

## ACTIVITIES

The PLEINAIR project has a duration of 30 months, involving more than 30 researchers, 3 local companies, 20 organizations, all of them collaborating in the co-design while also including more than 200 users.

**During the project the following activities were carried out:**

- 1** Analysis of the needs with real users combined with all participatory design activities in a 5 days workshop involving the end user.
- 2** Definition of mobility exercises and identification of sensors to be implemented in Outdoor Smart Objects in order to create an inclusive and multigenerational proposal for the enhancement of urban spaces.
- 3** Design and prototyping of urban furniture and recreational equipment that make up PLEINAIR's Outdoor Smart Objects, paying a particular attention to accessibility and usability also of disabled users.
- 4** Development of the IoT platform for the integration and monitoring of environmental parameters and the activities of visitors of the park and development of the app aimed at involving users in the park's activities through appropriate motivational strategies.
- 5** Thanks to the collaboration of the Museo della Civiltà Contadina of Bentivoglio it was possible to prepare the validation in the real environment for the evaluation of the functionality and acceptability of the system and for the definition of the final TRL (Technology Readiness Level).
- 6** The activities of PLEINAIR were followed with interest by several municipalities of the Region and in particular the project was presented at the Health Promotion and Prevention Working Group of the Municipality of Bologna.

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## PARTNERS



The PLEINAIR project stands for **Free and Inclusive Parks in Network for Intergenerational Recreational and Physical Activities** and aims at creating inclusive contexts to promote active and healthy lifestyles for everybody and all age groups.

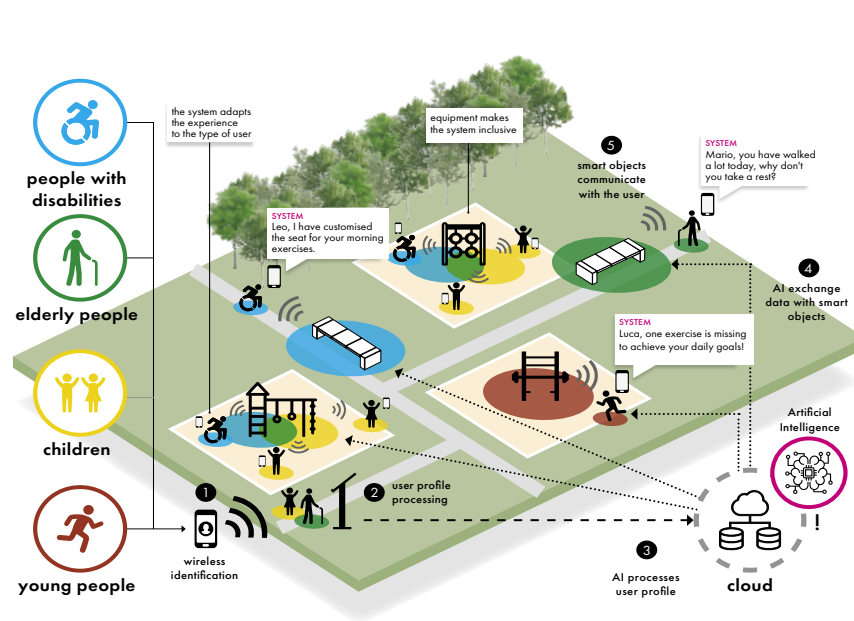


# DESCRIPTION



The aim of the project is to create inclusive contexts promoting **active lifestyles and good health** for everyone in all age groups.

PLEINAIR targets a multi-generational audience by encouraging correct lifestyles through the movement culture, according to the skills of each individual, and with personalized motivational strategies. PLEINAIR is a smart park with fitness equipment that implements new types of urban furniture featuring elements of distributed **"intelligence"** while providing an innovative mode of interaction through technology.



PLEINAIR  
PARK

# EXPECTED OUTCOMES

## METHOD

The researchers and companies involved in the PLEINAIR project have been redesigning and creating urban furniture and recreational equipment to promote outdoor physical activity in an inclusive context designed for all age groups. PLEINAIR users are those who feel the desire to pursue correct lifestyles and to live urban spaces in engaging in physical activity while sharing this experience with people of all ages. Expectations and individual experience have played a key role within the project and a structured user-centered approach was followed, that provided for intense interaction with both end users and different categories of stakeholders.

Mobility exercises and personalized motivational strategies have been developed with the aim of promoting correct lifestyles and physical activity, extending the user experience towards unconventional spaces and times of everyday life. New types of urban furniture and of recreational park equipment (OSO - Outdoor Smart Objects) have been developed and created, equipped with sensors and actuators that allow a personalized and more immersive experience for each visitor. OSOs are able to recognize the user and dynamically adapt their morphological and functional performances. The PLEINAIR IoT platform has been built in compliance with data security and privacy regulations to make OSOs interoperable, connecting users to each other and recording their activities. The PLEINAIR Mobile App has been designed to allow the user to easily find the most suitable outdoor recreational equipment among the many available, to select the difficulty level and to monitor progress. Through Artificial Intelligence techniques, the App implements customized motivational strategies for effective communication with users.