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Case Study: elearning tools for computing science

1 Introduction

With the advance of the internet, more and more people are looking for ways to learn new things. One of these is through e-learning tools. These tools provide a method to learn and be evaluated without a physical classroom. Teachers and students from all over the world can share their knowledge as if they were together.

One of the most popular tools for this purpose is Moodle. A free software that allows teachers to upload content and grade their students based on several methods, like quizzes, open questions and file submission. It is a powerful e-learning environment, but it doesn't have everything teachers on a computing science course would need.

Courses related to programming ofttten have assignments that are code based. Learning a new programming language, algorithm or technique is something that isn't always measured by the final code. A lot of that lives in the process and in the way the student thinks about the given problem and Moodle doensn't allow a teacher to see the development of any code.

2 Important Previous Concepts

To know a programming language makes it easier to understand this paper, but it's not required though. In this sections a few key concepts are explained.

2.1 Git

Git is a popular Distributed Version Control System (DVCS). It stores a local copy of your repository making it really fast and powerful. Almost all operations are offline and it's easier to create or merge branches. **??**

2.2 GitHub Classroom

GitHub Classroom is a tool that allows users to create virtual environments, classrooms, and set assignments based on GitHub. The instructor can create group and individual assignments and follow up on the changes they made (thoughout all the process).

2.3 Moodle

Moodle is well known e-lerning tool. It allows you to create your own courses and manage them with a lot of options in the most varied content.

3 Performance Discussion

4 Other Approaches

5 Conclusion