CLEOPATRA

CoLlaborative ExploratiOn of cyber-PhysicAl culTuRal lAndscapes



Cleopatra Project Deliverable: D1.2

Cataloging and documentation of archaeological sites and monuments

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About CLEOPATRA

The Cleopatra Project aims at increasing the knowledge of the archaeological and historical-artistic sites and to develop new communication techniques for Cultural Heritage. The objective is to promote and rediscover the sense of history and cultural identity by the valorisation of lesser-known areas and sites of the Campania region, but no less interesting.

Two experimental scenarios will be designed proposing "Diffused Museums", through which the territory is known, and developing archeo-trekking or slow-tourism (i.e., cycling tourism), based on the protection and preservation of places requiring responsible, personalized and non-massive use.

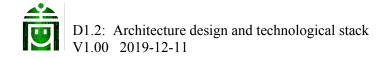
The projects aims at achieving the following objectives:

- the creation of user friendly services both in outdoor (archaeological sites, squares, etc.) and indoor spaces (historic buildings, museums that store material documentation), in order to structure thematic itineraries through history, culture and art that involve the territory in its entirety for the construction of an integrated network for tourism promotion which is currently lacking;
- the organization of a system to guide the tourist, combining, from time to time, archaeological and historical-artistic, naturalistic, faunistic and geological elements based on their interests through an informative support; in the case of scenario 2, its peculiarity is emphasized by the naturalistic and geo-environmental background, in which the archaeological sites are located: currently they can be visited only with the aid of expert touristic guides;
- the realization a close interaction between user and avatar; the avatar will guide the tourist to places of difficult access through vocal and visual advices, choosing the most suitable routes based on a series of criteria, such as the available time, the ability of users to move in difficult contexts, clothing and the possibility to take scenic routes; at the same time the user, in his interaction with other users, can recommend new paths and report new elements, thus providing starting points for future research;
- to overcome problems, thanks to the help of the avatar, such as limited interaction with text documents, especially in open spaces, the lack of user, and an insufficient or wrong location of POIs.

For more information

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Executive Summary

This report presents the software architecture and the technologica stack

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1 Management, analysis and public outreach of archaeological sites in Campania

1.1 Systematization and data import

- <u>Revision of the SIT "Territorio"</u>, with the normalization of the data present in the Microsoft Access environment:
 - verification of the interface with the GIS platform (ArcMap 10.3) through the match between the alphanumeric data in Access and the shapefiles in GIS environment;
 - insertion of new archaeological records;
 - systematized n. 2563 cards present in the SIT "Territorio";
 - importing alphanumeric data into a geodatabase, functional to the creation of the new WebGIS.
- <u>Starting from a match, Shapefiles have been produced</u>. This match was processed between a field common to the remodeled data table in the Sit Territorio and to the new table included in the Geodatabase.

The final Shapefile will concern the archaeological sites of the following territories: Ailano, Alife, Alvignano, Amorosi, Arienzo, Arpaia, Baia and Latina, Bellona, Caianello, Caiazzo, Capriati al Volturno, Capua, Carinaro, Casagiove, Casapesenna, Caserta, Castel Campagnano, Castel di Sasso, Castel Morrone, Castello Matese, Castelvenere, Cervino, Ciorlano, Dragoni, Durazzano, Faicchio, Falciano del Massico, Francolise, Giano Vetusto, Grazzanise, Gricignano d'Aversa, Letino, Liberi, Maddaloni, Marcianise, Melizzano, Mondragone, Piana di Monteverna, Piedimonte Matese, Pietravairano, Pontelatone, Prata Sannita, Pratella, Puglianello, Raviscanina, Recale, Riardo, Roccarainola, Rocchetta and Croce, Ruviano, Sant'Angelo d'Alife, S. Arpino, S. Cipriano d'Aversa, San Felice a Cancello, San Marco Evangelista, Santa Maria a Vico, San Potito Sannitico, San Prisco, San Salvatore Telesino, San Tammaro, Sessa Aurunca, Solopaca, Sturno, Teano, Telese Terme, Valle Agricola, Villa di Briano.

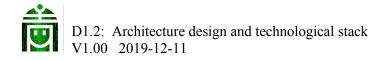
1.2 Setting up a WebGIS template

- Preparation of a standard form relating to archaeological sites within a WebGIS.

The new form includes eight sections and various subsections. They are essential for a precise knowledge of the considered archaeological heritage and contexts. The sections have been structured also considering the way in which the fields are filled in (drop-down menus with multiple choices, free fields, etc.).

1.3 Creation of lexicons

- <u>Study of the lexicons</u> used in the archaeological field. References are to the CIDOC CRM formal ontology model (European Ariadne Project) whose purpose is to make it possible to exchange and integrate descriptions, informations and documentation for scientific research between heterogeneous sources of cultural heritage.
- <u>Preparation of a new "dating section"</u> referring to the archaeological lexicons. The included cultural phases move from prehistoric era to the late Middle Ages, with a focus on those chronological periods that characterize territorial sectors of central and southern Italy.



2 Conclusions