

SYNERGIES BY DESIGN IN CITIZEN SCIENCE APPS

COLLABORATION BETWEEN PROJECTS ON THE SPOTTERON PLATFORM



INTRODUCTION

SPOTTERON is a highly customizable solution for crowd-based data collection and volunteer monitoring projects. We build interactive Citizen Science apps that can widely adapt to a project's requirements. All packages feature custom smartphone apps for iOS & Android, an interactive web-app for browser-based participation and an advanced data administration interface.

COLLABORATIVE PLATFORM

On SPOTTERON, Citizen Science projects work together. The basis for the collaboration is the "feature ecosystem", a collection of all available add-ons and functionalities. Every project can use all these extensions without extra development costs, which results in many projects, working together to strengthen each other and to benefit from the emerging synergies.



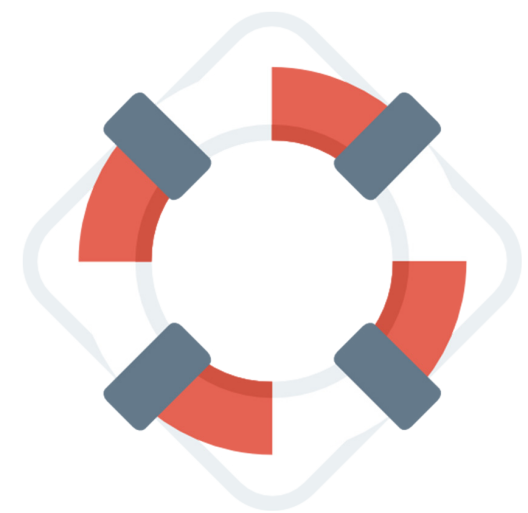
CORE FEATURES OF CITIZEN SCIENCE APPS

On the SPOTTERON platform, we are building custom Citizen Science Apps and interactive tools since 2014. When talking about technology, the mobile environment needs expertise to create reliable and interactive apps. On a broad view, Citizen Science apps should combine certain essential traits and functionalities for the best user experience, data quality, performance and software security, long-term motivation and innovation.



DESIGN & DEVELOPMENT

Citizen Science apps must be available for Android & IOS and also for people without smartphones. High-quality design and usability are as crucial as the quality of the technical solution.



UPDATES & SUPPORT

During the whole runtime of a project, it essential to provide regular updates for optimal stability, security and compatibility in the fast-changing world of mobile technology.



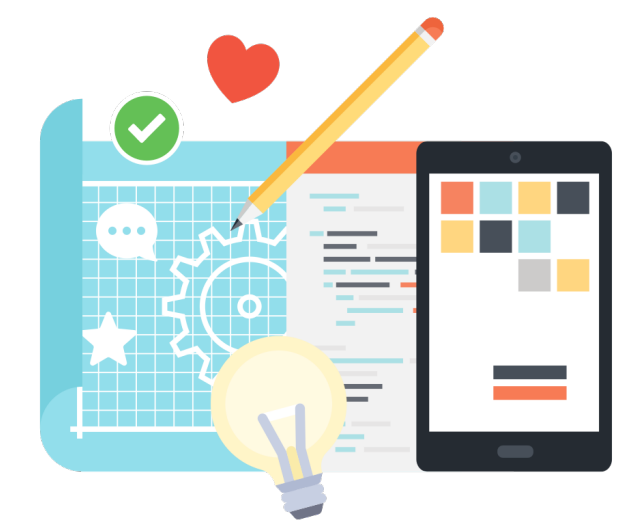
DATA MANAGEMENT

Running just Citizen Science smartphone apps is not enough in a project - the data must go somewhere, too. A data administration interface houses all management and data export tools.



ICT INFRASTRUCTURE

Running a Citizen Science project also means to have a robust ICT infrastructure for the best possible performance and the protection of personal data of the participants in the digital tools.

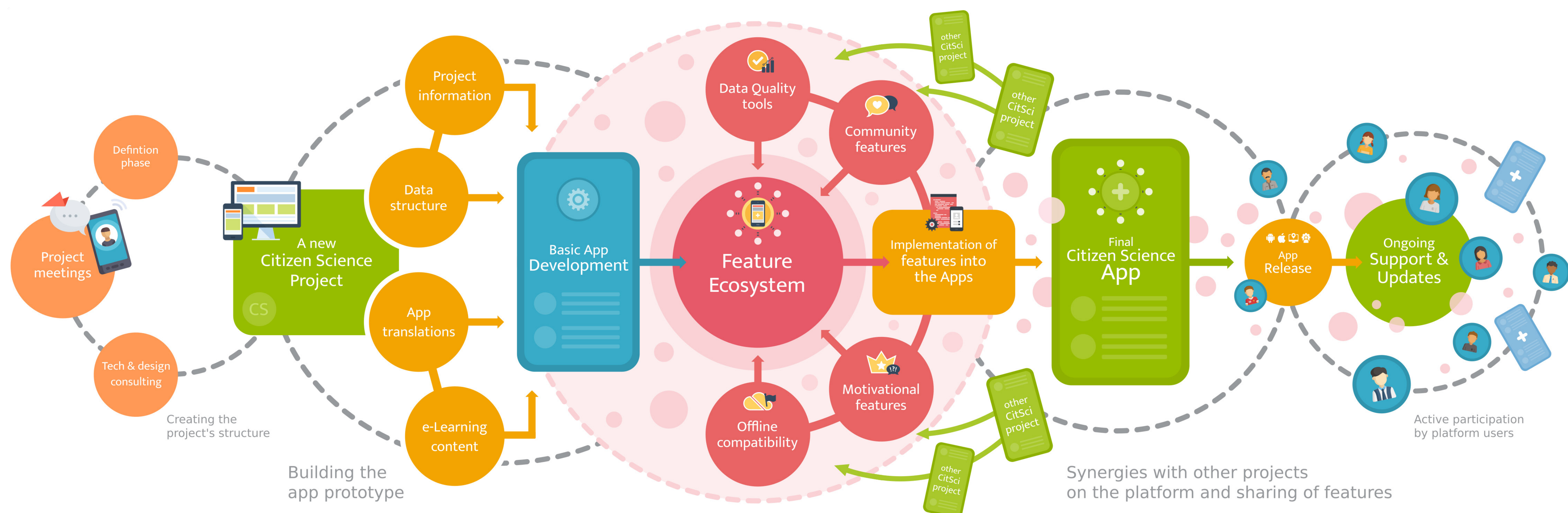


FEATURES & TECHNOLOGIES

Citizen Science Apps should not be just data collection tools. A wide range of technologies and interactive features is vital for supporting active participation and user motivation.

CAN ONE PROJECT BUILD ALL THIS ALONE? LET'S TALK SYNERGIES!

On the SPOTTERON Citizen Science platform, we have created a feature sharing model which strengthens all projects. New features & technologies, funded by one project, are always shared among all other projects without extra development costs. This "Feature Ecosystem" is available for all projects apps on SPOTTERON, which means that new projects can already use a broad range of features and functionalities from the start.



The diagram shows how a new Citizen Science App starts on the platform by first defining its data structure and app contents. With the SPOTTERON "Feature Ecosystem", we extend the basic app prototype by integrating the many different features already available for every Citizen Science project to use freely. After testing, feedback and iterations, we release the final app for public participation. Future app updates extend the apps with new features, funded by other projects and the platform itself. With this modular procedure, one project can build upon the work done for others and use synergies, only available through a platform approach.

The SPOTTERON "Feature Ecosystem" has been developed and grown together with research teams from universities, organizations and stakeholders across Europe and beyond:

