Software Design Specification

for

SarajeWar

Version 1.1

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Revision History

Name	Date	Reason For Changes	Version
Rev 1.0	8.11.17		Initial version
Rev 1.1	9.01.18	Adjusted according to actual implementation particularities	Final version

Objectives

SarajeWar app is developed for the Historical Museum of Bosnia and Herzegovina. It is envisioned to be an interactive map of the Sarajevo, providing users with opportunity to see a full picture of the events which unfolded in the 1992-1996 timeframe. Application would feature an interactive map of all locations, distinguishable by displayed markers. Detailed textual and visual information regarding the relevant location would be available to users via pop-up windows. Additionally, users would be able to use search functionality through geocoding service. It should be also mentioned that apart from the main functionality, museum staff would also have an administrator interface with a possibility to update, delete and create locations on the map.

SarajeWar is to be developed as a client-server application, with free-tier cloud computing platform serving as a server and user's browsers acting as clients.

System Design

Based on the available details, it seems that system design could incorporate the Editable interface for both LocationIcon and Location. However, since Ruby (selected programming language) does not support interfaces, it was decided to skip interface concept.

The class diagram is depicted on Figure 1 – *Class Diagram*.

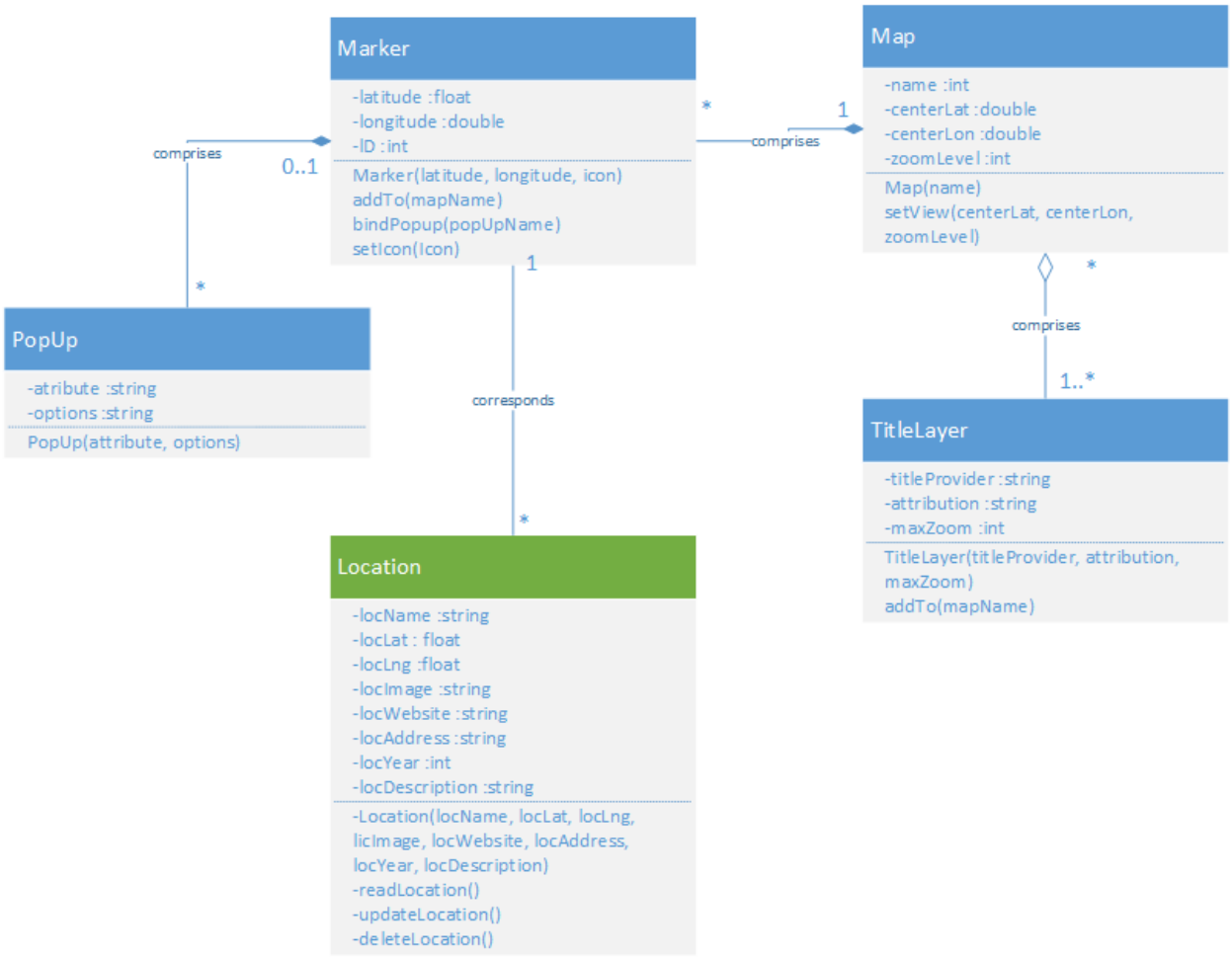

Figure 1 – Class Diagram

Use case diagram could be seen on Figure 2 – *Use Case Diagram*.

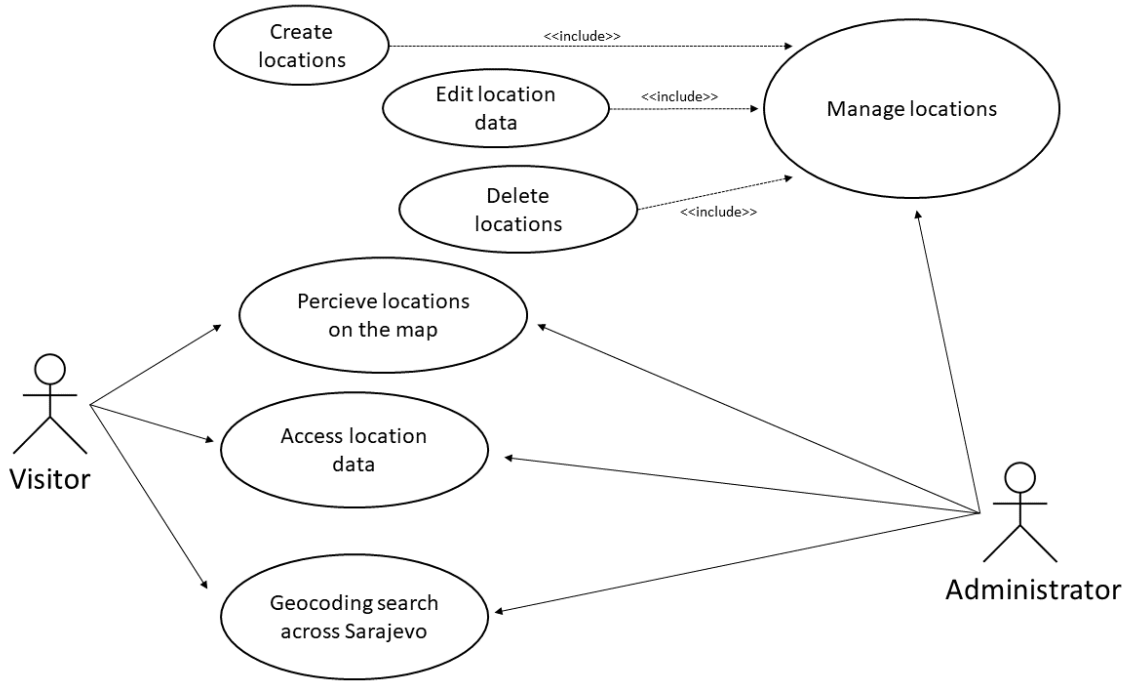

Figure 2 – Use Case Diagram

Functional Decomposition Specification

The functional decomposition diagram is depicted on Figure 3 – *Decomposition Diagram*.

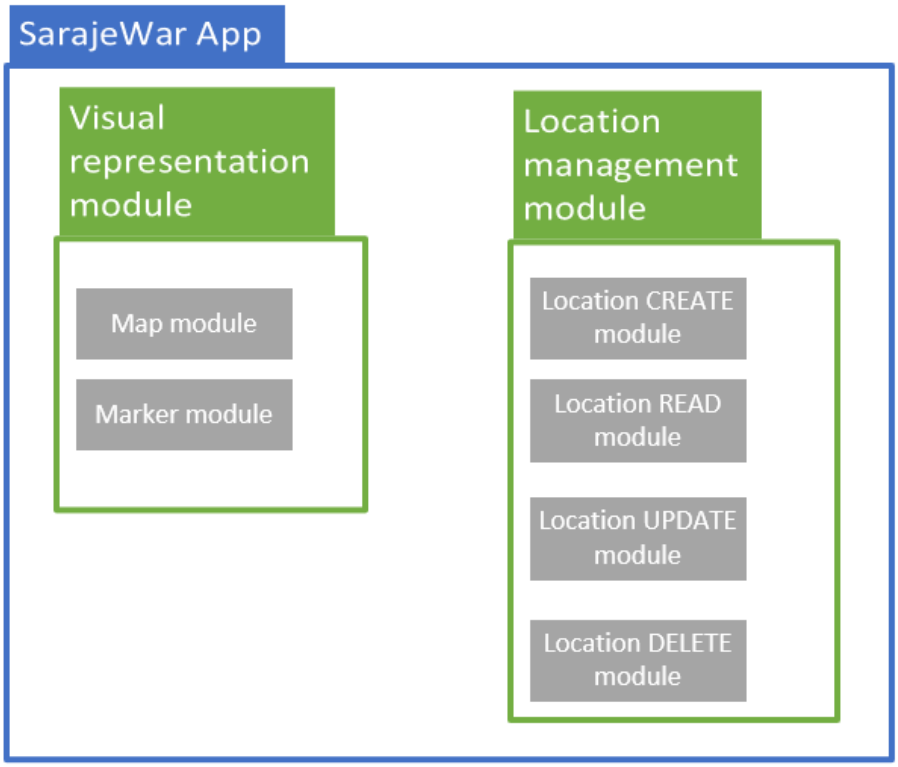

Figure 3 – Decomposition Diagram

Module name	Inputs	Outputs	Functions
Map module	Map parameters	Configured map	Display map
Marker module	Marker parameters	Configured markers	Display markers in required locations
Location Create module	Data to create location	Created location	Construct locations
Location Read module	Location which is to be read	Location details	Access location details
Location Update module	Location which should be updated	Updated location with specified details	Update location details
Location Delete module	Location which is to be deleted	Notification about successful location removal	Delete incorrect locations

Dynamic Models

The sequence diagram is shown on Figure 4 – *Sequence Diagram*

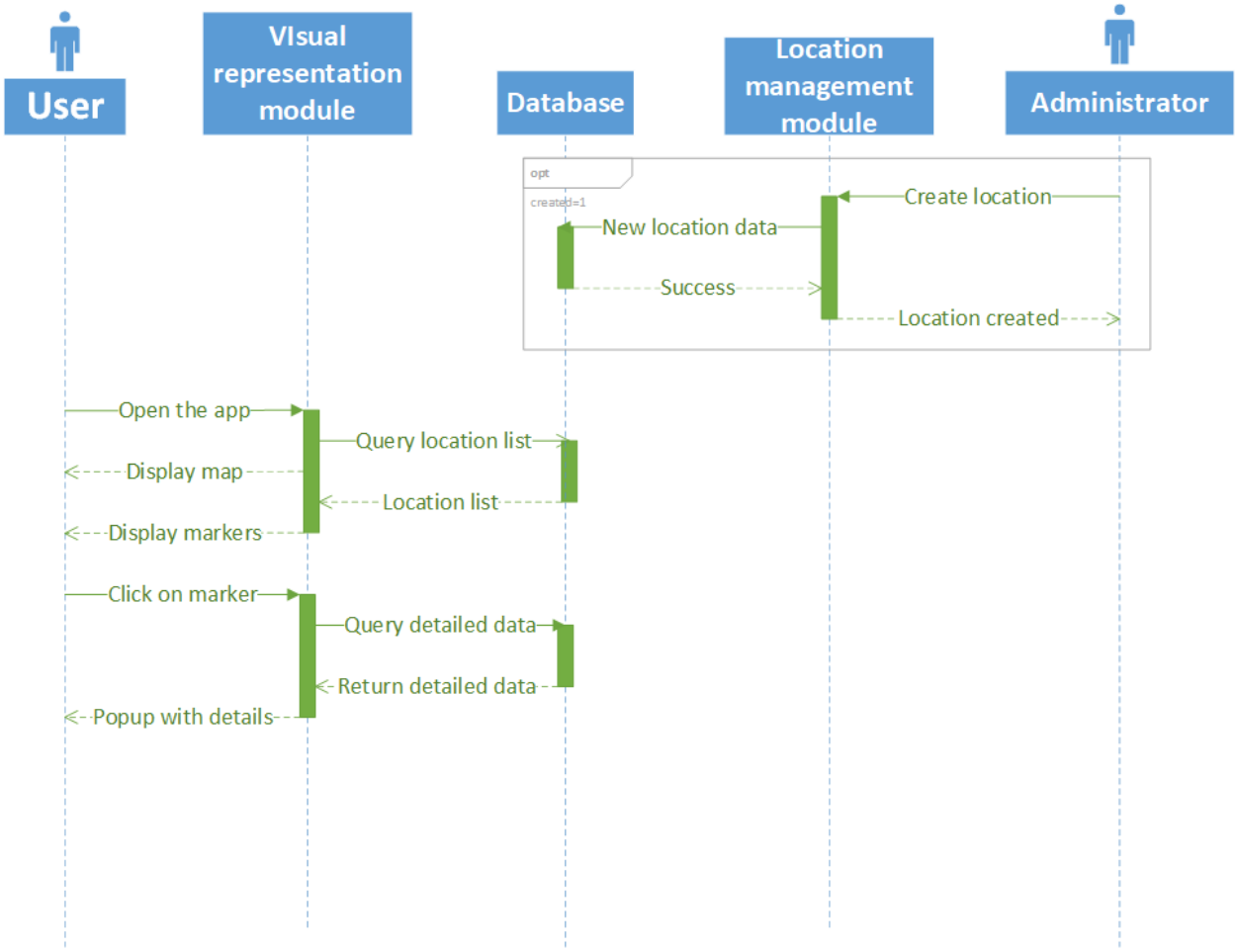

Figure 4 – Sequence Diagram

User Interface

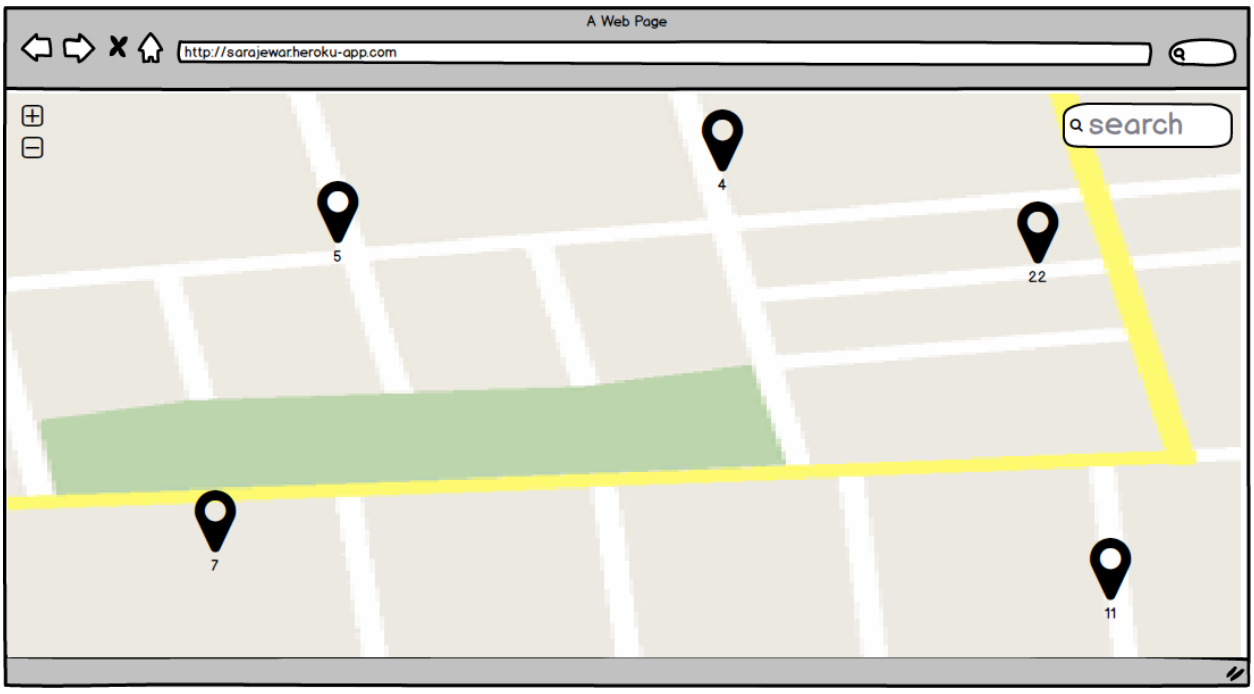

Figure 5 – Main screen

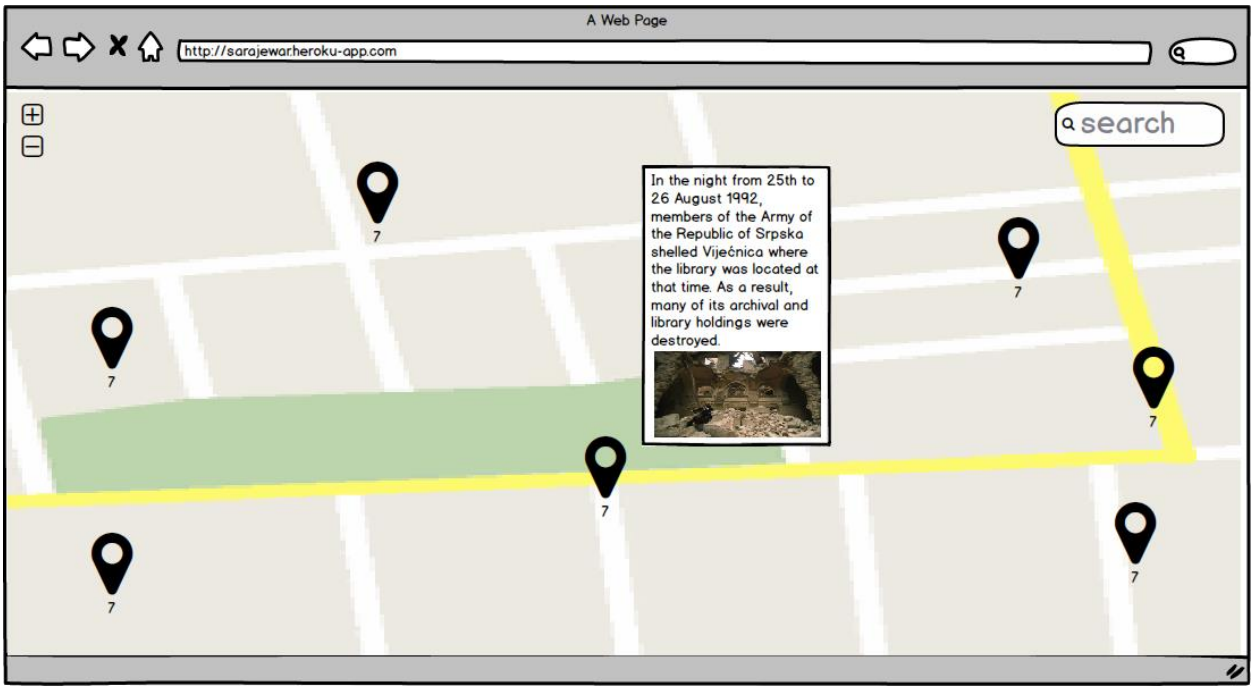

Figure 6 – Marker data screen

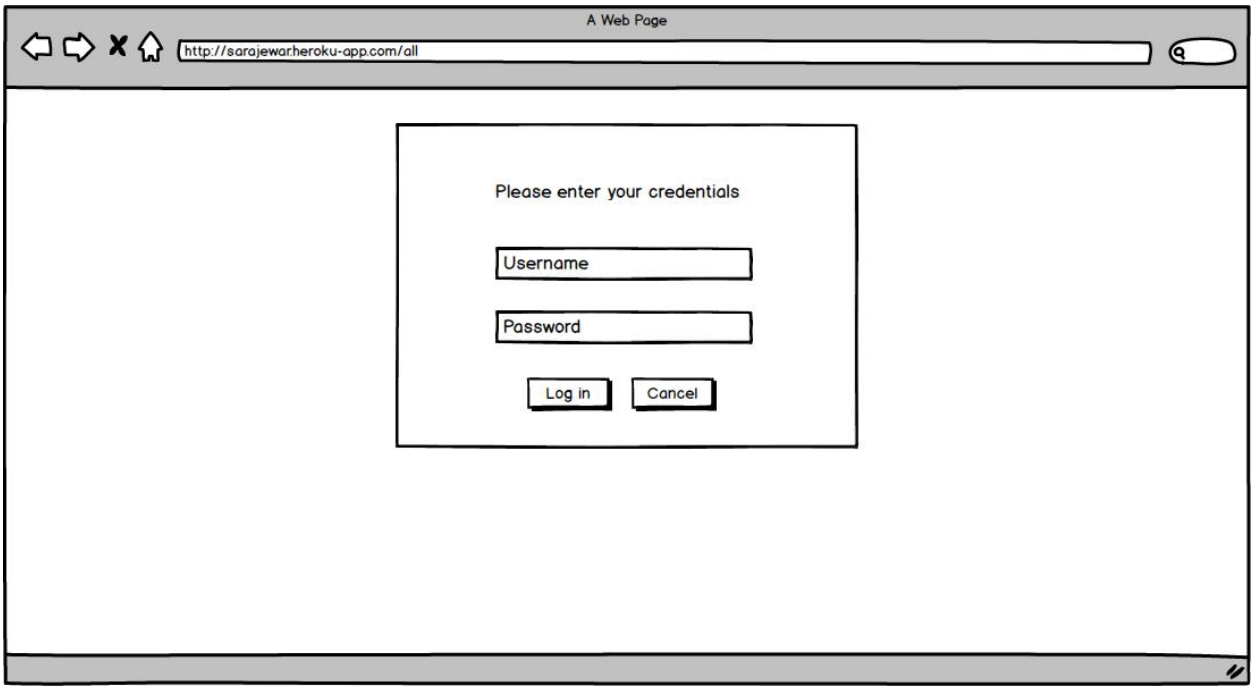

Figure 7 - Login screen

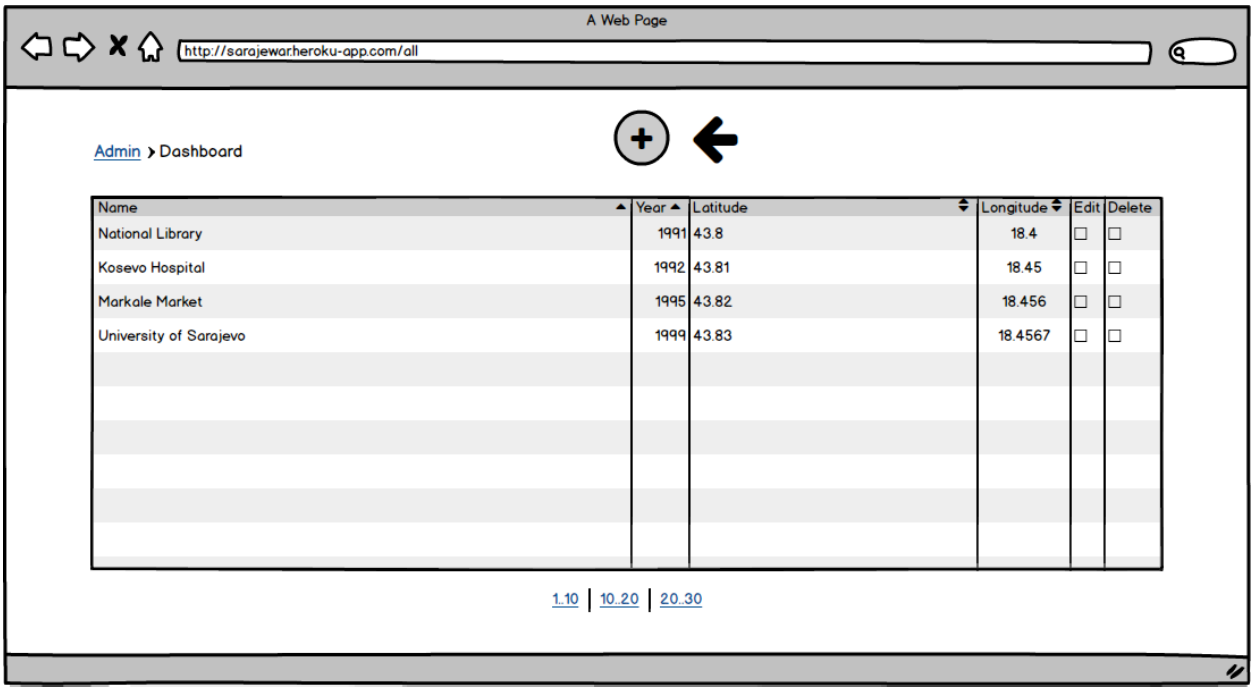

Figure 8 - Dashboard screen

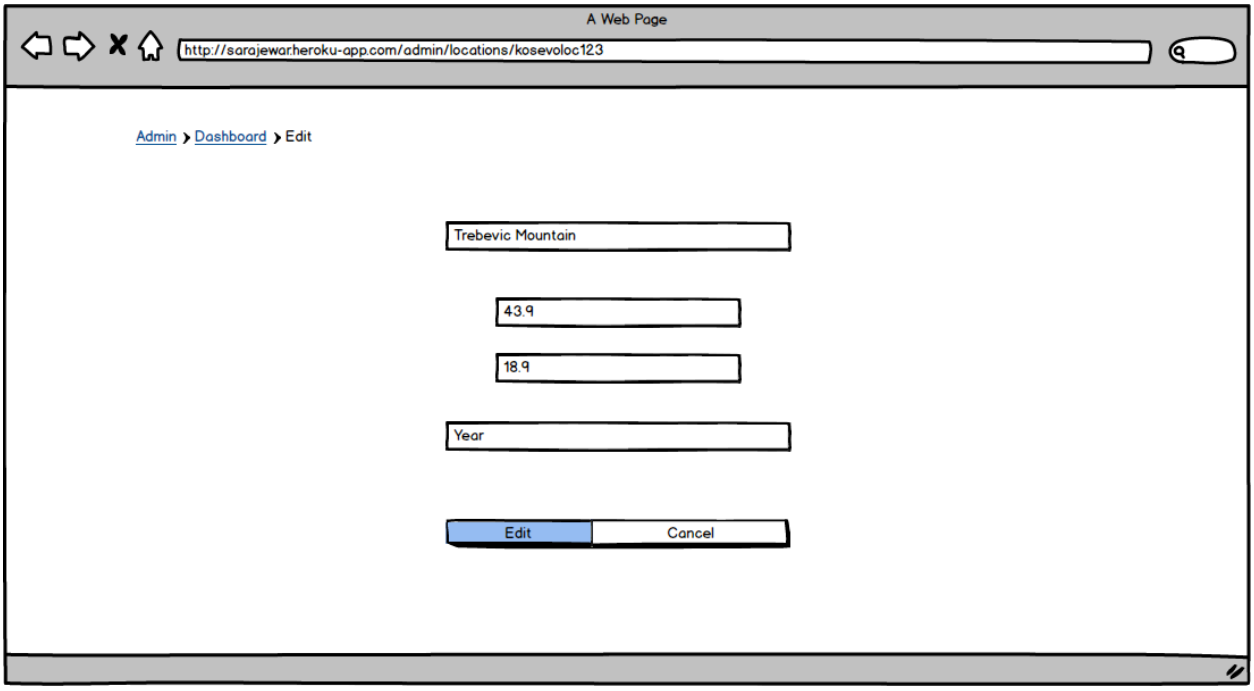

Figure 9 - Edit screen

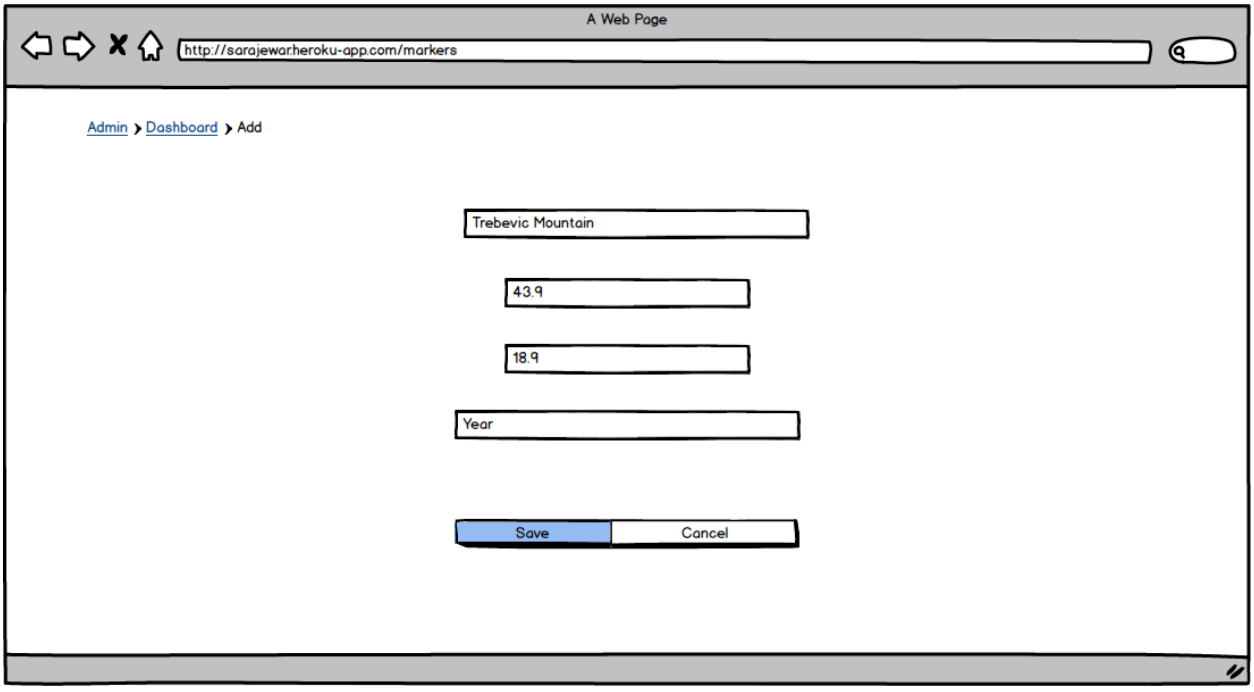

Figure 10 - Add screen

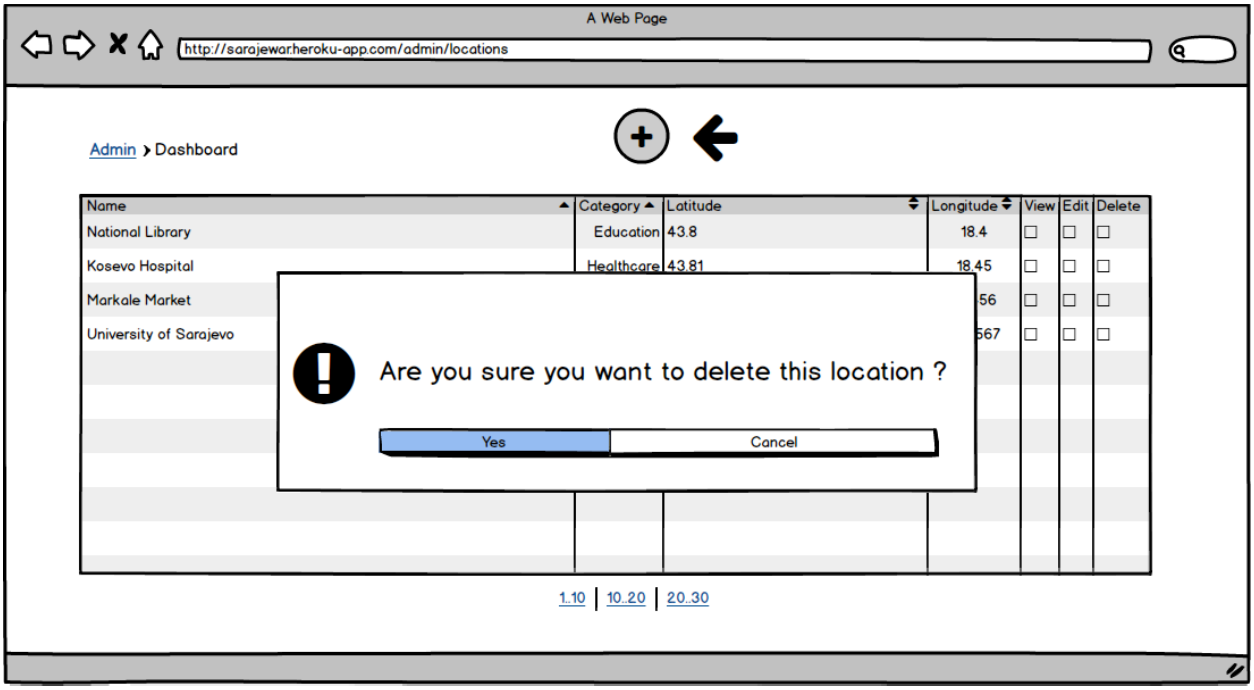

Figure 11 - Delete screen