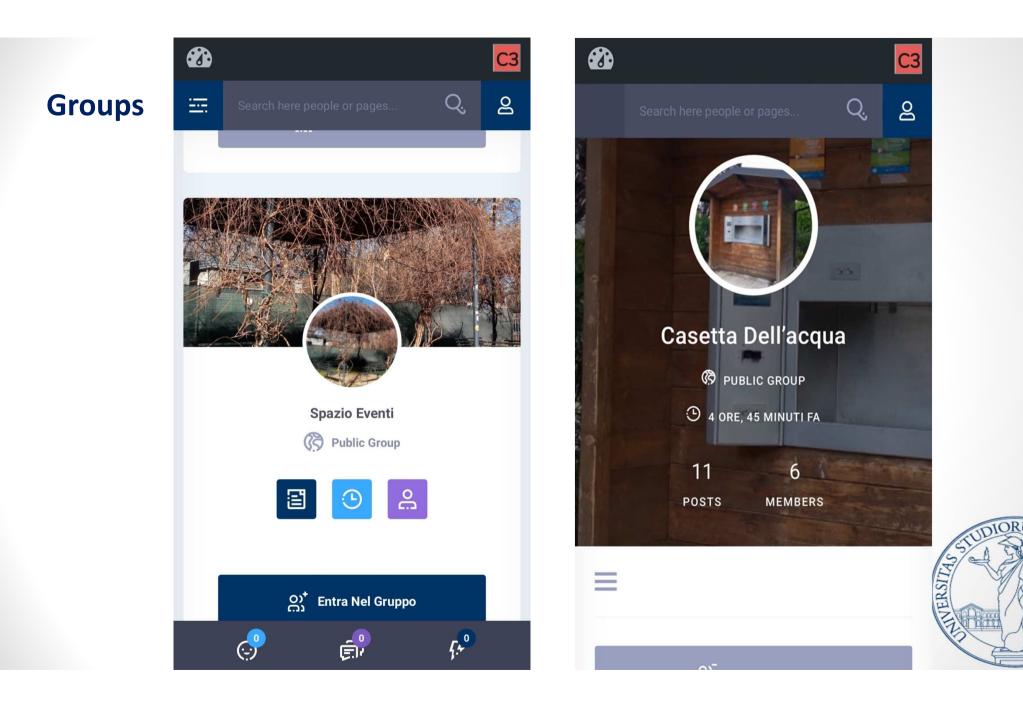


C3

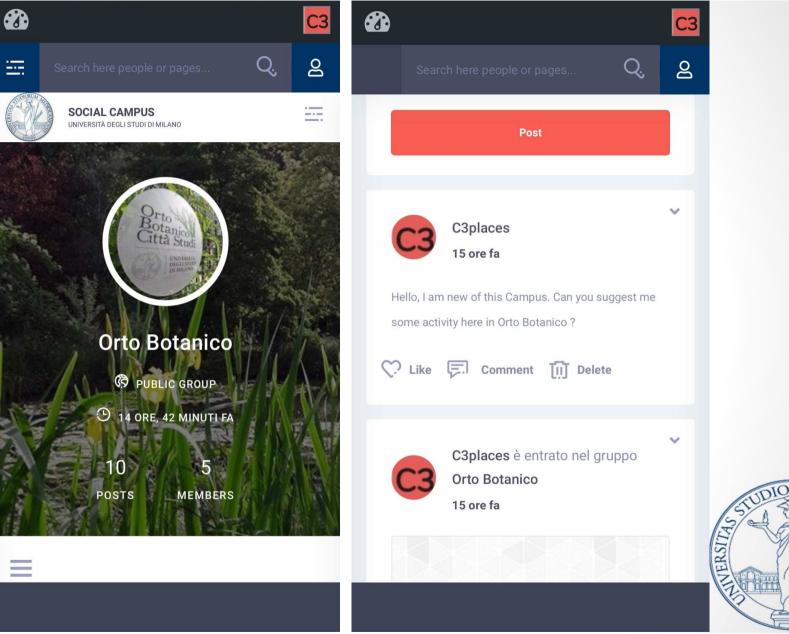


## List of groups



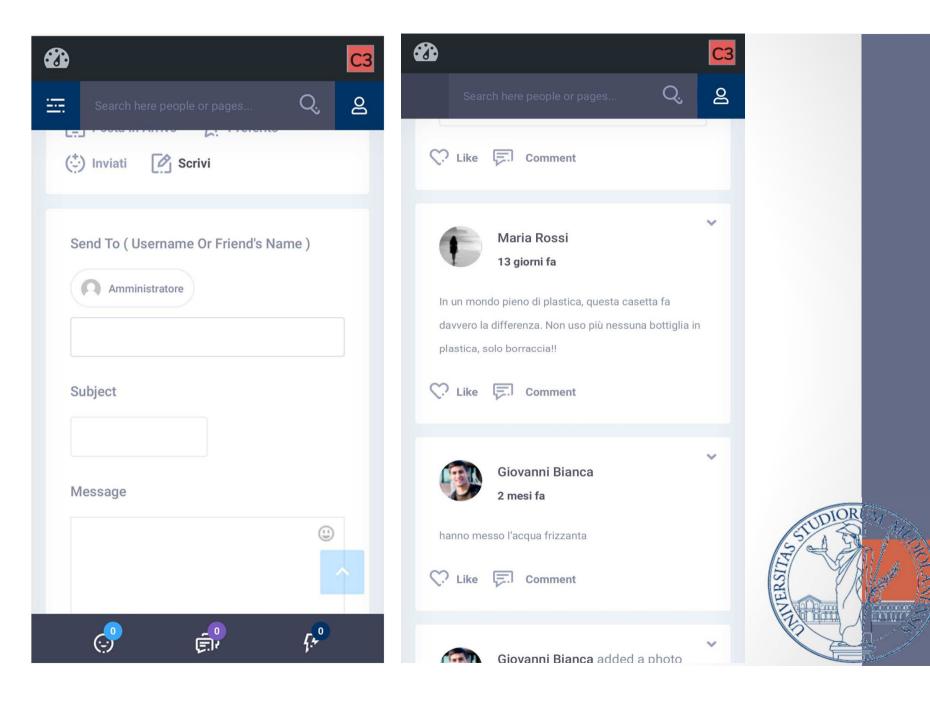


### Groups

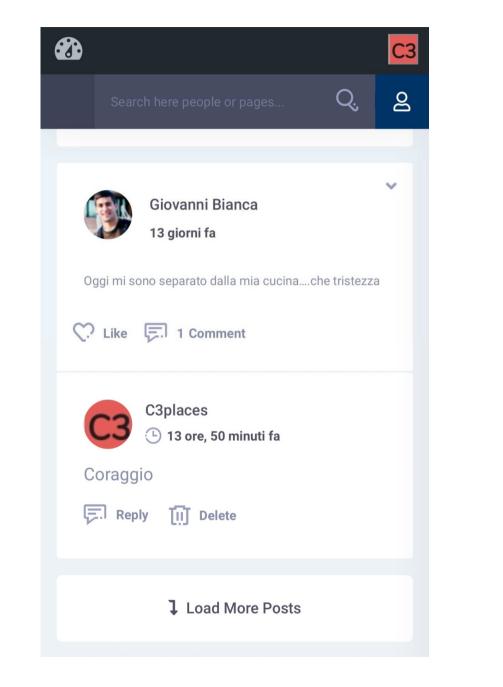




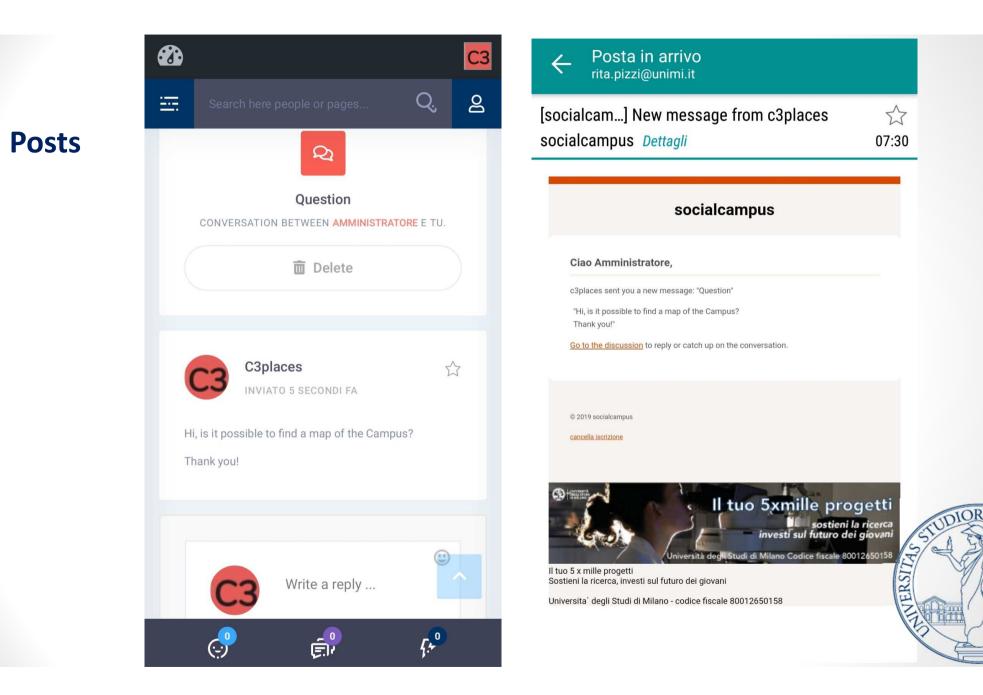
### Posts



### Posts

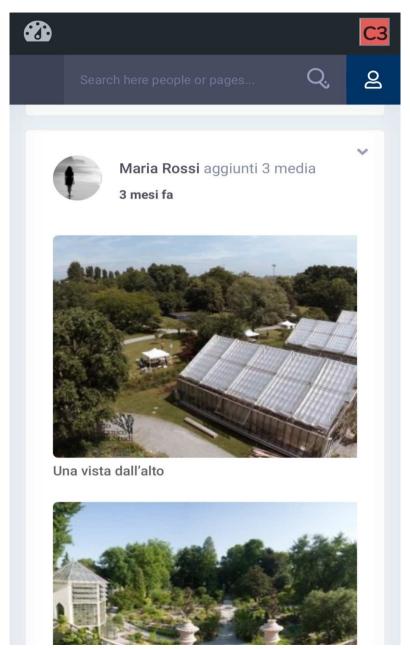


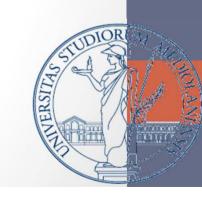




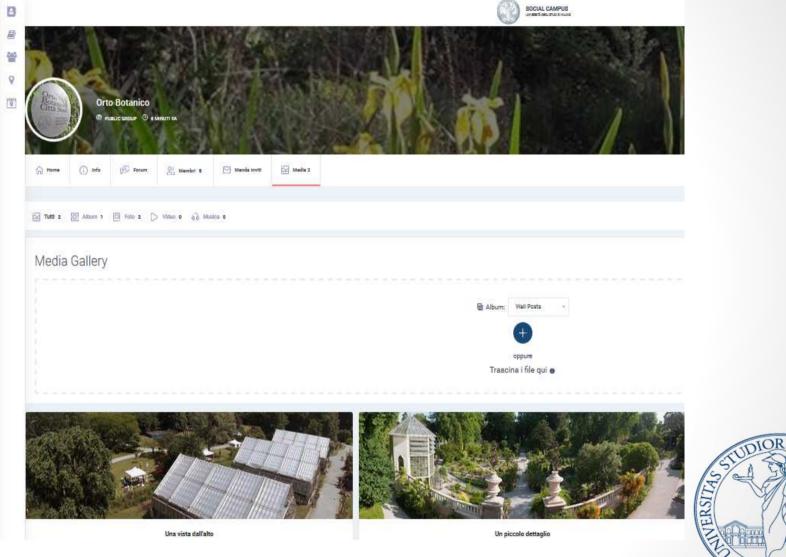
Conner Citta (2

# Media

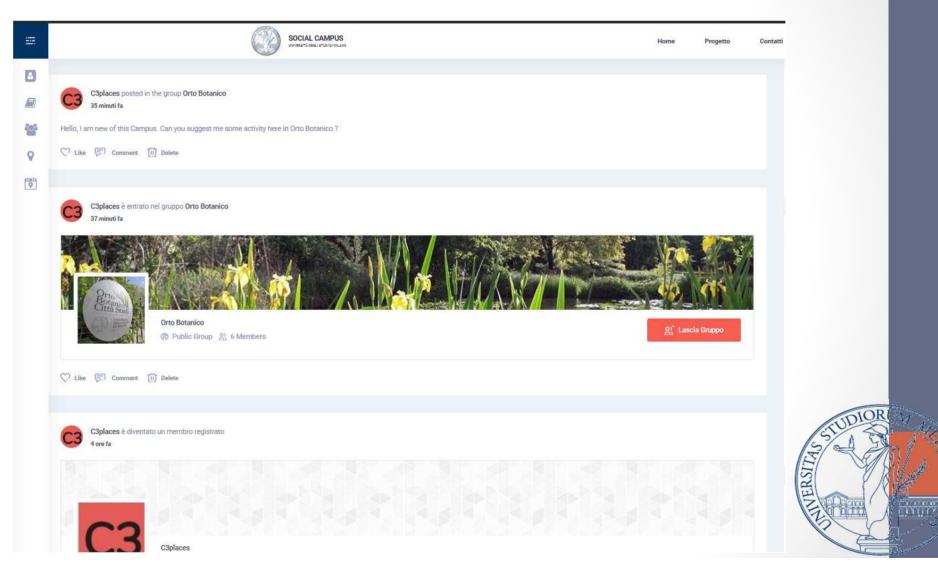




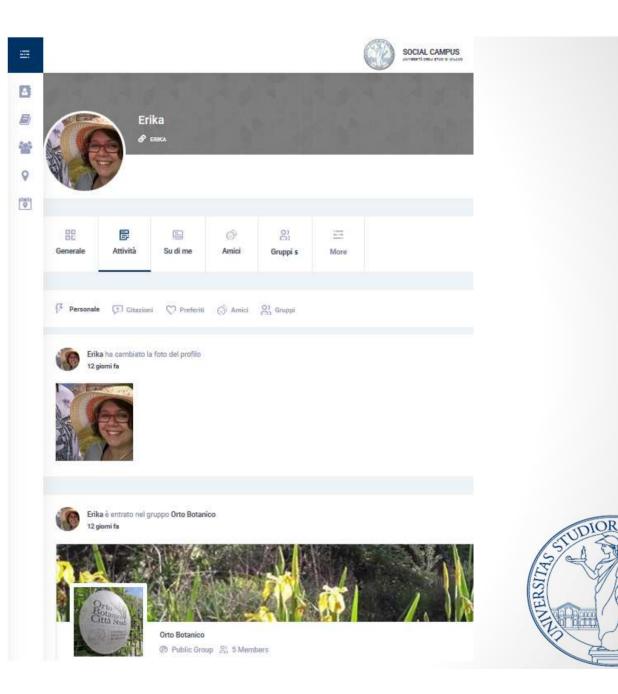
## Media Gallery



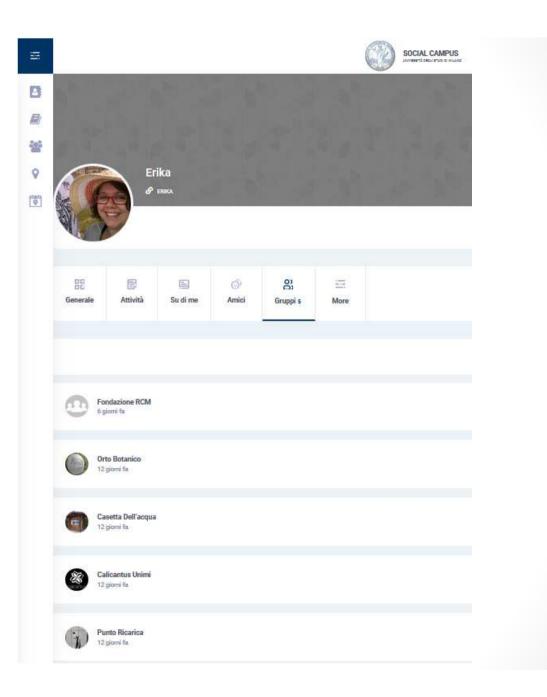
#### **List of Activities**



# **Member activities**

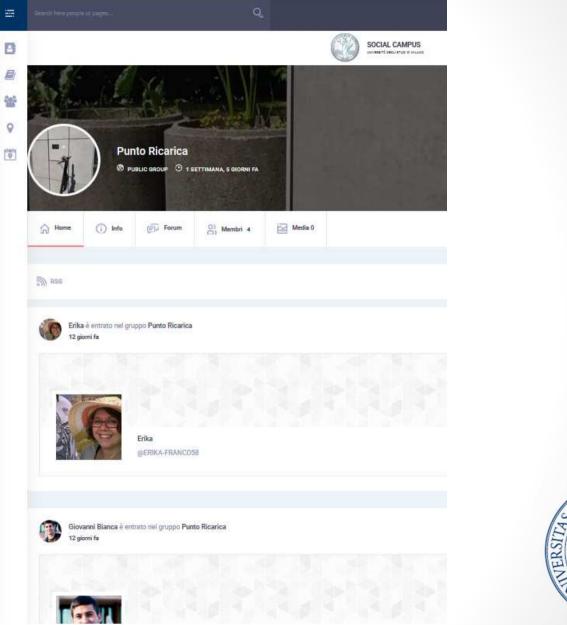


# **Member activities**



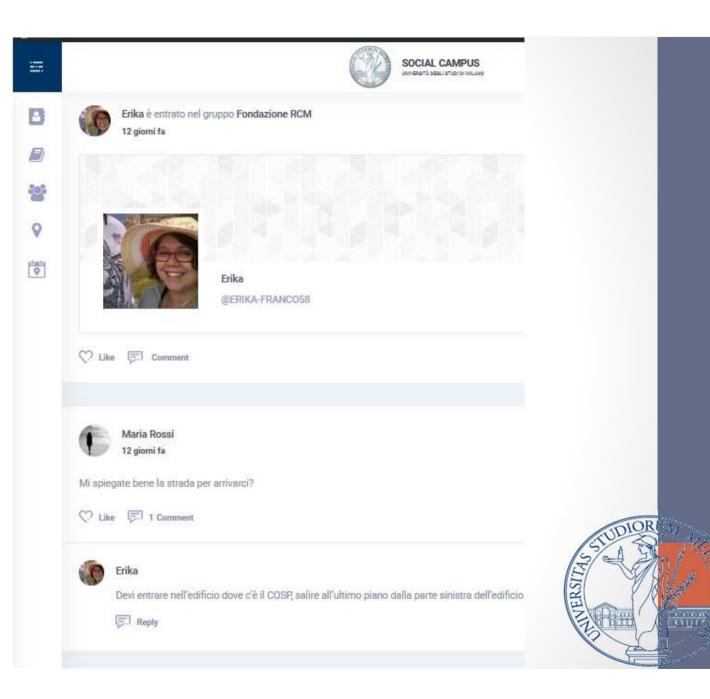


# **Group** activities

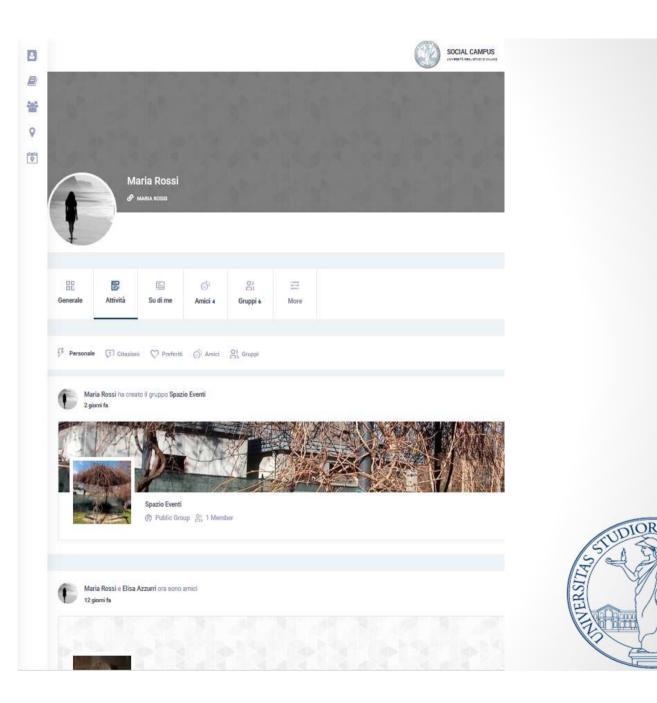




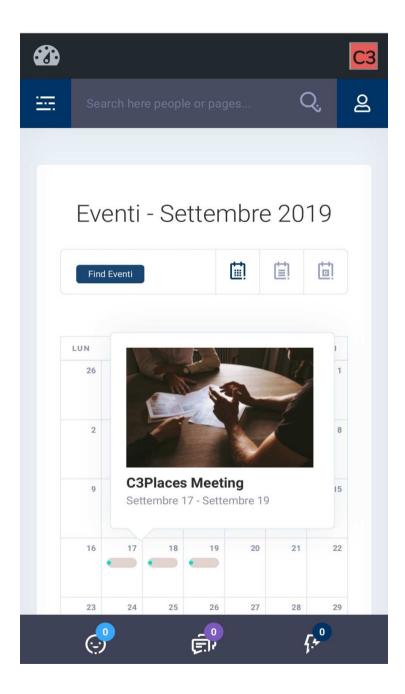
# **Group activities**



### Creating a new group



#### **Events**





## **Stats and Data**

Adesso su rtMedia		
Statistiche Media	Statistiche Utilizzo	
5 Album	7 Totale	
14 Foto	3 Con Media	
	1 Commenti	
	0 Mi piace	
Premium Addons		
Attività		

Bacheca



## Conclusions

- The evolution of ICT leads to the often spontaneous, but possibly institutiondriven co-creation of "2.0" public open spaces, attractive, inclusive, aimed at promoting socio-cultural diversity and proposing new and engaging experiences.
- The road to a higher degree of sustainability of urban spaces passes through the participatory action of citizens, facilitated by new technologies.
- The Milan project prefigures a free ICT tool able to promote the quality of life of citizens allowing active interaction based on the co-creation of points of interest.

