Design a Web GIS Platform for Visitors' Event Experiences

Introduction
ROCK (Regeneration and Optimization of Cultural heritage in creative and Knowledge cities) is a Horizon 2020 funded project that focuses on historic city centers as extraordinary laboratories to demonstrate how cultural heritage can be a powerful engine for regeneration, sustainable development and economic growth for the city. This PDEng project focuses on designing and developing a Web-based Geographical Information System (GIS) platform for large-scale events at heritage-led cities such as Dutch Design Week (DDW) event in Eindhoven. This platform facilitates the process of expressing event visitors' feelings and experiences. It can also be replicated in other events in other cities. This tool can help municipalities and event managers to improve the quality of services they can provide for visitors during the events. Therefore, it can also facilitate rewarding experiences for event visitors.

Methodology
There are some defined approaches in this project described below:
1. Data collection for base maps.
2. Creating database for spatial and non-spatial data.
3. Developing Web GIS platform for publishing database.
4. Enable editing and querying the database for event visitors.
5. Provide information for municipality and event managers.

Objectives
The aim of the project is to design a Web GIS platform that will enable:
- Implementing an online survey for visitors to geotag and explain their positive and negative emotions during an event.
- Visualizing the spatial behavior of visitors such as (un)attractive places, point of interests, etc.

This platform will be provided on a web server for event visitors, event managers and municipality. So that the demand and supply sides of events can be connected via an information system technology.

Design Solution

Figure: Activity Diagram of the PDEng project

Figure: Design Solution for the project