



Software Requirements Specification for **Afet Bilgi**

Emre Geçit, Baran Yancı

April 11, 2023

Contents

1 Introduction

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

1.1 Purpose of the System

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

1.2 Scope

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

1.3 System Overview

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

1.3.1 System Perspective

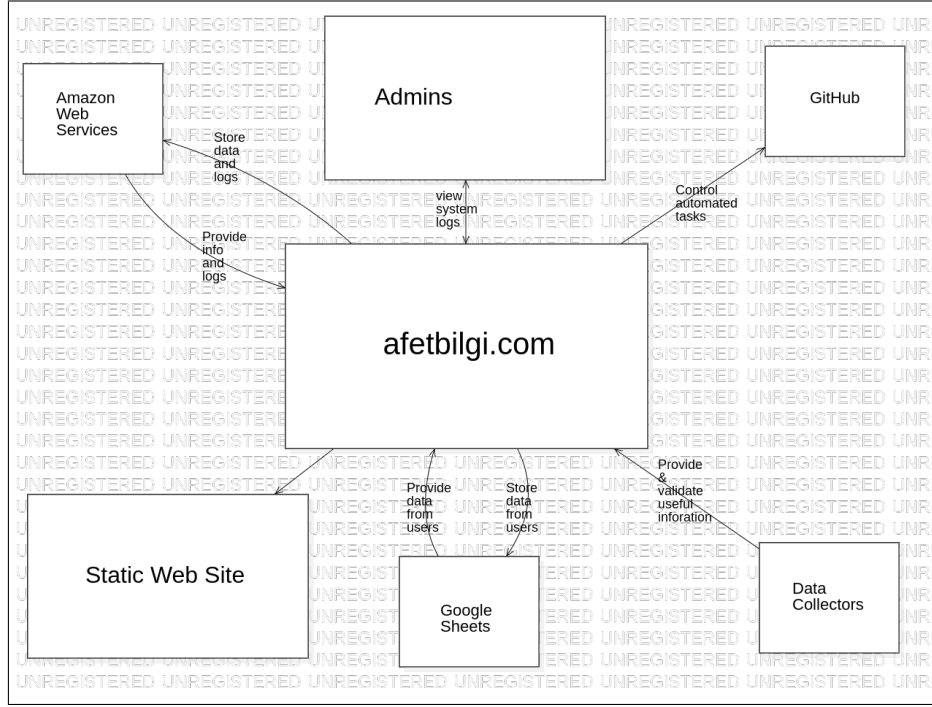


Figure 1: Context Diagram

The **afetbilgi.com** product is not an element of a larger system. The project is split into two main parts. The first part is the front-end of the website. The second part is the cloud services that is used to store and process the data. The front-end is a web application that is developed using TypeScript and the ReactJS framework. The front-end uses packages like MUI and is hosted on the static website **afetbilgi.com**. For the cloud services, the project uses Amazon Web Services (AWS) and the serverless framework. Alongside AWS, GitHub Actions is used for continuous integration and continuous deployment (CI/CD). The cloud services process the data and store it in a database. The data comes from individuals who enter and/or validate the data. The data is collected in Google Sheets and then processed by the cloud services. The cloud services are hosted on AWS. GitHub actions are also responsible for generating PDF files including information about affected areas, from the data in the database.

The PDF files are then stored in the cloud services and can be accessed by the front-end.

1.3.2 System Functions

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

1.3.3 Stakeholder Characteristics

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

1.3.4 Limitations

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

1.4 Definitions

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

2 References

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3 Specific Requirements

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3.1 External Interfaces

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3.2 Functions

Use case name	See PDF About a City
Actors	User, Static Website, PDF Viewer
Description	If a user wants to see the PDF document containing information about a city, the city selection dialog is shown, then the desired is picked on the dialog.
Data	PDF file about the city
Preconditions	The PDF for the city file must be refreshed previously.
Stimulus	User clicks on the "PDF" button and picks a city
Basic flow	Step 1: User clicks the "PDF" button Step 2: The pop-up dialog is shown Step 3: User picks the desired city on the city selection dialog
Alternative flow	-
Exception flow	-
Post conditions	User is redirected to the PDF viewer

Table 1: See PDF About Hatay Function

Use case name	Kızılay Blood Donation Places
Actors	User, Static Website, Kızılay Website
Description	The user wants to see the blood donation locations.
Data	Blood Donation Locations
Preconditions	-
Stimulus	User clicks on the "Kızılay Blood Donation Places" button
Basic flow	Step 1: User clicks the "Kızılay Blood Donation Places" button
Alternative flow	-
Exception flow	-
Post conditions	User is redirected to the Kızılay website

Table 2: Kızılay Blood Donation Places Function

Use case name	Generating PDF Documents
Actors	GitHub Actions, automation code, Data Providers & Validators
Description	The PDF files are generated by the automated code running on GitHub Actions. Those PDF files include information about evacuation points, food distribution centers, pharmacies, gas stations and more, based on the districts of the given city. All the information comes from Google Sheets, which holds the data coming from voluntary individuals.
Data	Open pharmacies, evacuation points, food distribution centers, gas stations, accommodation places, veterinarians.
Preconditions	The information should be on Google Sheets prior to generation.
Stimulus	GitHub actions runs this task periodically.
Basic flow	Step 1: The data from sheets are fetched Step 2: The PDF file is generated using the Python script Step 3: The file is stored in AWS Cloud.
Alternative flow	-
Exception flow	-
Post conditions	The updated PDF file is stored on the cloud, and is ready to be seen on the front-end.

Table 3: Generating PDF Documents Function

Use case name	Showing Maps
Actors	Leaflet, Data Providers & Validators
Description	The map is generated by the map provider Leaflet. The map includes information about donation centers, temporary accommodation places, food distribution places, pharmacies, gas stations and more, and where they are on the map. All the information comes from from voluntary individuals.
Data	Open pharmacies, evacuation points, food distribution centers, gas stations, accommodation places, veterinarians.
Preconditions	The information should be available on the sources prior to generation.
Stimulus	User clicks the "map" button on the page.
Basic flow	Step 1: The user clicks the "map" button Step 2: The user is redirected to maps.afetbilgi.com Step 3: The map is shown.
Alternative flow	Step 1: The user opens maps.afetbilgi.com.
Exception flow	-
Post conditions	-

Table 4: Showing Maps Function

Use case name	Changing Language
Actors	User, Static Website
Description	There are millions of people living in the affected areas belonging to different ethnicities and background, and although the main language of the site is Turkish, support for different languages is a must. The project comes in four different languages which the users can choose from: Turkish, English, Kurdish and Arabic.
Data	Visual messages
Preconditions	The translations are done previously.
Stimulus	User clicks the language button on the site
Basic flow	Step 1: The user clicks the language button Step 2: A dropdown menu for language selection is shown Step 3: The desired language is selected
Alternative flow	-
Exception flow	-
Post conditions	The site is now in the desired language.

Table 5: Changing Language Function

3.3 Usability Requirements

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3.4 Performance Requirements

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3.5 Logical Database Requirements

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3.6 Design Constraints

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3.7 System Attributes

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

3.8 Supporting Information

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4 Suggestions for Future Work

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.1 System Perspective

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.2 External Interfaces

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.3 Functions

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.4 Usability Requirements

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.5 Performance Requirements

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.6 Logical Database Requirements

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.7 Design Constraints

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.8 System Attributes

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.

4.9 Supporting Information

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget libero sollicitudin justo vehicula venenatis quis ut eros. Proin vitae.