* Introduction
  + Open-Source Software Health and Sustainability Metrics Tool
* Software product overview
  + Tool to track open-source project contributions. It will take the current and past contributions to find the predicted trend of the project. The sustainability of the projects will be tracked and predicted to aid companies that use these projects.
* System Use, including an actor survey
  + Software will take in contribution data from open-source projects. This data will be analyzed to help predict the future of the projects. This outcome is the determinator if the projects have enough stability for companies to use/contribute to them. The actors of the tool will be companies that depend on the contributions of an open-source project.
* System Requirements
  + Use case

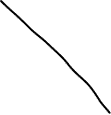
Output

Company



Counting

contirbutions



* + Functional specification
    - System should display predicted open-source project sustainability
    - User should be able to input open-source project to tool
  + Non-functional requirements
    - System should be able to predict the future of open-source projects with a good degree of accuracy
* Design Constraints (at least 5)
  + System cannot modify anything it touches
  + Cannot exceed set budget
  + Only outputs information asked for by the user
  + Cannot pull more memory from Github API than has been allocated
  + User cannot run system on open-source project that does not exist/it does not have access to
* Purchased Components
  + Servers
* Interfaces
  + Github API

Discreet requirements

1. System able to tract contribution data of project
2. Consistent
3. Able to be modified as needed
4. Unambiguous
5. History storage, user able to see past query to see changes
6. Storage
7. Access to projects
8. Verifiable
9. User able to track program progress
10. User able to modify how information is displayed
11. Correct
12. System displays data in a readable format
13. Data displayed is relevant to query
14. Traceable
15. User able to input several projects to compare
16. User able to see how often project has been updated
17. User able to derive how much money would need to go to adding to the project
18. Feasible
19. Information displayed is prioritized
20. Data taken in and displayed is necessary