

Individual Requirements Analysis for Semester Project

**Fall 2019 CS4320/7320 Software
Engineering**

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DUE November 4, 2019

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Introduction:

Chaoss is Open Source Software Health and Sustainability Metrics Tool. The Chaoss projects were officially announced at the Open Source Summit North America 2017 in Los Angeles. And the project is more focused on visualizing and monitor the community projects' health and popularity. The importance of open source software is shown in history, however, when open-source contributors don't have an overview of the projects, all their work may not working out efficiently for them, because the community for the open-source project they're focusing on is dying. Then the team realize if there is a tool that can monitor the health and sustainability of an ongoing open-source project, and showed to all contributors, not only they won't be wasting their time anymore, also will help the open-source project be worked on more often and more close to its original goal.

Software Product Overview:

Chaoss is software is an ongoing Open Source Software Health and Sustainability Metrics Tool. On the GitHub, the Chaoss is monitoring the major open source project, and feedback all the majority change of the project. By visualizing the data change in history, the software will automatically calculate the risk and evolution of the repo.

System Use:

The system used to monitor the change in the open-source project community and generate the report that helping the community grow more.

Actor Survey:

Community managers: They take the information the tool to collect and helping contributors having more information on ongoing projects and predict the future of the projects with the data and information the tool collected.

Contributors: Contributors can get information from community managers, the information about how the open-source project is working and when the project is started and what about the popularity of the projects since its start and when the community for the project is most active. With the information provided

by the community managers, the contributors can focus more on work on the project and getting the proper support they needed.

Project user: With the community managers managing with the source they got with all the contributors, the projects will see its future faster and make the user have the better version and higher quality finish product.

System requirement:

Use case:

Data summarized Comparison Metrics: The data in collected in the metrics and easier to compare with the data needed to compare.

Open-Ended Community Manager Questions is supported in the Metrics: more open-ended questions such as what is the activity in the past 30 days for a repo?

System Functional Specification:

Augur: live experiments with Chaoss project prototyping.

Non-functional requirement.

The visualization of the data showed in the graph need to be clear and easy to read.

Design Constraints:

The community manager doesn't have the accessibility to change the data collected.

The contributors don't have the accessibility to change the data collected.

The normal project user doesn't have the accessibility to change the data collected.

The community manager have access to read the data collected.

The contributors have access to the graph generated.

Interface:

The Chaoss project is the Linus Foundation project and the interface is online and supports major browsers.