Aveiro Tech City Challenges

Urban Challenge #3

SCOPE OF THE CHALLENGE:

The Municipality of Aveiro (CMA) manages a set of sports infrastructures, to be designated: Pavilions and their gymnasiums, multi-sports and Tennis Court, as well as other public facilities used by the community for sports practice.

It is therefore important to increase rates of use and sharing of these infrastructures by the population, through the creation of a digital platform that allows the promotion / presentation of existing infrastructures and the respective pre-scheduling of spaces.

The platform should consist of a responsive web / WebAPP interface for public access and a "backoffice" that is accessed by the managers of the sports spaces. The platform should consist of a responsive web / WebAPP interface for public access and a "backoffice" that is accessed by the managers of the sports spaces.

The digital platform should consist of a website / WebAPP for mobile phone, compatible with Android and IOS. For those interested can find all the information about the sports offer of the Municipality, both at the level of sports facilities, as well as at the level of the available modalities.

The software must be intuitive and simple, to allow the public to book the sports facility and/or book classes.

DEVELOPMENT OF THE CHALLENGE:

It is intended to present innovative proposals for a Web platform and WebAPP for public access aimed at the promotion and reservation of shared spaces of sports infrastructures and sports modalities, and a backoffice with the following functional characteristics:
- Public WebAPP
  - Infrastructure visualization module
    - List view
    - Geographical view (including geographical coordinates)
    - View of photos and attributes of each space (e.g. capacities, opening hours, etc.)
  - Infrastructure scheduling module
    - Registration form with selection of:

- Identification and contact details of the applicant (email and mobile phone)
- Requested infrastructure
- Desired time slot registration with automatic real-time verification of availability
- Submission with issuance of QR-Code with reservation code
    - Inquiry form, editing and cancellation of reservation:
        - Presentation of the reservation code and obtaining the reserved space, dates and times and status (accepted / canceled)
        - Option to change reservation and cancel reservation
    - Email communication module
        - Sending an email in the reservation, change and cancellation actions of the reservation
- It should be possible to adapt graphic style to the image of the website of the Municipality of Aveiro
- Management "Backoffice" should allow:
    - Login of multiple users with the following profiles:
        - managers of sports venues (only access to the spaces managed by them and acceptance/rejection of their reservations)
        - Administrator (full access to the platform and allocation of sports infrastructures to space managers)
    - The editing of content related to shared sports infrastructures (names, locations, written attributes, schedules, photos, etc.)
    - The editing of content related to shared sports (names, locations, written attributes, schedules, photos, etc.)
    - The management of reservations made (accept, propose change and reject reservation)
    - The sending of a customized message when rejecting or changing the reservation

The following technical characteristics shall be ensured:
- Implementation with "opensource" tools/frameworks
- Website to the public and fully responsive backoffice, allowing you to run in browsers on a PC, tablet and smartphone
- WebAPP compatible with Android and IOS

- Hosting of the backoffice solution, API and interfaces for the developed mobile application and support of operation and computer security in a period of 1 year after the end of the challenge;

MENTORSHIP:

- José Manuel Batista | DED | jmbaptista@cm-aveiro.pt