FUNCTIONAL REQUIREMENTS

O·CITY

Module II	Course Infographic	Topic Design process and visual design basics in UX	Lesson 1

Activity

- **Short Description**: Identify the functional requirements of an information visualization about a natural or cultural asset of a city according to the users' wants and needs. This activity is the continuation of the previous activity about the identification of context of use and users' needs (T1.L1.1).

- **Methodology**: The methodology of this activity is based on learning by experience and inquiry-based learning, since by researching and analyzing existing information visualizations and walking through the design process followed by other designers, the learners apply a user-centered research approach and reinforce their knowledge on the learning topic.

- **Duration:** 2 hours

- **Difficulty (high - medium - low)**: Medium

- **Individual / Team**: Individual

- **Classroom / House**: House

- **What do we need to do this activity?**

- **Hardware** Smartphone or Personal Computer, or any other digital device, in the case of digital information visualizations.
- **Software** Web browser or mobile applications in the case of digital information visualizations.
- **Other resources** None

Description

- **Text description**: First of all you need to transform the users' wants and needs you identified in the previous activity (T1.L1.1) in actionable statements that led to a more defined and coherent design. Then you should identify all the functional requirements that correspond to functions actually performed by the system and that can be operated by the user interface (or features of static information visualizations).

- **Illustration**: None

Instructions

1. Make a list of the main features and functions (what characteristics shall be present) of the information visualization you chose to analyze by following the next steps.
2. For each of the users' needs identified in the previous activity (T1.L1.1), complete the following statement about the user need and requirement (produce as many statements as you can): "The <user> needs <something or to do something> in order to <accomplish a goal>" (e.g. People interested in the O-City project need to know all the kinds of heritage promoted on the platform in order to clearly identify the contents of their interest).
3. For each statement define the corresponding functional requirement, i.e. operations and actions the system should perform in accordance with the user needs and goals: "<Who> shall <what>" (e.g. The information visualization shall show to the user all the kinds of heritage available on the O-City platform). Which function of the product or system (or feature of the information visualization) meets the specific requirement?
4. Verify that all the functions and features displayed correspond to the identified users' needs and requirements. If not, find what needs and requirements led to that function or, on the contrary, which requirement has not been considered by the designer.

Expected outcomes

- Learn to analyze a user interface or information visualization by properly identifying the requirements that define which functions and features meet the users' needs allowing an adequate user experience.

- Understand the User-Centered design way of thinking about a product, system or information visualization.

This activity can be used in other (module, course, topic, lesson):

- **Module II, Course Infographic, Topic 2, Lesson 1**

- **Module II, Course Infographic, Topic 2, Lesson 3**

- **Module II, Course Infographic, Topic 2, Lesson 4**

DIGICOMP (Competences developed):

1. *INFORMATION AND DATA LITERACY*
1.1 *Browsing, searching and filtering data, information and digital content*
1.2 *Evaluating data, information and digital content*
5. *PROBLEM SOLVING*
5.2 *Identifying needs and technological responses*
5.3 *Creatively using digital technologies*

ENTRECOMP (Competences developed):
1. *IDEAS AND OPPORTUNITIES*
3. *INTO ACTION*
3.5. *Learning through experience*

Example (when necessary): None