

# Sprint 2 Design Document: Group 8

CS4320

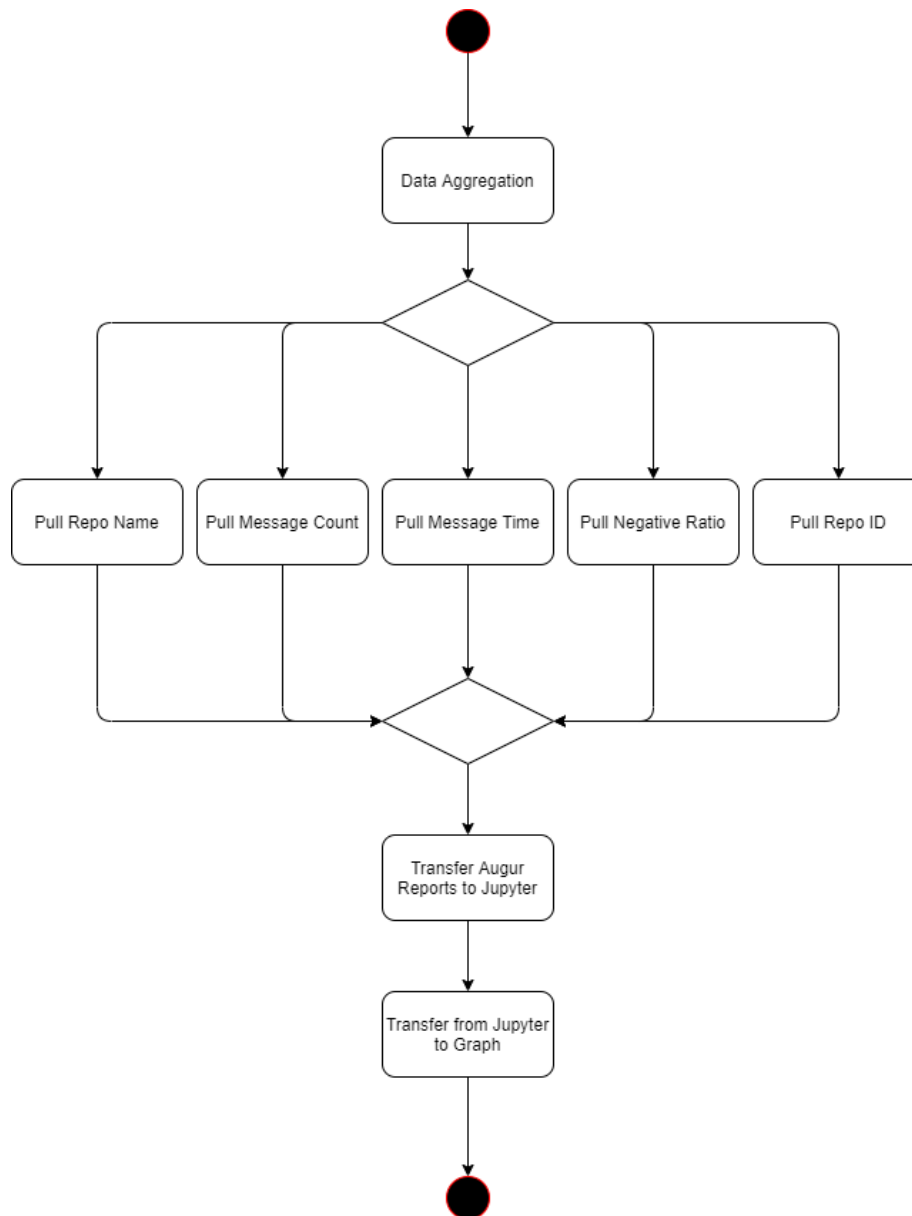
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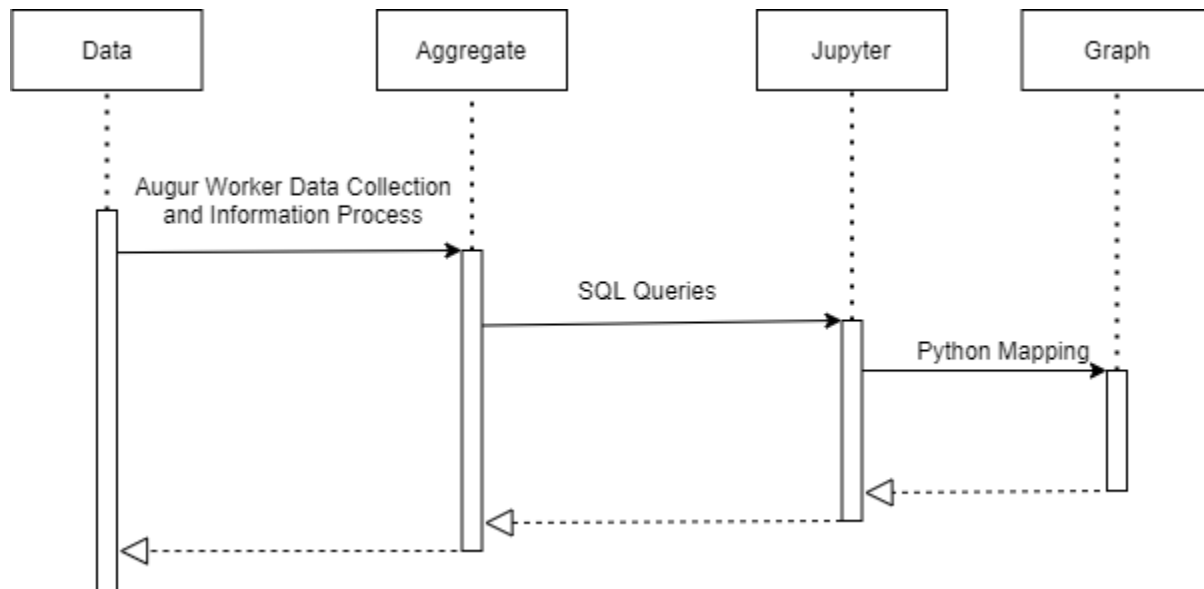
## Activity Diagram

**Title:** Message Toxicity Data Collection Process and Transfer

**Description:** Data from the Augur Community Reports is aggregated using Augur workers. Then an SQL query organizes the collected data (i.e. Repo name, message count, message time, negative ratio, repo ID). It is then transferred to a Jupyter notebook and mapped into a graphical representation using a python script.



## Sequence Diagram



**Title:** Sequence of Processes for Data Collection and Formatting

**Description:** In this diagram we are representing the flow of data from the Augur workers and the augur\_vmware and augur\_czi databases to the output of the Jupyter Pages through the use of SQL queries of the noted databases. The system will then use that data and present it via the Jupyter Notebook pages with a graphical data representation of the following metrics:

- Toxic Messages Per User (Distributed)
- Toxic Messages Over Time (Lifetime of the Project)
- Toxic Messages By User and Users Project Contribution Lifetime
- Toxic Messages Count By User versus Total Message Count By User

## Use Case:

- **Title:** Evaluating Open Source Project Toxicity
- **Description:** A manager wishes to check the status and value of an open source project before using it in a project. The manager wishes to ensure that the project development is one that is collaborative and reflects the values of his project. The manager wishes to query the prospective project's repo for toxicity before taking on its image and values in his project.
- **Triggers:** Actor runs Jupyter Notebook Pages
- **Actors:** Project Manager, Project team members
- **Preconditions:** Manager has a project repository in mind they wish to query and they meet the systems requirements below which include network connection and access to the github repo for augur, access to the Augur Community Reports tool, access to the augur\_vmware and augur\_czi databases
- **Main Success Scenario:** The project and jupyter pages compile for the user and the graphical data representations of repo toxicity are generated and presented to the user.
- **Failed End Condition:** The reports and graphics do not compile and present themselves to the user

- **Diagram:**

