Software Requirements Specification

Project: CHAOSS

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Introduction

Purpose:

CHAOSS is a Linux foundation project with them wanting to create metrics and analytics that help define the health of the community. Their goals are to build reproducible project health reports/containers, produce integrated open source software for analyzing software community development, and establish standard implementation-agnostic metrics for measuring community activity, contributions, and health.

Scope:

This tool is built for people within IT companies and open source software contributors. Anyone who is interested in the works of open source software it is open to them.

Software Product Overview

CHAOSS is going to be something that anyone can use to check on the sustainability and health of any open source project they are interested or want to check on. There will be an option to search the project you want to look for and it will connect with the databases and servers to bring you the information in reasonable time. It will then present the data on the open source health and sustainability in a good format on the webpage.

System Use

Actor Survey:

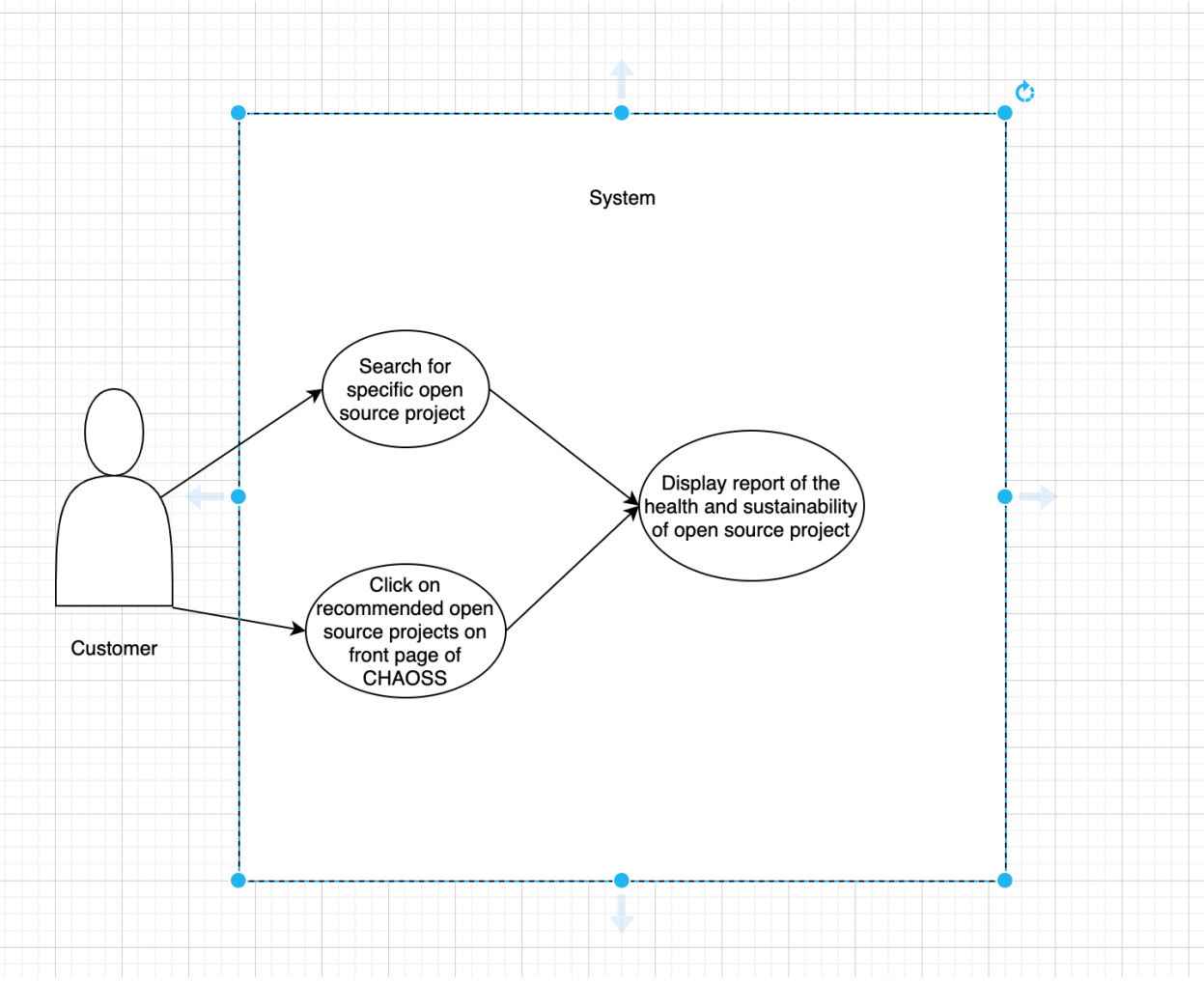
Customers: The customers will be able to interact with the system by searching for the open source projects they want to check on and will be a majority of the traffic on CHAOSS. Their main purpose is to search and view the health and sustainability of the chosen open source project.

Owner: Their goal is to improve the project of CHAOSS and to sell the project to other people to gain more traffic to their project. With CHAOSS they will only use it to improve and check reports on it.

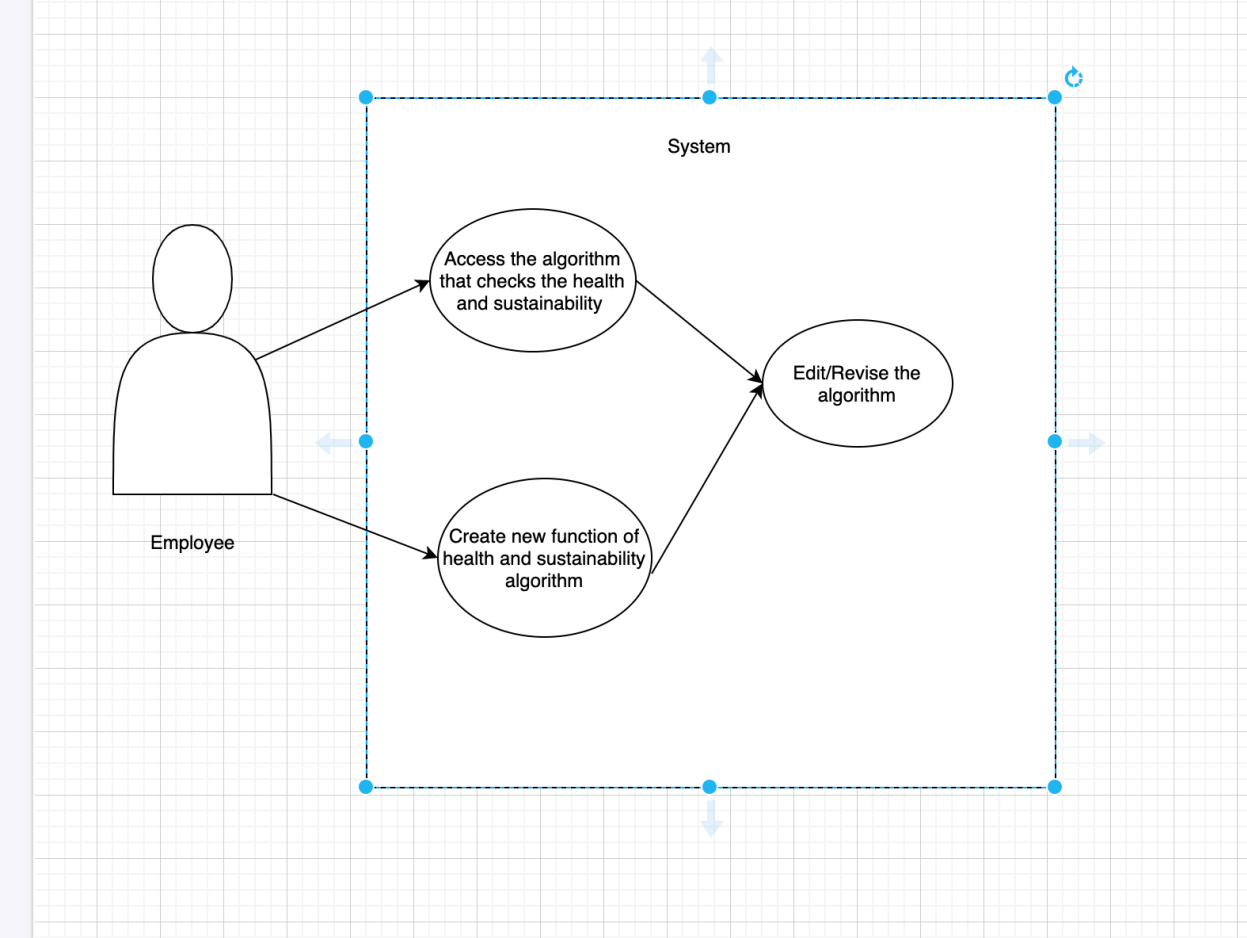
Employees: The employee's main task is to make sure that CHAOSS is working at all times and on top of that to be consistently improving the system. They can change the algorithm that searches and pulls the data about the projects to improve it if need be.

System Requirements

Use-Case:



This use-case is what the customer would see when they use CHAOSS where they can either choose a recommended project or search one and get the health and sustainability reports.



This use case is the access of what the employee can do and see, they have another level of access because they can check the algorithm that CHAOSS runs on and edit or make new things to improve the project.

Functional Specification:

- It should be able to work on all web browsers whether you are using a mobile device, laptop, or PC
- There should also be a log in page for everyone to know how much access to give the person

Non-functional Requirements:

- Database
- Servers
- An interface that works on all platforms
- Needs to handle large amounts of data
- Handle large traffic on servers
- User-friendly
- Response time should be relatively quick

Design Constraints

- Price: 600k - 700k US Dollars
- Work on Firefox, Chrome, Internet Explorer, Safari, Opera
- Database: Postgresql
- Use software such as Java and SQL
- Time: 16 months
- Should have encrypted SSL for the login feature

Purchase Components

- Database - $6000
- Computers for Employees - $8000

Interfaces

- Customer Interface
- Admin Interface
- Software Developer Interface