Hello All!

Our project is to help manager gain insights about project, process and people metrics through Tableau visualizations.

In this Milestone, we have covered the internal logic for each use case in Python scripts. The Python scripts run at any interval of time that is specified. The interface provided is an HTML page where the user can make choices about which use case to choose, and which repositories to mine and then the visualization is displayed for that particular use-case for the selected repositories. The data is refreshed every once a week. Hence, the manager can have a weekly analysis of the team's direction, speed and progress.

For this project, we are mining a subset of Google's repositories.

Here we can see that the repository names are extracted via a Python script using the GitHub API.

When we choose use-case 1,

Use-case 1 : we are asked to select the repositories. On selecting the repositories, we can see each developer's contribution to the fixing the bugs. On hovering on the developer's name, we can see the number of bugs fixed by that developer. The second visualization depicts the bugs fixed in the selected repositories over a larger period of time.

Use-case 2: we select the repositories and click visualize. Here, we can see the issues fixed over the years for those repositories. We also see the distribution of issues fixed by various developers and also on hovering on the name of the issue, we can see the average time spent by each developer to solve the issue.

Use-case 3: again, we select the repositories. We see here that Java and Python have been used in our repositories. There are various new libraries added and they can be checked by hovering on the pie chart or seeing the names on the right hand side of the screen.

Work to be done in the next milestone : We will be tackling integration issues in the next milestone along with some edge cases. As of this milestone, we have implemented the internal logic for each use case with actual repositories and they run at a specific time.

Thank you for watching.