ELSI Report for GitGrader

The GitGrader application was developed for professors and teaching assistants of programming courses with the intention to ease and streamline the process of distributing GitLab repositories for programming assignments. The inspiration behind the application was the Assigner Python library, which allowed the same aforementioned functionality, albeit all through the command line terminal. GitGrader makes these processes easier with a user-friendly UI and also adds a few functionalities the original Assigner did not have. In future updates to the application, we hope to add more repository manipulation as well as possibly adding autograder functionality and grade import to Canvas.

All data used by GitGrader is stored locally, with the only network connections being used are API calls to Canvas and GitLab to automate the repository processes and auto-detection of courses of which the user teaches or assists in. Future updates regarding grade import to Canvas can present an issue regarding privacy protection of students' information (in order to comply with FERPA requirements), however, as the intended users of this applications are professors or teaching assistants, perhaps some user authentication before utilizing the application and its data should be added.

An initial layer of security, however, is already built in due to the user needing to generate their own private access tokens to Canvas and GitLab, which is only accessible to the user via their own Canvas and GitLab accounts. However, upon initial input if these tokens, they are saved locally, thus any unauthorized access to the application as of the current version may present a security breach of the information within the app itself. Hopefully more layers of security may be added in the future (such as the aforementioned user authentication) in order to keep students' information secure and prevent any FERPA violations.

Due to the dependencies and libraries being used by the application all being open source, with the remaining codebase being written by the spring 2020 GitGrader senior design group, there is no known source of plagiarism nor copyright infringement. Thus this product is the work of the spring 2020 GitGrader group and any future contributors (being given access to by the original group) to the project onward.

--From Spring 2020 Group,

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