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Application: Blackboard

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0.1 Abstract

Blackboard is a widely used commercial learning management system (LMS) that makes the educational experience easier for students by giving easy access to information needed. It's a great communication tool giving quick information delivery, and addressing common challenges faced by educational institutions. A survey of college students indicated strong favoritism for Blackboard over other platforms due to its great features that support learning and connectivity, Blackboard's backup and recovery capabilities, with responsive design for various operating systems, underscores its role as an essential educational tool.

Chapter 1

INTRODUCTION

1.1 Introduction

There are many educational programs that help us in education in any circumstance, including Teams, Webex and Zoom, and also the Blackboard application, and each of them has disadvantages and positives, but why did we choose the Blackboard application specifically. Blackboard is a commercial learning management system (LMS) that has become one of the most widely used platforms in North America and Europe and is now spreading to all around the world. The platform helps students enhance their learning experience by providing easy access to the wanted information, such as files, lectures, and videos. Students can also take quizzes and tests and view their grades in an efficient way, giving better communication between students and the faculty and allowing content and updates to be shared faster. Blackboard addresses a common problem that many colleges and universities face, which is delivering information faster to students, but thankfully the platform has made it easier in the education field. With how easily it can be used, Blackboard has become an essential tool for modern educational needs, making sure that students and the faculty stay connected and on track and get the job done.

1.2 The purpose of Blackboard

Blackboard addresses a common challenge that many colleges and universities encounter: delivering information quickly to students. This is especially important in today's fast-paced educational environment, where students need timely access to materials and updates. Thankfully, Blackboard has made this process much easier, becoming a vital tool in the education field. Its user-friendly design allows both students and faculty to navigate the platform with ease. Because of its straightforward interface, it has become an essential resource for meeting modern educational needs. Blackboard ensures that students can easily access course materials, communicate with teachers, and participate in online discussions. By facilitating quick and efficient communication, Blackboard helps keep everyone connected and on track. It enables faculty to share important updates and resources promptly, allowing students to stay informed about their courses. Overall, Blackboard supports effective learning by providing a reliable platform for both teaching and learning, making it easier for everyone involved to get the job done efficiently.

1.3 Student's interviews

In a survey we've done with college students, we learned about their experiences using the Blackboard system and how different it is from other systems. We asked if they knew of any other learning systems that do similar things to Blackboard. All students said yes, saying that apps like Zoom, Microsoft Teams, and Webex assist with online learning by making students join online classes, and stay connected with teachers.

Then, we asked about the pros and cons of using Blackboard. Around 62,5% of the students shared positive feedback saying that Blackboard makes learning easier helps them stay connected and organizes the needs they need overall with the materials they need Such as viewing lectures and seeing grades. However, 37,5% of them mentioned some difficulties during busy times, it happens when multiple people are trying to join a lecture, and Blackboard can be slow and hard to use. This leads to problems like not being able to join at all sometimes or having issues with audio, making it hard to follow along.

When we asked the students if there was any difference between Blackboard and other systems, 75% of them said Blackboard was much better for education. They highlighted that Blackboard records lectures since it's a helpful feature for reviewing class material. Not like the other systems that mostly focus on communication.

Finally, we asked if they would recommend Blackboard to other students or anyone in the education field. And good enough 87,5% of students said yes because it meets their educational needs. However, a few students -only 12,5%- favored other systems like Teams or Google Classroom, because they found those easier to use in some situations. Overall, it's better to say from this survey that Blackboard is considered a top choice for online learning due to its wide range of features and convenience.

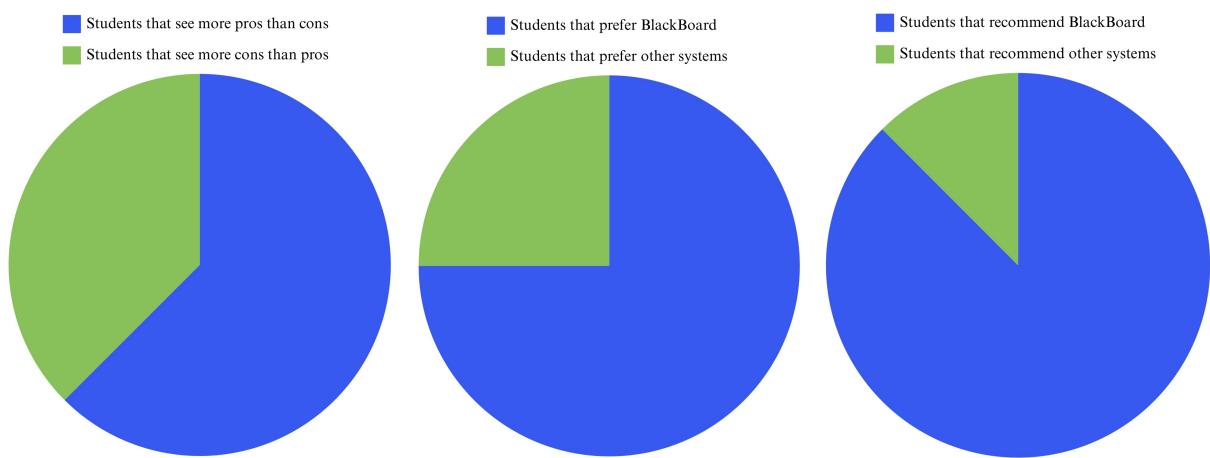


Figure 1.1: pie charts from the interviews

1.4 Existing programs

Blackboard is both a popular online and useful tool since it lets students find everything they need in one place, like lectures, assignments, tests, and grades. It also makes it easy for students to stay in touch with their teachers if they need help. Many students like Blackboard because it's simple to use and has features like recording lectures, so they can watch them again later if they missed something.

Unlike other systems, students feel Blackboard is more focused on learning since it offers more than just online classes. However, some students find it a tad harder to use when lots of people are online with the same lecture, and sometimes there are problems with sound or getting into the class. Even though there are other systems for online learning, most students still prefer Blackboard because it has everything they need for their education in one place, and educational facilities prefer using it all around the world.

Applications	Advantages	Disadvantages
Zoom	It is easy to use and has an easy and simple interface.	Focuses on meetings and courses for project management.
Teams	You can customize your needs, whether your team or your organization.	The sound or screen stops when the internet connection is weak.
Webex	It provides a set of tools for communication and chat.	A complex interface and when logging in, you must log in more than once.

Table 1.1: Comparison Table

Now looking at the blackboard system, we know it's a special platform that's made to help students and teachers do better in their education. Blackboard, not only gives tests or homework, but it also has many more things that make learning easier. The system is easy to use, and it works well with the systems used by educational facilities, so students can easily find what they need and move from one thing to another fast and easily. This makes the app helpful for students who are new to online learning.

But that's not the only thing that makes Blackboard special. It has many good tools that other apps don't have. These features make it stand out from other learning apps. Students and teachers can talk to each other easily, ask questions, and even work together on different projects or assignments. The app also helps make lectures more fun and interesting because students can share ideas and discuss what they learn. Teachers can explain things better, and students can join the conversation without feeling left out.

In short, Blackboard is more than just a simple tool for schoolwork. It creates a strong community where both learning and connection happen at the same time. Students and teachers come together, share knowledge, and help each other grow. **n**

Conclusion

Blackboard is a popular online tool used by schools and colleges to help students learn. It's useful because it lets students find everything they need in one place, like lectures, assignments, tests, and grades. It also makes it easy for students to stay in touch with their teachers if they need help. Many students like Blackboard because it's simple to use and has features like recording lectures, so they can watch them again later if they missed something. Compared to other apps like Zoom or Teams, students feel that Blackboard is more focused on learning since it offers more than just video calls. However, some students find it tricky to use when lots of people are online at the same time, and sometimes there

are problems with sound or getting into the class. Even though there are other apps for online learning, most students still prefer Blackboard because it has everything they need for their education in one place.

Chapter 2

ANALYSIS

2.1 REQUIREMENTS

2.1.1 Functional Requirements

- In Blackboard, students can upload assignments, take quizzes, and download documents for their courses, making it easier to manage their work.
- Students can also view their grades and access the teacher's notes, allowing them to stay updated about their performance.
- Communication with university faculty is easy in Blackboard, as both students and the faculty can send emails and notifications related to the course subjects, enhancing the overall learning experience.
- Joining group collaboration, that allows students to work together on online courses more easily. This helps teamwork and enhances the learning process by making students share ideas and resources.

2.1.2 Non- Functional Requirements

- One of the main strengths of Blackboard is its security. Since the program is widely used among many universities and schools, it is designed to run smoothly without compromising performance.
- The application is easily accessible to everyone in the educational field, as it is available on multiple platforms, including iOS and Android, and can also be accessed via the web.
- A notable feature of the program is its backup and recovery capability, which helps to save a significant amount of information, benefiting both students and faculty by ensuring that important data is not lost.
- Blackboard's system is designed to maintain a response time of fewer than 3 seconds for viewing pages, uploading files, and submitting assignments, making sure the experience a seamless for the user.

Chapter 3

Design

3.1 Interfaces

Blackboard's Global Reference Database is a separate database where students voluntarily place copies of their research to help promote authenticity. This database is separate from the internal database of each organization, where each organization stores all its research. Students are free to select the option to examine their research without sending it to the Global Reference Database. Students voluntarily submit this research to the database with an agreement not to delete it in the future. Research submitted to the Global Reference Database is additional copies voluntarily given to help preserve authenticity. Blackboard does not have the right to claim ownership of this submitted research.

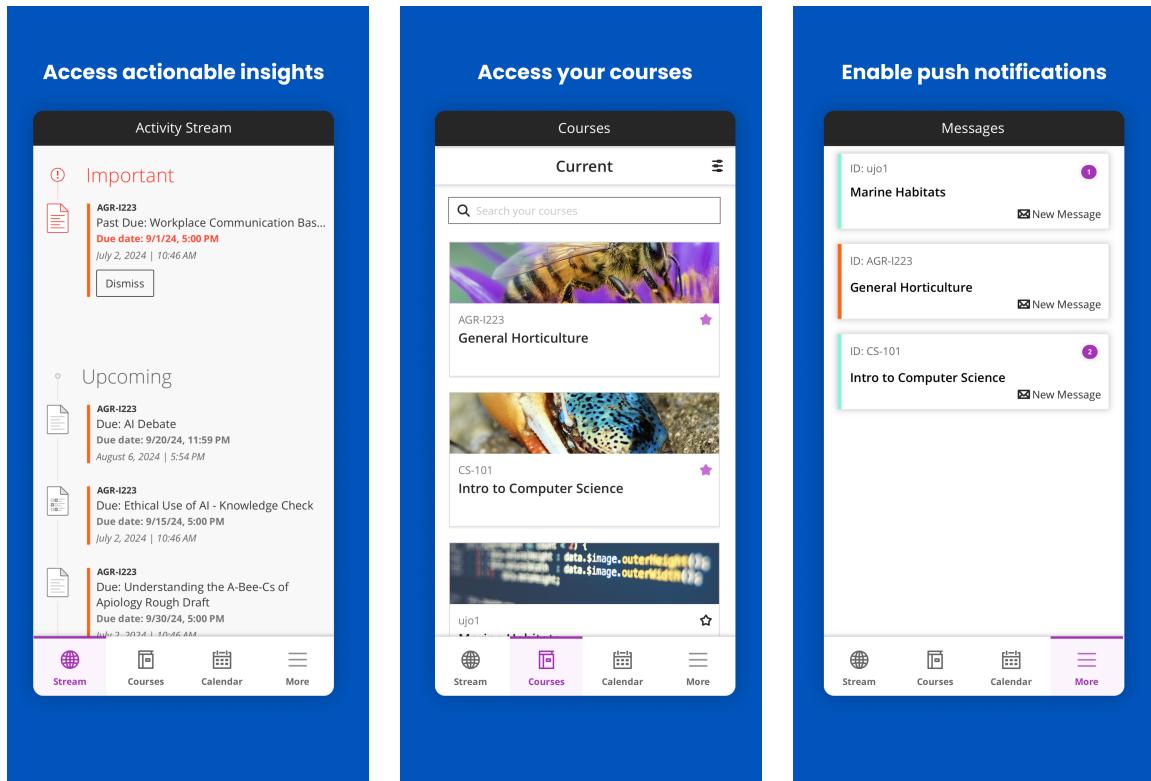


Figure 3.1: Blackboard interface

After logging in, a page opens with an icon bar at the bottom, as in [Figure 3.1], through which the student can open the courses, the calendar, or even his grades for each subject after opening the first page.

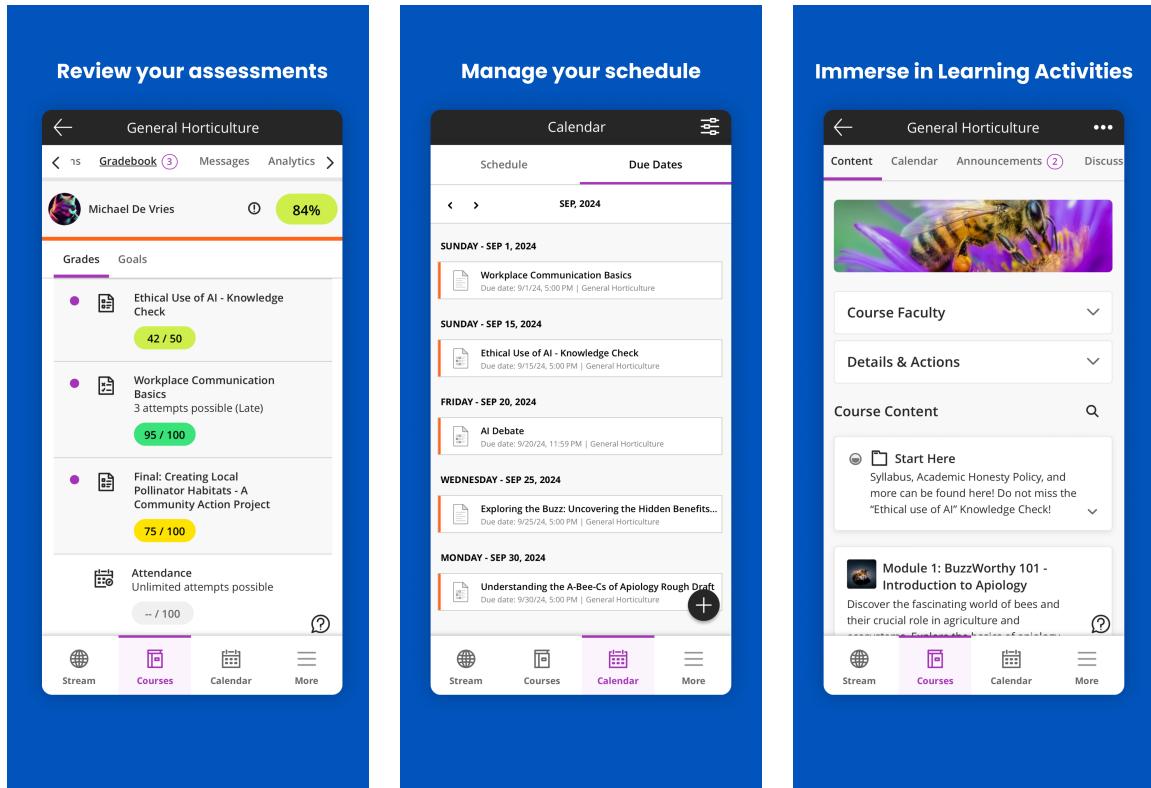


Figure 3.2

here it shows the student the courses to search for the course he wants or send an email to the subject teacher as in [Figure 3.2]. After that, there is an icon called the calendar through which the student can see when the assignment or test expires.

3.2 Specifications

3.2.1 Systems specifications

- Blackboard can be opened on the following operating systems: Windows 10 and later, MacOS 10.14 and later, IOS 13 and later, android 7 and later, and Linux. You can open it on any browser on the OS above easily with internet access necessary.

3.2.2 hardware specifications

- A thing to consider is the hardware, hardware should be at least 4 GB RAM, and with a dual-core processor, abd and a 720p webcam needed. For mobile devices, the hardware should be Apple A12 and above or Snapdragon 865. The speed may vary depending on the device and the hardware but If it follows the specifications above blackboard should work just fine just fine.

3.2.3 Use case

It's known that Blackboard's main focus as a learning management system is to improve the relationships between the students and the faculty. This UML diagram will explain the two main focuses -the student and the faculty- and show how both groups can do more than just joining courses or taking tests. With a lot of tools designed to improve the educational experience, Blackboard makes things a lot easier since it has many tools, making education fun and easy for students and faculty.

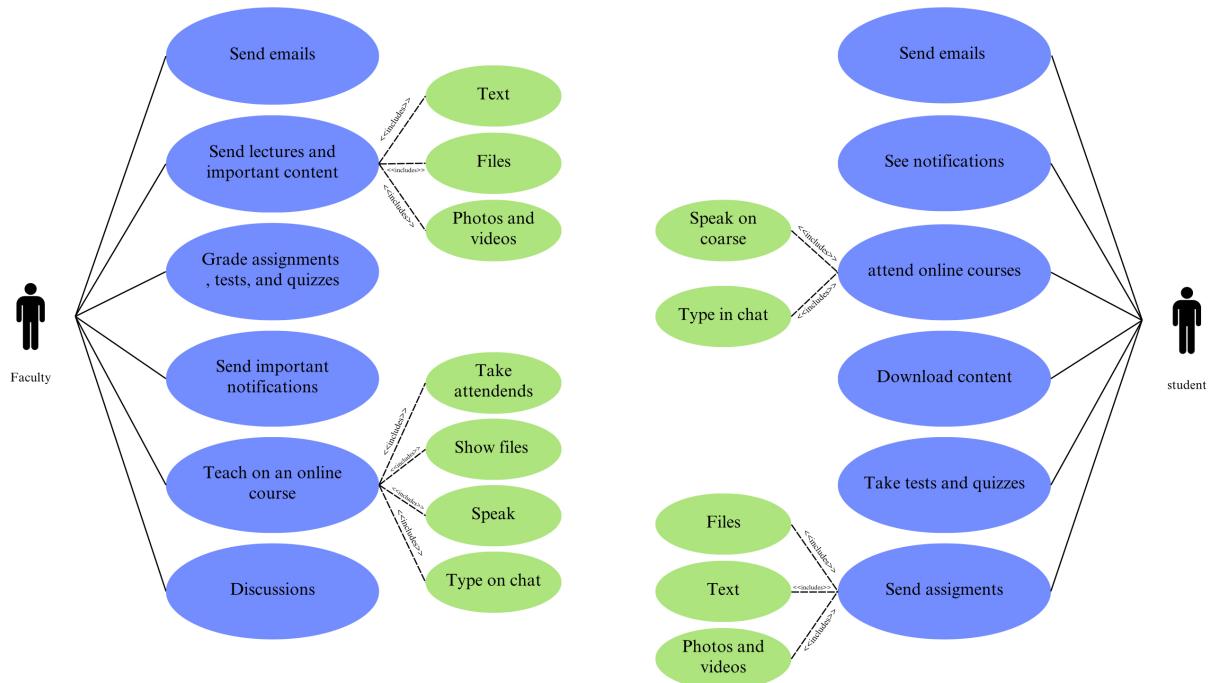


Figure 3.3: use case diagram

Chapter 4

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