AFET BİLGİ

Software Requirements Specification

Version 1.0

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Table of Contents

List of Figures

List of Tables

Revision History

Version	Date	Explanation
1.0	12.04.2023	All section titles have been present. Context diagram has been drawn and Use-cases are determined and Use-case diagram has been drawn and use-case tables are added.

1. Introduction

1.1. The Purpose of System

1.2. Scope

1.3. System Overview

1.3.1. System Perspective

Afet Bilgi site was created to both verify and convey important information about the disaster in this area to earthquake survivors, and also deliver these people to those who volunteered to save them.

The whole database is handmade by volunteered people. The purpose of system is providing speed, confirmed, useful information on time which are critical for their life matters. This system interacts with other services such as Google Maps. With the Google Maps entegration people can easily reach the information about what they need in an area and locations.
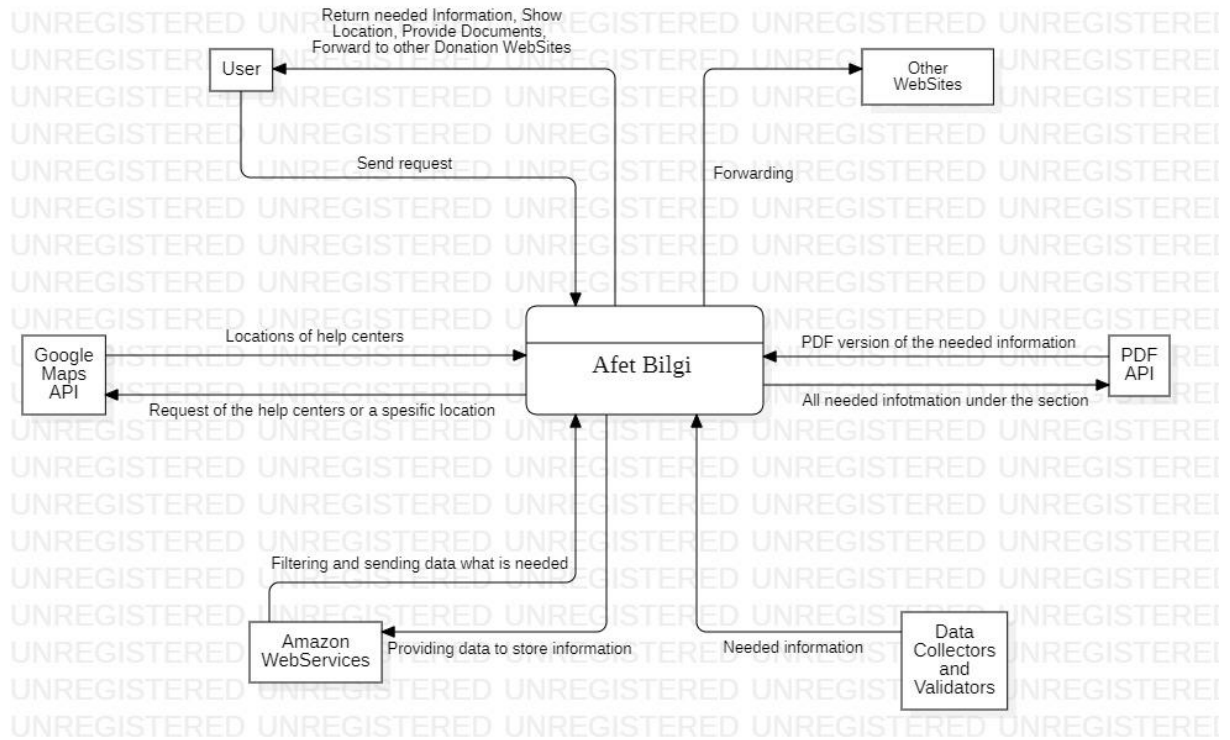

Figure 1: Context Diagram

1.3.1.1. System Interfaces

WebSite Interface: The interface consists of four main titles which are General Needs, Important Resources, Healthcare Services and Donation section. They all work according to selected city. The General Needs section provides information about gathering areas, food distribution center, gas stations etc. The Important Resources Section provides crucial phone numbers, useful links and articles. The Health Services consists active hospitals, veterinarians, and pharmacies. Finally, To Help section provides helping opportunities to people who wants to help survivors.

Google Maps API: This system is used for showing all or wanted cities' hospitals, hotels, food places and other needed locations. Thanks to Google Maps API, users can see their locations and how to go to desired locations. (check 1.3.1.2 for details).

Amazon WebServices: Amazon database systems is used for storing and parsing information. Also, it provides fast response to users.

PDF API: This API is used for creating PDF documents from the information in the website sections. The website sends all the information from the section and this API creates the pdf version of the section.

Other WebSites: Afet Bilgi redirects users to some Non-Governmental Organization websites such as Kızılay, Ahbap, AFAD to make donations and to get help.

1.3.1.2. User Interfaces

Users who wants to use Afet Bilgi does not required to download any applications. They can connect to this website from any device which can connect to internet. They can find information about general needs of a earthquake survivor, resources about education, accommodation, healthcare, phone numbers and useful applications. They can find the locations in Map section. The Map section will provide navigation support to desired place. Users can download PDF documents of the needed section's information to use without internet because there is limited internet connection in the earthquake site. In addition to the user interface, there is an admin interface to include and remove new or updated information.

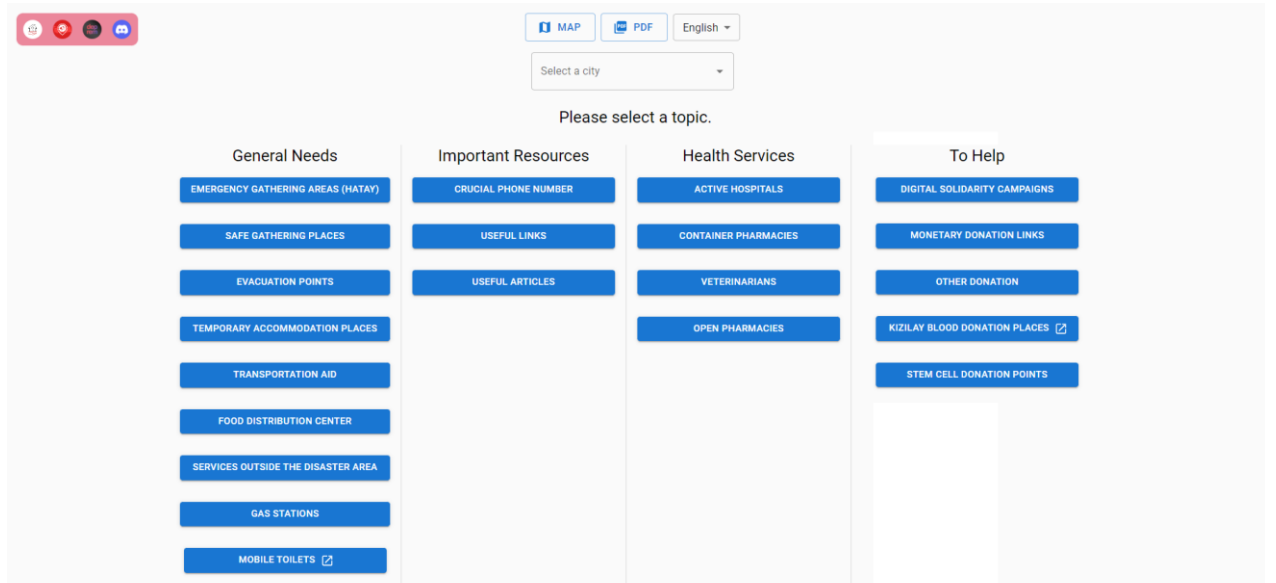Figure 2: Main Page of Afet Bilgi

PDF Interface: For selected city, the required information uch as hospitals, pharmacies, gas stations, accommodation places, veterinary and food sharing places will be in the PDFs. If the user has a stable internet connection, they can Access to Google Maps or the source directly from the PDF instead of going to website.

Figure 3: PDF Page of Afet Bilgi

afetbilgi.com - Hatay

Bu belge afetbilgi.com sitesinden alınmıştır. Verilerin son doğrulanma tarihi: 09.04.2023 16:39:06

İçindekiler

Aktif Hastaneler

İlçe	Konum	Harita	Kaynak	Telefon	Son güncelleme	Güncelleme Saati (Update Time)
Antakya	Maxim Park	Google Maps Linki		-	10/02/2023	20:00
Defne	Sümerler Anfi Tiyatro (Memorial Sağlık Destek Birimi)	Google Maps Linki	Kaynak	-	10/02/2023	20:30
Dörtyol	MMK Metalurji Limani (Gemi)	Google Maps Linki	Kaynak	-		
Arsuz	İskenderun-Arsuz Expo	Google Maps Linki	Kaynak	-	16/02/2023	21:00
Dörtyol	Hatay Dörtyol Devlet Hastanesi Bahçesi (Memorial Sağlık Destek Birimi)	Google Maps Linki	Kaynak	-	10/02/2023	20:30
Antakya	Sümerler Mahallesi Dostluk Parkı	Google Maps Linki	Kaynak	-	11/02/2023	23:31
İskenderun	Akdeniz Mesleki Ve Teknik Anadolu Lisesi Bahçesi (Yeni Devlet Hastanesi Karşısı)	Google Maps Linki	Kaynak	-	10/02/2023	20:00
Antakya	Ovakent	Google Maps Linki	Kaynak	-		
Antakya	Acı Badem Sağlık Tırı (Eğitim Araştırma Hastanesi Bahçesi)	Google Maps Linki	Kaynak	-		
İskenderun	Sancaktar gemisi	Google Maps	Kaynak	-	10.02.2023	12:04

Figure 4: PDF Document of Hatay

Map Interface: This system provides temporary accommodation places, food sharing places, hospitals, pharmacies, and helping centers locations and navigation systems. That means the system guides you how to reach desired places. The interface has seach and filter features. The user can search a place and find the available shortest way. If the users need any help, the map will make it easy to find it.
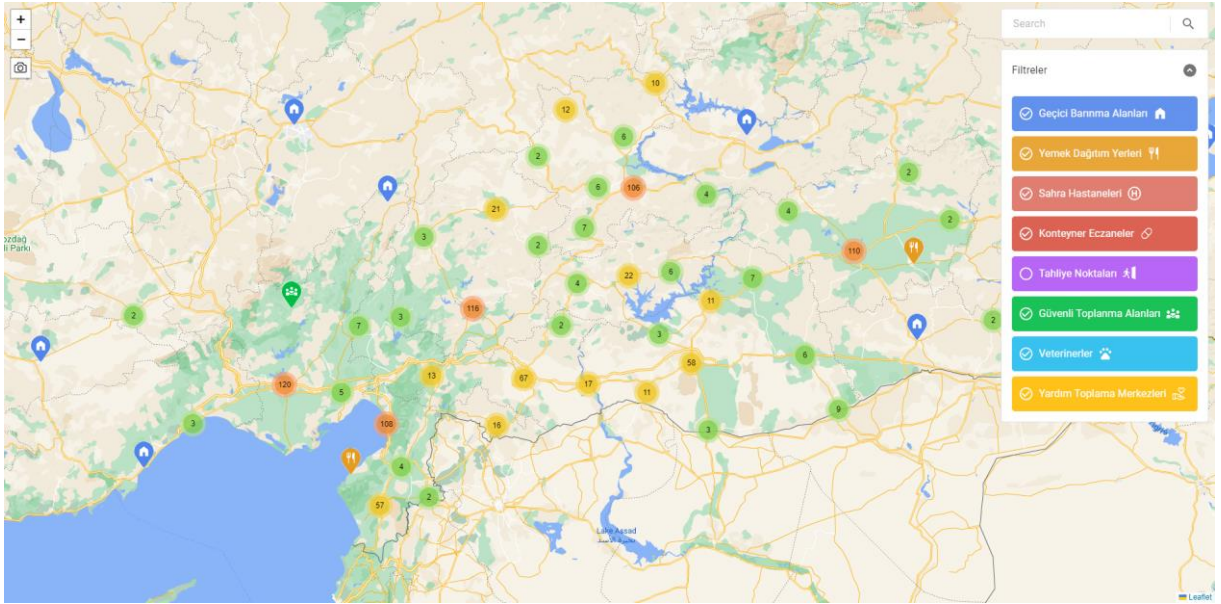
Figure 5: Map Page of Afet Bilgi

1.3.1.3.   Hardware Interfaces

As website-based systems run entirely within a web browser, they do not require any special hardware interface beyond the standard hardware used to access the internet, such as a computer, smartphone, or tablet.

The hardware interface of website-based systems is generally straightforward, as they can be accessed from a wide range of devices with different hardware specifications using a standard web browser. The user interacts with the system through the website's user interface, which is displayed in the web browser. The performance of website-based systems can be affected by factors such as the speed and reliability of the internet connection, the processing power of the device running the web browser, and the amount of memory available on the device.

1.3.1.4. Software Interfaces

Database: data collectors and validators who works in Afet Bilgi system, firstly take the data and check their accuracy. Then, these validated datas are stored in the storing data sheet. Lastly, these informations are send and hold in Amazon provided database.

Operating Systems: These systems can be used by all Operating Systems that can access web services.

Google Maps: This system is used for displaying active health services, emergency gathering areas temporary accommodation places which are critical for those people.

1.3.1.5. Communication Interfaces

Afet Bilgi uses HTTP/HTTPS protocols for communication systems. When you use HTTPS for communication, your data is encrypted before it is sent over the internet. This means that it is much more difficult for anyone to intercept and read the data as it travels across the network. In this way, any data transmitted, such as login credentials, personal information, is protected from malicious actors.

1.3.1.6. Memory

Memory is not big issue for Afet Bilgi system since this system can do some kind of basic database operations and these operations do not need huge amount of memory. Also, there is no storage needed for this system.

1.3.2. System Functions

1.3.3. Stakeholder Characteristics

1.3.4. Limitations

1.4. Definitions

2. References

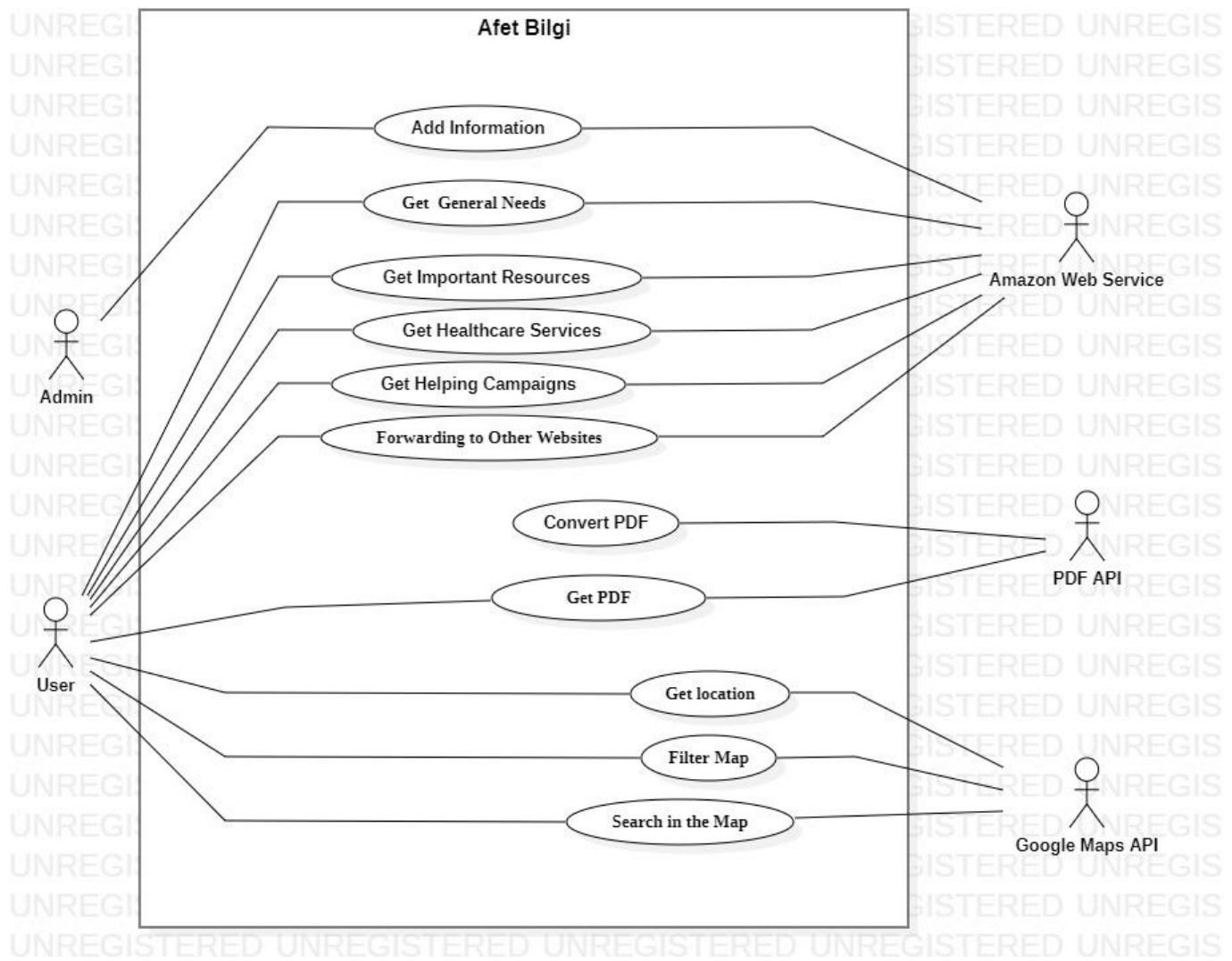# 3. Specific Requirements

3.1. External Interfaces

3.2. Functions

Figure 6: Use-Case Diagram

Usecase name	Add Information
Actors	Admin, Amazon Web Service
Description	When there is a new data including a needed information, admins will add this information to the database. So that the information will be available for the users in the website.
Data	Information of any sections.
Preconditions	The information needs to be checked and verified.
Stimulus	Admins clicks on the Add button.
Basic Flow	Step 1: The information comes from data collectors. Step 2: The information is checked by validators. Step 3: The information is verified. Step 4: The information is added to database. Step 5: The information is available in the website.
Alternative Flow	-
Exception Flow	Step 3: If the information cannot be verified, then it will not be added to database until it is confirmed.
Postconditions	There is a new information is provided to the users.

Tablo 1 : Add Information

Usecase name	Get General Needs
Actors	Users, Amazon Web Service
Description	When users needs to find out about safe gathering places, accommodation places, food distrubution centers, gas stations and mobile toilets, these informations are gathered according to selected city.
Data	Information of selected city and General Needs section
Preconditions	Desired city must be selected
Stimulus	User selects city and clicks on the general needs section.
Basic Flow	Step 1: User enters to the website. Step 2: User selects the city. Step 3: User selects the title which is under the general needs section. Step 4: User gets the necessary and verified information.
Alternative Flow	-
Exception Flow	-
Postconditions	The information under the general needs section is provided to the user.

Tablo 2: Get General Needs

Usecase name	Get Important Resources
Actors	Users, Amazon Web Service
Description	When users needs to find out about the critical information about earthquake and what is useful for the survivors, these informations are gathered for the user.
Data	Information of the selected section
Preconditions	-
Stimulus	User clicks on the buttons under the Important Resources section.
Basic Flow	Step 1: User enters to the website. Step 2: User selects the title which is under the Important Resources section. Step 3: User gets the necessary and verified information.
Alternative Flow	-
Exception Flow	-
Postconditions	The information under the Important Resources is provided to the user.

Tablo 3: Get Important Resources

Usecase name	Get Healthcare Services
Actors	Users, Amazon Web Service
Description	When users needs to find out hospitals, pharmacies and veterinarians, these informations are gathered according to selected city.
Data	Information of selected city and Healthcare Services section
Preconditions	Desired city must be selected
Stimulus	User selects city and clicks on the general needs section.
Basic Flow	Step 1: User enters to the website. Step 2: User selects the city. Step 3: User selects the title which is under the healthcare services section. Step 4: User gets the necessary and verified information.
Alternative Flow	-
Exception Flow	-
Postconditions	The information under the healthcare services section is provided to the user.

Tablo 4: Get Healthcare Services

Usecase name	Get Helping Campaigns
Actors	Users, Amazon Web Service
Description	When users wants to contribute to organisations which helps to survivors, they are offered many organisation types. After the user chooses the organisation type, they can choose the desired organisation. After that, they will be forwarded to that organisation's website.
Data	Selected site's information
Preconditions	Desired organisation must be chosen and clicked
Stimulus	User clicks on the organisation'
Basic Flow	Step 1: User enters to the website. Step 2: User selects the type of organisations. Step 3: User selects organisation which they prefer to donate or help in any other way. Step 4: User is forwarded to the preferred organisation's website.
Alternative Flow	-
Exception Flow	-
Postconditions	The information about organisation's website is provided to the user.

Tablo 5: Get Helping Campaigns

Usecase name	Convert PDF
Actors	PDF API
Description	When there is a conversion request from the website which consists of all information about the city, PDF API creates the PDF document according to these information.
Data	The whole information about the selected city.
Preconditions	The API request from the site.
Stimulus	User clicks to the PDF section and choose the city.
Basic Flow	Step 1: User clicks the PDF button on the main page. Step 2: User chooses the desired city. Step 3: PDF document is created for the city.
Alternative Flow	-
Exception Flow	-
Postconditions	The whole information abot the city are showed into the PDF document.

Tablo 6: Convert PDF

Usecase name	Get PDF
Actors	Users, PDF API
Description	When users wants to document of all information about the city which they select, these information are gathered and PDF document is created. This PDF can be easily downloaded and shared.
Data	Selected city information
Preconditions	Clicks PDF download button and desired city have to be chosen.
Stimulus	User clicks to the PDF section and choose the city.
Basic Flow	Step 1: User enters to the website. Step 2: User clicks to the PDF button. Step 3: User chooses the desired city. Step 4: The whole information about city is created into the PDF document. Step 5: The PDF document can be downloaded.
Alternative Flow	Step 3: User clicks to the All Cities button. Step 4: The whole information about all cities are created into the PDF document. Step 5: The PDF document can be downloaded.
Exception Flow	-
Postconditions	The whole information abot the city are showed into the PDF document and ready to downloaded.

Tablo 7: Get PDF

Usecase name	Get Location
Actors	Users, Google Maps API
Description	When there is a provided location in a page under any section, there is a map button which directs to the Google Maps. In Google Maps this location can be found easily.
Data	Location information
Preconditions	When there is a provided location under any section, and then user clicks to the Map button.
Stimulus	User clicks to the Map button.
Basic Flow	Step 1: User enters the section which provides a location. Step 2: User clicks the Map button under the address section of the site. Step 3: The address of the location is shown in the Google Maps.
Alternative Flow	-
Exception Flow	-
Postconditions	Google Maps is opened according to the location which is selected by the user.

Tablo 8: Get Location

Usecase name	Filter Map
Actors	Users, Google Maps API
Description	In the Google Maps, users can filter the locations in terms of useful parameters such as accommodation, food sharing places, hospitals, pharmacies, safe meeting places, evacuation spots, veterinarians and aid collection center.
Data	Location information and filtering parameters
Preconditions	User should select to parameter for the location.
Stimulus	User clicks filter button in the Google Maps section.
Basic Flow	Step 1: User clicks the Map button under the main page and goes to Google Maps. Step 2: User clicks filter button in the Google Maps. Step 3: The filtered places are shown in the map.
Alternative Flow	-
Exception Flow	-
Postconditions	The filtered locations are shown.

Tablo 9: Filter Map

Usecase name	Search in the Map
Actors	Users, Google Maps API
Description	In the Google Maps, users can search the locations in terms of the name of the place, or the street name or number.
Data	Location information and search parameters.
Preconditions	User should enter the parameter for searching location.
Stimulus	User clicks the search button after the entering searching parameters.
Basic Flow	Step 1: User clicks the Map button under the main page and goes to Google Maps. Step 2: User enters the required parameters for the search. Step 3: User clicks the search button. Step 4: Desired places are shown in the map.
Alternative Flow	-
Exception Flow	-
Postconditions	Google Maps shows the searched locations.

Tablo 10: Search in the Map

Usecase name	Forwarding Other Websites
Actors	Users, Amazon Web Services
Description	When user clicks on any source or website section this buttons forward the user into appropriate links.
Data	Other websites links
Preconditions	When there is a provided links under source section or website section and user clicks on it.
Stimulus	User clicks to link button.
Basic Flow	Step 1: User enters the section which provides other websites links. Step 2: User clicks link or source button in the site. Step 3: User is forwarded to the desired websites.
Alternative Flow	-
Exception Flow	Step 3: If the link does not work properly, user cannot be forwarded to other website.
Postconditions	User has reached the other useful website.

Tablo 11: Forwarding Other Websites

3.3. Usability Requirements

3.4. Performance Requirements

3.5. Logical Database Requirements

3.6. Design Constraints

3.7. System Attributes

3.8. Supporting Information

4. Suggestions to improve the existing system

4.1. System Perspective

4.2. External Interfaces

4.3. Functions

4.4. Usability Requirements

4.5. Performance Requirements

4.6. Logical Database Requirements

4.7. Design Constraints

4.8. System Attributes

4.9. Supporting Information