**Requirements Analysis**

Project Name: GitHub Downloader

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**INTRODUCTION**

This project will be designed to speed up the process of downloading projects from GitHub. Downloading each individual GitHub project takes too much time and eats up the available bandwidth of the client; therefore, a solution is needed. The project will need to be able to navigate the web, not only to download the GitHub projects, but to also access Black Board. This will be done using the Selenium module in Python. Also, to clear up the bandwidth issue, the project will be set to run automatically in off hours of the night. If these issues are handled, then the project can be considered a success.

**CURRENT SYSTEM**

Currently the client has a list of all the GitHub links, and he navigates to each one, one at a time, and downloads them. This already takes a chunk of time and effort to do, but when you factor in download times as well, the process becomes even more drawn out. The client has more important things to do with their time.

**PROPOSED SYSTEM**

The new system solves the issues mentioned above. Using selenium and python, the script will automatically navigate to the BB page to download the file containing the links. From there, the links will be checked for any potential errors. After the links are checked, the program will be scheduled for a later time. Once the time comes, the script will submit each individual link to the selenium driver and download the GitHub projects. To further speed up the process and improve workflow, the downloaded files will be extracted to their own folders and then the residual zip files will be cleaned up.

**FUNCTIONAL REQUIREMENTS:**

1. Fetch lists from BB

2. Check links for errors, remove where appropriate

3. Schedule script for appropriate time

4. Download GitHub files automatically

5. Unzip downloaded GitHub files

6. Remove residual files