Criterion A: Analysis

Line numbers reference the Appendix A transcript

Description of Scenario

My client is **Colette Fisher**, a student in eleventh grade at International High School. She has chosen to teach children attending our school's middle school Latin, and teaches herself Latin in the process while preparing their curriculum. She used to do this as a part of one large group and would go during lunch to teach the kids in person, often having them do group work and present different sections of the textbook [lines **35-36]**. However, due to new circumstances caused by covid, her original one group was divided into two which she now teaches separately and entirely online. She hosts her previously in person classes on zoom twice a week, once with each group. She puts the materials from which the students learn online for the students in one large google drive which makes the system inefficient and unorganized [lines 29-32]. Even before the pandemic she already struggled with staying organized, and due to these new circumstances it is even more difficult [lines 29-30]. It is also harder for the children to learn in this environment because it is more difficult for them to stay organized, as well as engaged in the class [lines 34-37]. Another concern Colette has is that when she graduates she will not be able to continue teaching the children directly as she does now, but she hopes that with this website, students who don't otherwise have access to a way to learn Latin will take interest, and be able to learn independently with the resources available [lines 3-5].

IB Computer Science – Internal Assessment CRITERION A

Line numbers reference the Appendix A transcript

Rationale

After consulting with my client, we decided that while she could use the existing application google classroom, my suggestion of a database driven dynamic website would be better. It would be used by both Colette and her students and would be an overall better experience. It would allow for her to put all her documents and materials for the class into one central location, and the students would also be able to access these materials and documents in a more intuitive and convenient way than otherwise possible. Colette and the students will have individual accounts, all with unique login information needed to be inputted to be accessed. Colette's account will be able to add and remove documents from the website, as well as add general information specific for each of the students. When the student logs in they will be presented with a student page, which will have numerous tabs to navigate through different parts of the website, each with a different part of the curriculum, as well as important information such as announcements and deadlines. This website will also make the learning experience better for the students, because an organized website catered to the needs of each student rather than a cluttered google drive will be a much better way for them to learn. The website will also have some interactive elements to help the students stay engaged in the class, and allow for them to learn indirectly when Colette is eventually no longer teaching. This website is a good solution because it is completely custom made for this class specifically, making it more straightforward and organized for the students, as well as catering to the exact needs of Colette which is not an option for any other applications.

IB Computer Science – Internal Assessment CRITERION A

Coding Languages Used:	Reason For Usage:
G ood.	
HTML	HTML will be used to make most of the visual elements of the website because it is easy to use, efficient, and
	compatible with most operating systems.
css	CSS will also be used for some visual aspects of the website to make the page look more professional, and to make the actual creation of the website more efficient.
PHP	PHP will be used because it can be used to create a dynamic, easily usable website which can be altered easily, and is very compatible with HTML as well as MYSQL, which makes the coding process much more efficient.
MYSQL	MYSQL will be used because it allows for high speed databases to be made efficiently, that can be updated easily, and works very well with PHP.

IB Computer Science – Internal Assessment CRITERION A

Success Criteria

- A home page for users with a menu that links to other pages within the website pages, including conjugations, declension, and translations. [lines 43-46]
- 2. The system should have different landing pages for the teacher and the students. [line 40]
- 3. The teacher and students should have different individual logins with a username and password. [line 40]
- 4. Error message displayed if an unauthenticated user tries to login. [line 40]
- 5. The system should allow the creation of new users e.g. teacher and students. [line 9]
- 6. The system should allow for the teacher to input all the materials necessary to teach the students, including jpegs, pngs, gifs, and pdfs. [lines 46-47]
- 7. The system should allow students to open materials so they can be viewed in fullscreen. [lines 46-47]
- 8. The system should allow teachers to add resources that are only available to a specific class, or both classes. [lines 32-33]
- The system should allow the teacher to delete existing resources. [lines
 29-32]
- 10. The system should allow for the teacher to upload resources to specific pages on the website, including conjugations, declensions and translations. [lines 56-57]

IB Computer Science – Internal Assessment CRITERION A

- 11. The system should include a deadlines tab for the teacher, which allows them to add deadlines. [lines 47-48]
- 12. The system should include a visual display of the deadlines and announcements for students, and by what date on the home screen. [line 37-38]
- 13. The deadlines displayed should pertain to the specific class of each student. [line 32]
- 14. The system should allow the teacher to view all student account information. [line 32]
- 15. The system should allow the teacher to add and delete student accounts.

 [line 32]
- 16. The system should include an announcements tab for the teacher, which allows them to add announcements. [lines 47-48]
- 17. The teacher should be able to choose which announcements each group of students is able to see. [lines 47-48]
- 18. The system should allow teachers to delete announcements. [lines 47-48]
- 19. The product should be accessible on laptops, ipads, and iphones. [lines 60-61]
- 20. The users should be able to receive a new temporary randomly generated password by pressing the forget password button and entering the email associated with their account to be used if they forget their password. [line 40]

IB Computer Science – Internal Assessment **CRITERION A**

21. The system should allow both students and teachers to update their

passwords, and have them enter it twice to ensure there are not any

mistakes when typing it. [line 40]

22. The product should prevent teachers from inputting announcements

scheduled for dates that are invalid, e.g. before the date the announcement

was being set. [line 37-38]

23. The product should prevent teachers from inputting deadlines for dates

that are invalid, e.g. before the date the deadlines were being set. [lines

47-48]

24. When a student logs in, display their first and last name and which class

they are in on the home page. [line 40]

25. When a teacher logs in, display their first and last name on their home

page. [line 40]

26. Resources in the system should be sorted by date. [line 5]

Line numbers reference the Appendix A transcript

Criterion A Word Count: 542