Group 9 - Iota
Assignment Requirements: At least one use case, requirements document, list all intended
endpoints and the CHAOSS metric that it accounts for.
CS 4320
November 8th.

Augur Fork:

https://github.com/ryanzzz1243/augur

Activity will be contained on the augur-new branch of this repository.

Primary Use Case

Title:
Query and understand repository statistics.

Description:
One notable system use case would be for researchers or frontend developers to be able to query certain repository statistics not already implemented in Augur. This new information should be representative in some way of repository health or sustainability.

Triggers:
A user wishes to query certain repository statistics not already implemented in Augur.

Actors:
User (researcher / frontend developer)

Preconditions:
The user has an internet connection.
The user has access to Augur.
The user supplies augur with a repo and a query.
Augur is capable of collecting and presenting data.

Main Success Scenario (Goals):
The user is able to use the provided API endpoints to query and receive the requested information. This would include issuing a query to the API against a valid repository and returning a result that is valid and complete.

Alternate Success Scenarios:
There are no alternate success scenarios.

Failed End Condition:
The desired API endpoints cannot be found and the search returns an error.
The desired API endpoints can be found, but return poor or sparse data.
The requested repo cannot be found, and the search returns an error.
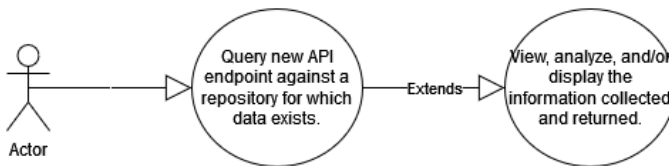
Extensions:
No extensions are necessary other than the new API endpoints.

Steps of Execution (Requirements):
- The user issues a request for the provided API endpoint.
- The API endpoint issues a query against the server and returns the information described by the endpoint.
- The requested information is returned to the caller.

Diagram:

Dependent Use Cases:
There are no dependent use cases.

Requirements: Possible API Endpoints to be Implemented

See the included sprint_1_requirements.xlsx for the requirements in tabular form.

- Sustained contributors (proportion of non-new contributors)
  - Measure of how many contributors contributed during the given timeframe that have contributed at least once in the past.
  - This is in the realm of the Contributors CHAOSS focus area.
- Release/tag frequency
  - This endpoint will return the frequency with which tags or releases are made by collecting the tags or releases made within a certain period of time.
  - This is within the realm of the Code Development Process Quality CHAOSS focus area.
- Proportion of merged/closed pull requests
  - Compound ratio of merged pull requests over closed pull requests for 'the given time frame', to analyze how frequently pull requests are merged rather than closed.
  - This aligns with the Change Request Acceptance Ratio CHAOSS metric.
- Sum of additions/removals per contributor

- ○ This is the total additions or removals for a particular contributor on a given repository. This will aid in determining the relative contributions of maintainers or other contributors on a project.
- ○ This aligns with the Code Development Activity CHAOSS focus area.
- Messages by users on issues/PRs
  - ○ Determine if there is active discussion, and who is discussing.
  - ○ This aligns with the Issue Comments CHAOSS metric.