Product Requirements

A Recommendation for Sahana by DSO

June 9, 2015

Stakeholders

Our main stakeholders are the Sahana community, which includes:

- Michael Howden, initial point of contact for this project
- Volunteers who develop Sahana software
- Users who have deployed Sahana Eden in the past

We have been encouraged to share our work directly to the community as much as possible by engaging with the Sahana Eden mailing list.

Problem Statement

Sahana Eden should be easy to use out of the box, accessible to new users and quick to configure in preparation for or response to a disaster. Sahana Eden is currently difficult to use unless customized to a specific context. DSO aims to identify and document the common requirements for different types of users, which Sahana will implement, so that users can deploy and customize the software in an easier manner.

Scope

DSO will deliver requirements for Sahana Eden feature sets based on personas, scenarios, and user stories. Each deliverable will be validated through the Sahana community and documented on the Sahana Eden Wiki.

The time scope of the project is the Stanford Winter and Spring Quarters in 2015.

Assumptions

The assumption is that our work has been thoroughly documented such that it can be easily built upon.

Product Requirements

This is documented to allow people to understand what the web setup toolkit should do.

Market Definition and Assessment

Overview from DSO:
https://docs.google.com/presentation/d/1h2r9b5C2hE69Z6Gw0taD-YvYu1VFTY-ffQlobcAqNEU/edit#slide=id.p

Use Cases

Use Cases Brainstorm:
https://docs.google.com/document/d/1iI4JJl9L2-a_GbBUsqoLGC1vqhmcgd3BCGdWuIePJXs/edit

Phase 1: Minimum Viable Product (UI prototypes only)

1. An administrator picks their organization type / deployment purpose / expected users

2. An administrator is only given a set of default modules

3. An administrator is only given a default feature set for each module

4. An administrator is presented options of databases to import from

* An administrator is defined as a user who is in charge of deploying Sahana for their organization.

The following phases are DSO's recommendation to Sahana for future implementation and sustainability purposes.

Phase 2: Implementation of UI prototypes

1. An administrator picks their organization type / deployment purpose / expected users

2. An administrator is only given a set of default modules

3. An administrator is only given a default feature set for each module

Phase 3: Customization

1. An administrator picks their organization type / deployment purpose / expected users

2. An administrator is allowed to pick from a set of modules

3. An administrator is allowed to pick from a set of features for each module

4. An administrator is presented options of databases to import from

Functional Requirements

Defines what the web setup toolkit should do

The follow fields are presented for an administrator to fill out

1. Org Type - string [30 characters]

    a. Purpose: to name the type of organization

    b. Only one answer allowed

        i. Help text: Pick the one that is most representative of purpose

    c. Dropdown menu to pick from, examples:

        i. Governmental organization

        ii. Humanitarian organization (eg, Red Cross)

        iii. Registered non-profit organization

        iv. Registered for-profit social enterprise

        v. Other: _____

2. Deployment Purpose - string [30 characters]

3. Expected Users - number [30 characters]

4. Name - string [30 characters]

Recommended Default Feature Sets

Documented at:
https://docs.google.com/document/d/1tOR3QIGso_oSkRCpghgGuLXxfOmH8l0NylHihbvJjpk/edit?usp=sharing

Eden Configuration Spreadsheet

Documented at:
https://docs.google.com/spreadsheets/d/1uRI--NMhUAe9SzdbAZW3RZsTdqD1cP6lUrsW26Nhnd
A/edit#gid=0

Sahana Baseline Data Repository

Documented at:
https://docs.google.com/document/d/1xz8ACUr6aq1yezCpyJRTPaQ6_Rb34fnc54Khburca1U/edit#
heading=h.8zsn9z7oxeab

IMPORTING FROM DATABASES:
A checkboxes of databases should ideally not be necessary as there's supposed to only be one
baseline repository.

- Have information about what each of these contain:

    - Humanitarian Data Exchange (https://data.hdx.rwlabs.org/)

    - Open Street Map

    - Sahana GIS data (http://eden.sahanafoundation.org/wiki/GIS/Data) - admin
      boundaries

    - Other data sources/government statistics

Usability Requirements

This is documented to allow people to understand how the web setup toolkit should work.

Feature Set/User

In order to facilitate the future development of a configuration tool (by a Sahana developer) that will ease Sahana set up, we plan to outline feature sets. These feature sets will define and encompass key features of Sahana that a deployment of Sahana may employ. There is a need for multiple feature sets as different disaster scenarios require different tools, mobilization of personnel, etc.

Personas

To understand what Sahana modules and features ought to belong together in a feature set, we took a user-centric approach and developed user personas. These personas are intended to be an imagination of what different Sahana users would be like, including their backgrounds, job scopes, and goals - and to that end, what Sahana modules the would find most valuable in their job.

We developed personas for different roles, including DRR Project Officer, HR Coordinator, Red Cross Volunteer, etc. These personas can be found here: https://docs.google.com/document/d/1tOR3QIGso_oSkRCpghgGuLXxfOmH8l0NylHihbvJjpk

Interviews

In order to verify the accuracy of the developed personas, we will conduct a user study on users and potential users of Sahana. Many of these people (User Study Participants) fit the user roles we seeked to define personas for. Interviews are ongoing. A list of interview questions can be found here: Interview Questions (Take note that these questions are non-exhaustive and the interview is open-ended)

Key take-aways and overall summaries:

https://docs.google.com/document/d/1tTw6BmqRUBjEMPwFNVpCXrbvv1X1oyDuoGJpy5SKxYQ/edit