Analyzing Group and Individual Contributions within Group Programming

Alina Palacios
apalaci1@swarthmore.edu

Introduction
The field of Computer Science has been steadily growing within academic institutions across the country. As a result, the topic of Computer Science Education has grown into a popular subfield. In order for institutions to provide good quality education in Computer Science, there needs to be accessible resources for educators to use. Unfortunately, as of now, there does not seem to be a reliable resource for educators to use to help them evaluate a student group’s code for a software engineering project. To tackle this issue, we decided to focus on developing a web-based application that would help educators understand and assess their student projects.

Disadvantages of Other Resources
There are some companies and individuals that attempt to help customers review their code repositories; however, their products don’t focus on the needs of an educator. Due to this, various drawbacks arise including:

Company Created Application
- Designed for companies to track the process of their engineers
- Many of the functions are excessive for a courses needs
- Must pay to use it

GitHub Based Applications
- Usually tend to be termal-based
- Don’t have a user-friendly interface
- Requires individuals to read through documentation to understand how to use it
- Some offer very general information

Overview of RepoRabbit
We built our web application while focusing on the needs of educators. The purpose of our web app is to process student code repositories and from this analysis curate graphs to assist educators to answer questions about fairness, timeliness, consistency, and overall contribution from their students.

Future Work
We built a web application to help educators understand and assess student code contributions. Our next step is to share our application to multiple educators for use in their software engineering courses. As part of this planned collaboration, we hope to gain feedback on our application, make improvements, and resolve current limitations.

References:

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If your interested to delve more into RepoRabbit, feel free to visit: https://www.reporabbit.com