**Team ID:** c\_uragiw

**Members:**

**#ADD UNITY ID**

1. Aditya Govil
2. Gautam Worah
3. Cameron Nelson
4. Fahmid Morshed Fahid (ffahid)

**Subject of Analysis:**

1. Matplotlib - A visualization library
2. Plotly

**Tools:**

1. Static Analysis
   1. PyLint
   2. Mypy
   3. Radon
2. Bug Finding
   1. PyChecker
3. Security analysis
   1. Bandit
   2. Python taint
4. Documentations
5. Community Feedbacks
   1. Github
   2. StackOverflow

**Metrics:**

* Performance metrics
* Code coverage
* Static analysis metrics like bug report, styling etc
* Subjective feedback on documentations
* Community feedback like number of commits and forks, stackoverflow questions etc.

Github Data Collection and Matrices: Gautam

Documentation analysis and matrices:

Static analysis and matrices:

Bug Finding and matrices:

<https://link.springer.com/content/pdf/10.1007%2F978-3-319-13734-6_6.pdf>

**29th Oct:**

**GOALS: A dev should choose what?**

* **Performance?**
* **Documented?**
* **Code quality?**
* **Runtime?**
* **Render time?**
* **Resource needed (size)?**
* **Purpose?**
* **Industry or individual?**
* **Support?**
* Pylint for Plotly
  + Modules, Classes, Methods, Functions
    - How big the projects are, why?
  + Code testing: Convention, Refactoring, Warning, Error
    - How well it is coded? What are the chances of falling into a bug of the lib
  + Code documentations
    - How well documented? For a new dev? Resource vs Time to learn? Purpose?
* Script + **TRAVIS CI**
  + For Sin curve and Bar chart, For 3 window size, do it 100 times for each
    - Import time of the lib
    - (Measure the FPS of a same functions using both lib)
    - Runtime or Render time
    - **How much point/lines plotly and matplotlib can plot in a given time?**
      * **Make a table and compare with all 6 rows (2 \* 3)**
* Github
  + Bugs
    - # of bugs over time
    - # of resolved bugs over time
    - Average time to solve
  + Commits
    - # of commits
    - # num of pull requests
    - # avg time between commits
    - **More than x commits done by the same developer**

TODO:

* Pylint with plotly (Cmaeron)
* Script + TRAVIS CI (Aditya) (Fahid)
* Github (Gautam)
* Plotting into charts and tables
* Make the presentations slides
* Written Report