

Work Package 6

Development of a virtual museum and App

Task_6.1 User-friendly interface design: interface design; development of a storytelling and an effective graphic interface for the implementation of an application for the dissemination of information collected by the project.

Task_6.2 App development and virtual musealisation: integration of the 3D models and the elaborates produced through the digital survey for the use and understanding of the places and architecture of the Franciscan Order through the App.

Task_6.3 Feedback collection: integration of a feedback system to monitor and collect information through user involvement.

Output O17 - Mobile Application (Application)

[O17] WP6 intends to adapt the content of the project database to make it entirely usable by smartphones for the purposes stated in the project or the construction of custom itineraries based on the user's specific needs. The application has been designed with the primary objective of showing the multimedia materials related to the project in formats adapted to mobile devices. These materials include the Webmap and 3D models. The application was developed in Android Studio, the official tool provided by Google for the design and programming of Android applications. On a technical level, the application is based on using Fragments, interface blocks that can be used on different sites; RecyclerViews, interface components that recycle no longer visible elements; and the connection to the Project Database. This ensures the future expansion of the app, with the addition of new convents and case studies, without having to reprogram the application. The application interface includes a main screen, from which the user can access a short section with the history of the Observants, the main case studies, an interactive map with all the convents and their cards, and 3D models of some convents. In addition, a menu has been added with three screens that provide information about project objectives, project teams, and associated partners. 3DHop, an open-source software framework for creating interactive presentations of 3D models, was used to visualize 3D models of convents. The original models consist of a cloud of high-resolution dots, which results in excessive dimensions to use on a smartphone. Therefore, the models included in the app have been simplified and rendered in a much lighter mesh format. This process leads to an inevitable loss of quality in favour of the fluidity of mobile viewing.

Finally, the F-ATLAS app with the verified developer profile has been uploaded to the official Google Play shop. This registration process ensures that the application meets all the requirements and quality standards set by Google, facilitating installation and giving security to the end user (https://play.google.com/store/apps/details?id=com.fatlas.f_atlas).

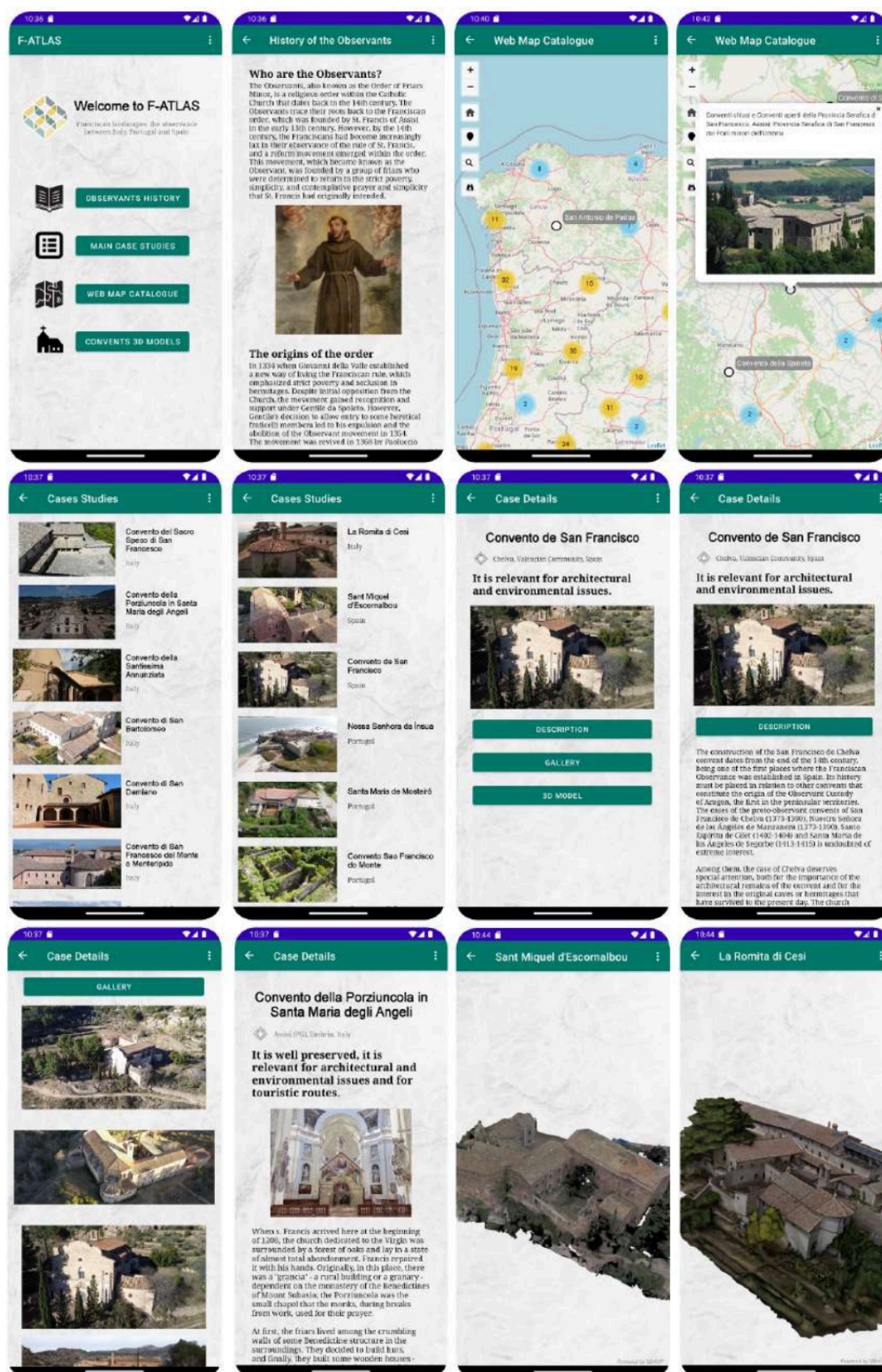


Fig. 22: Screenshots of the F-ATLAS App.