BI Web App for Tazpiteva project

Tazpiteva project is a local citizen project managed by the Golan Regional Council, in collaboration with researchers from the University of Haifa.

The final project (app) presented here is one component of Tazpiteva project, which leans on the global iNaturalist platform.

The app developed as Single Page Application (SPA) in order to gather all the information available to the end user in one place, and to simplify the way of extracting, managing the information and visualize it.

In this way, the app provides a solution to the community managers, researchers and casual users to extract data in a wide range of cuts filtered by projects, users, species and observation, and presents it in a graphic view such as maps and analytics graphs.

In the development stage of the project, we set up MySQL server as our Back-End, which store data related to all Tazpiteva projects via synchronization functions we built that working with custom API that pulled the desired data from iNaturalist servers. This architecture enables data analysis on our local server and not Via API calls which makes the data analysis and retrieval to carry out faster.

For our Front-end we use HTML and several JavaScript libraries such as jQuery, Highcharts, google Maps, bootstrap and more.

The middleware layer is based on cakePHP platform, which conduct the communication between the back and frond end via AJAX calls.

Future work for this app needs to focused on the scalability of the community and make the proper adjustment needed to maintain those changes, such as changing the front-end to work on AngularJS platform and to add an admin panel to manage and update new projects in a graphic view and not directly on the DB.

Link to the project:
http://132.75.252.120/~aainouz/dashboard

Link to user guide:
http://132.75.252.120/~aainouz/dashboard%20tazpiteva%20%20users%20guide.docx