

AFET BİLGİ

Software Architecture Description

Version 1.0

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Revision History

Version	Date	Explanation
1.0	17.05.2023	

Table 1: Change History

1. Introduction

This document is the Software Architecture Description (SAD) of a website which is afetbilgi.com developed by a group of METU students and METU graduates during the Pazarcik Earthquake on 06/02/2023.

1.1. The Purpose and Objectives of afetbilgi.com

The purpose of this project is to verify crucial information and deliver it to both disaster victims and those who want to help during an earthquake. Also, this site offers help with other needs of survivors. It makes it easier for people to reach their important needs by showing where they can find these needs and emergency phone numbers in a pdf document.

1.2. Scope

Within the scope of this system, it is tried to meet the urgent needs of people who are exposed to earthquakes. The information reaching the admins is confirmed and uploaded to the site's database, so that users need to enter the site and select the appropriate title in order to find what they need. This site provides 4 main titles for what they are looking for.

First, if user selects the topic under the General Needs title, like emergency gathering areas, safe gathering places etc. information in terms of the selected areas is reached from the database and is prepared in a pdf document and presented to the user.

Second, if user selects the topic under the Important Resources title, useful phone numbers, links and articles is provided to the user.

Third, if user selects the topic under the Health Services title, like hospitals' and pharmacies' locations are presented in the Google Maps and user can get the directions there and reach it easily.

Last, if user want to help or make donations for people who are suffered from the earthquake, they are forwarded to appropriate sites under the To Help title.

All of this information is recorded in a system's database service which is provided from Amazon. These databases can be developed by aggregating and verifying more information. In addition, Amazon database service is used for the database requirement system.

1.3. Stakeholders and their concerns

There are three main stakeholders of the Afet Bilgi system which are users, admins and data collector and validators.

Users are people who want to get information about in the earthquake and help people who have been harmed by it. They need any device with an internet connection to connect to this site. They do not need any complicated requirements to enter this website.

Admins are the people who are responsible for the add, update, and delete the information about the earthquakes in the databases. Also, they are responsible for the organizing all interfaces of system. They need to know the system in detail and to have good web site developer skills.

Data-collector and validators are the people who are responsible for the collect the data from other people or social media and then check the reliability of these information. After the check process, they decide to information should be presented or not. They need have good-communication skills, good researcher, and reliable person.

2. References

This document is prepared with respect to IEEE 29148-2011 standard:

29148-2011- ISO/IEC/IEEE International Standard-Systems and software engineering – Life cycle processes – Requirements engineering.

Other Resources:

Afet Bilgi Github (2023). *Afet Bilgi*. URL: <https://github.com/alpaylan/afetbilgi.com>

3. Glossary

Term	Definiton
PDF	PDF is an abbreviation for Portable Document Format.
DB Service	Means Database service. It is provided by Amazon Database Service.
API	Application Programming Interface

4. Architectural Views

4.1. Context View

4.1.1. Stakeholders' uses of this view

4.1.2. Context Diagram

Afet Bilgi is not a part of a larger system. However, it interacts with 5 main external entities such as users, data collectors and validators, Google Maps API, PDF API and Amazon WebServices.

The users want to access information about the earthquake survivors using many entities.

Google Maps API provides locations of necessary places for survivors and people who want to help the survivors.

PDF API provides PDF document for people who wants to access the information they need without internet after downloading the document.

Data collectors and validators collect the information and validate it. Then, they provide it to the database.

Amazon Web Services is used as the database of the system. All the data is collected in the database for the Afet Bilgi. Then, when user requests data, Amazon Web Services provides the data.

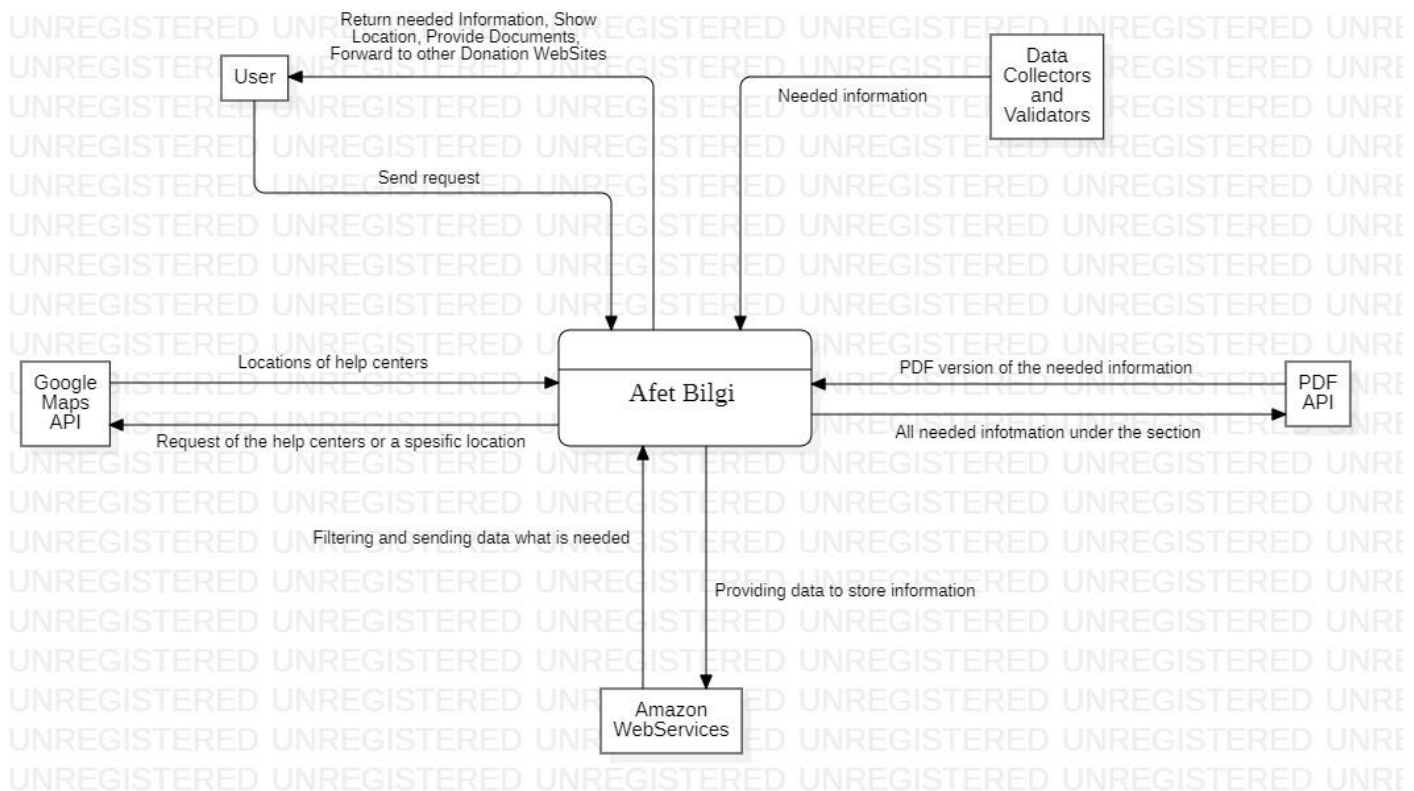


Figure 1: Context Diagram

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4.1.4. Interaction Scenarios

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