Script

Hello All!

Our project idea is to build a portal that gives insights to managers about making key decisions about software quality with respect to bugs encountered in the code, developer performance in terms of the **issues** solved in a time frame and technical details like **new** libraries used.

Let us dive into the implementation done so far.

Our portal is a webpage designed using HTML and CSS. The portal is currently hosted on localhost. The portal displays a list of names of repositories in GitHub that we are analysing. From a user's point of view, when the user opens the portal, he or she can navigate through these repositories. The user can then choose to create a new view. This view needs the user to select the repositories of interest. Practically speaking, a manager would select the project repositories which are being managed by him or her. Once the repositories are selected, the user can choose what metrics need to be seen for the chosen repositories.

Let us see a demo for use case 1 now.

Use cases on Tableau Public:

- UC1 - bugs resolved
    - Distribution of bugs resolved by developers
    - Monthly bugs resolved
- UC2 - developers contribution
- UC3 - libraries

Let us now talk about how we have completed this implementation

Our data has been extracted from GitHub repositories using Python scripts. Currently mock data is collected from relevant repositories for each use-case. The data has been stored in CSV and JSON formats. This data is then visualized and published in Tableau Public, which is further embedded into our portal webpages.

In the upcoming milestones, we plan to use repositories from a single company and perform the visualizations. The size of this data will be huge and hence, we will store the data in a database. Also, the updates to the visualizations will be done in real time.