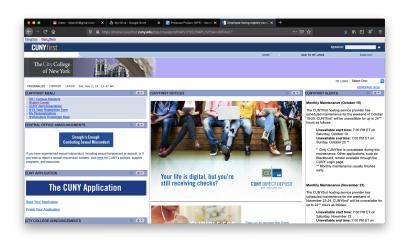
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Technical Difficulties: Proposal to Change CUNY's Online System

In today's day in age, everything from entertainment to school work has gone digital. Everything is accessible through the internet, and in most situations, this works as an advantage for professional settings, especially in schools. Usually, websites and technology help students with organization, time management, and productivity. However, here at the City College of New York, it seems that technology has had the opposite effect. As students log onto the multiple CUNY portals, such as CUNY first and Blackboard, they often encounter multiple obstacles that work towards ruining their academic experience. With multiple errors, a confusing user interface, and outdated technology causing students to be disorganized and nonproductive, the school should consider renovating the CUNY online system, as well as replacing the technology that the school currently owns with stronger, more modern computers. Having issues which may cause students to be hindered academically should be addressed by the school immediately. By following the plan to change the current system that is in place at CCNY, as well as understanding the benefits of following these steps, the students can achieve the academic excellence they were meant to achieve, instead of being held back by the problems currently produced by Oracle and the outdated machines around campus.





#### Action plan:

The goal of the action plan is to renovate the current online system that is in place for all CUNY schools, which is made by Oracle, as well as update and add a sufficient amount of computers for the student population at CCNY. In order to accomplish this goal, we must pursue the following steps:

- Contact Oracle about the disorganized and confusing layout of CUNY first and
  Blackboard. Ask for an aesthetic overhaul to make the system easier to follow and
  more user-friendly. Students should not be confused on how to see their current
  financial standings, how to set up their schedule, or how to see their assignments.
- 2. After addressing the issue of disorganization, the school should address the maintenance issue of CUNY first with Oracle. Many times the website will be down for maintenance, and students are unable to access their accounts, although they might have assignments or important financial documents due. Student accessibility and productivity should be CUNY's first priority, therefore, a system where Oracle is able to maintain the website for a much shorter time, or do it while the system is live, which other companies have managed to do, should be put into place.
- 3. Next, the school should address Oracle about its tactic on fixing big errors.

  Instead of waiting for a slotted maintenance time, big errors should be addressed once found. For instance, there was an error on CUNY first when clicking on the student center, which did not allow students to access the center. Although there was a way to bypass the error, some students might not have found out, and could

have missed important information. In addition, we surveyed 100 students and asked them if their homework assignment has not been turned in because of Blackboard, and 52 percent said yes (See Figure 7 in Appendix). Errors such as these should be addressed immediately.

- 4. The cost of updating CUNY first in the steps mentioned above should be considered the entire way through the discussion between Oracle and CUNY. This way, CUNY can keep track of its budget in the technology department and not make a bad economic move that would end up hurting the university in the long run.
- 5. After addressing Oracle on how to change the CUNY online system, the school should look into changing the outdated computers on campus. To do this, the school must know how many computers they currently have and its total cost.
- After finding the total cost of its current computers, they should look into
  affordable modern computers that would not make an immense dent in the
  schools budget.
- 7. After finding such computers, the school should sell away their current computers and use the money to help with the acquisition of the new machines.

After the final step, the online systems would be renovated to be more user-friendly for the students, and the computers on campus would be much more powerful and useful. Students' confusion on how to navigate CUNY first and Blackboard would be greatly diminished, which would cause there to be more organization and productivity amongst the students. Also, the students would be able to complete more work on the updated computers that have fewer issues.

There was a research done by McGraw-Hill in which they surveyed 3,300 college students. The students were asked if technology helped them learn better. They found out that 81% of the students said that technology helped them improve their grades ("New Survey Data..."). Therefore, improving the technological resources of CCNY would allow the students to do better in the classroom, and the school's academic excellence would shine brighter than before.

#### Cost and Benefits:

#### Benefits:

A college student is as good as his computer allows him to be. The current Windows computers at CCNY are good enough to do the simple tasks that every college student is required to do, however, there are very few models that are fast at these tasks. The iMacs and old Dell models need to be upgraded. Lets kill two birds with one stone. Personally, I once needed to print a paper, but the main computer lab at the NAC building, which houses many of the old Dell models, was closed due to maintenance. So, I headed over to the mac lab on the lower floor of the library. All of the computers were busy. I happened to find one that was empty, but when I logged in, the computer took about 10 minutes just to get started. Tens of students also waited for these computers to be available. By buying new Mac and Dell computers, we can improve the workflow and availability of these computers. A faster, more modern machine would allow one to work more efficiently and stress free with less maintenance.

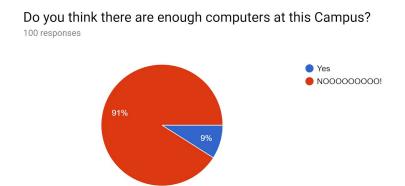
Furthermore, here is how remaking the CUNY system will benefit us all. The new redesigned CUNY portal, which includes CUNY first and Blackboard, will have a more user-friendly design. Currently, both websites have many flaws, including log in errors and mobile compatibility. Some students do not know how powerful the CUNY portals are. Why?

Because of its complexity and old looking interface. The newly redesigned websites will allow us to find our grades, schedule, financial aid, assignments, and any important dates faster. All of these features are currently available, but students do not know how to use them because they are hidden behind multiple clicks and links. In addition, the Blackboard website does not clear its courses every semester, which may confuse students who are trying to find their current courses. Having tabs that clearly point to specific information can help clear confusion. If the students can locate all important information with no confusion, it is more likely that they will be more organized and productive, and therefore, excel in their academics and responsibilities.

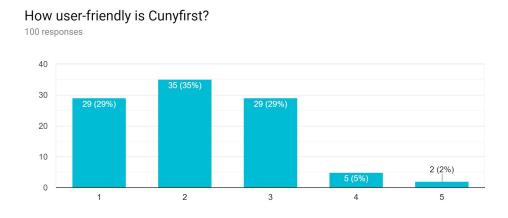
We are living in a day and age where cell phones have become part of our lives. A good mobile app will improve the learning experience and could also help improve a student's grade. One of the major issues with CUNYfirst is its lack of a notification system. If you don't log into CUNYfirst, you don't know what's happening. An app can greatly improve that by having it send notifications directly to one's phone. Now your CUNYfirst information will become much like any of your social media apps. This simple, yet crucial, feature will help keep students aware of important dates and information. For example, at the end of each semester, students have to regularly log into their CUNYfirst account to see if their instructor has posted their final grade. This is a very inefficient and a frustrating experience at times. These experiences could all be eliminated with the implementation of a solid mobile app that notifies and reminds one of every important update. Furthermore, it would allow students to stay on top of their work much more easily than before and improve in their selected courses.

Last, but not least, in a survey where 100 CCNY students were questioned about their opinions regarding the CUNY portal and the computers around campus, their opinions reflected

dissatisfaction with the technological resources. Below are charts that reflect their opinions, followed by captions that explain their implications.

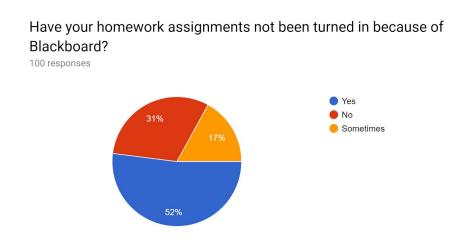


There are about 16-18 thousand students at CCNY. Many of our students require the use of intense computer programs that can only be run on desktops to get work done, while others require school computers to print or do other simple tasks. Without sufficient computers on campus, many students can struggle to get work done for their classes, which will result in poorer grades.



1=Not friendly 5=Friendly

An overwhelming majority of the students that took the survey believe that the CUNYfirst interface is not user-friendly. Creating a more user-friendly interface for the students would lead to less confusion amongst the students, which would further lead to productivity since the students would not have to find help to sort out their problems within their accounts.



Fifty-two percent of the students claim that their homework was not turned in when it was submitted through Blackboard. If Blackboard was improved so that it did not accidentally not submit a student's work, grades would increase across the board.

#### How much will all this cost?

The current price to build a good website ranges from \$20,000 to \$30,000 dollars or more ("How Much Does It REALLY..."). For a medium complexity app, the price is between \$40,000 to \$70,000 ("How much does it cost to make an app..."). Blackboard currently does have an app that is usable, but CUNYfirst does not. The complexity of this app is from medium to high since it will mostly handle information. Let's give it a price of \$85,000. IMacs have a price of \$1,799 per unit with the following specs ("Buy iMac"):



## **Display**

Retina 5K Display

27-inch (diagonal) Retina 5K display; 5120-by-2880 resolution with support for one billion colors; 500 nits brightness; wide color (P3)

#### Processor

3.0GHz 6-core 8th-generation Intel Core i5 (Turbo Boost up to 4.1GHz)

## Storage1

1TB Fusion Drive

Configurable to 2TB Fusion Drive or 256GB, 512GB, or 1TB SSD

## Memory

8GB (two 4GB) of 2666MHz DDR4 memory; four SO-DIMM slots, user accessible Configurable to 16GB or 32GB

## Graphics

Radeon Pro 570X with 4GB of GDDR5 memory

For 40 total units, the price is about \$72,000 which includes a 10% school discount that Apple offers. The old Dell computers will be replaced with the OptiPlex 5270 All-in-One Desktop Dell computers which have the following specs ("OptiPlex..."):



#### Processor

Up to Intel® Core™ i5-9500

### **Operating System**

Windows 10 Pro 64bit English

## **Graphics Card**

Intel® Integrated Graphics

#### **Hard Drive**

Up to M.2 256GB Class 35 Solid State Drive

## Memory

Up to 8GB 1X8GB DDR4 2666MHz Non-ECC

Each unit has a cost of \$800. With 400 units we will replace the computers in the NAC library, all computer labs, and some classrooms. In total, a budget of \$500,000-\$550,000 would solve many of our worst nightmares as CCNY and CUNY students. This includes replacing the CUNY online system, development of a CUNY first app and replacing slow, old computers around the CCNY campus.

#### Team:

Isljam Purisic is an undeclared freshman at the City College of New York. Before being accepted into the Macaulay Honors Program at CCNY, Isljam experienced education in and out of New York City. He attended elementary school at P.S.13 in Rosebank, Staten Island. Later, his family moved to Lynbrook, Long Island, where he completed middle school and high school within the town's school district. Experiencing school in two different areas of New York helped develop Isljam into a hard-working student. After moving to Long Island, the difference in the education was obvious to Isljam. Every student around him was learning at a much faster pace due to the faster curriculum the students have become accustomed to. Seeing that he was behind his peers, Isljam found motivation to study and catch up on what he has been missing. This time in his life taught him how to be persistent. His determination allowed him to develop greater skills as he continued his academic career, and he was able to graduate high school fourth in his class. Along the way, Isljam's determination allowed him to become skilled in design, multiple computer programs, and mathematics.

**Mohammed Forkan** is a sophomore at the City College of New York. Mohammed wants to major in Computer Science. Mohammed speaks two languages which include Bengali and English. Mohammed moved to America at the age of seven. He started to speak fluent

English within two years. Mohammed likes to take apart computers and putting them back together. They never work when he puts them back. Mohammed is also a thankful person.

Mohammed came from a country where having clean water and electricity is a privilege. Having these things now makes him a thankful person. Mohammed likes going to the gym and playing different sports. Mohammed is not good at any sports.

Frederick Ramos is a third-year civil engineering student at the City College of New York. He attended a high school called I.S.L.A, which stands for International School for Liberal Arts. He graduated in June of 2016 with the third highest gpa among his graduating class. During his high school days, Frederick played 3 years in the Walton varsity volleyball team. His experience as co-captain of the Wildcats taught him the importance of teamwork, leadership, responsibility, and dedication. From 2016 to 2019, he attended The City College of Technology, where he graduated with an AAS in civil engineering technology. He has skills in AutoCad, Revit, Adobe Photoshop, After Effects, and many other computer programs. During his spare time he enjoys music production and playing sports. The day that Frederick graduates, he wants to be an important part of the future of the New York City skyline.

#### Conclusion:

Technology is constantly advancing and so are the people. If advancing students are using outdated computers and computer systems, their academic experience will be affected negatively. That is why changing the computers and websites that the students at the City College of New York use every day is essential. After surveying 100 students at CCNY, it was found that the majority of the students do not like the CUNY portals and the old computers on campus. They do not find the technological resources reliable or user-friendly, however, they

often need to use them because of the important information they hold. By renovating the resources that are currently set in place at CCNY, students and administrators alike will only benefit because the confusion and disorganization that was once present would translate to organization and productivity. Otherwise, if nothing is done to help fix these programs and computers, then the academic success of the students will never reach the peak that it is capable of.

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# Appendix:

Figure 1

# Do you think there are enough computers at this Campus?

100 responses

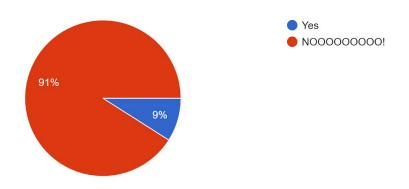
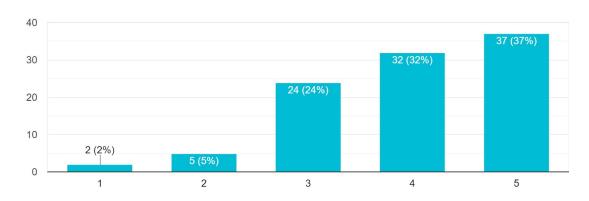


Figure 2

# How bad are the computers at CCNY?

100 responses

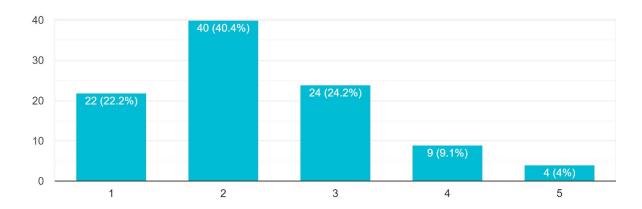


1=Good 5=Bad

Figure 3

# How reliable are they?

99 responses



1= Not reliable 5= Reliable

Figure 4

## How often do you go to Cunyfirst?

100 responses

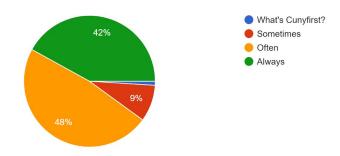
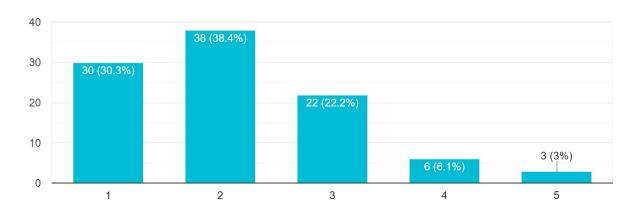


Figure 5

# How user-friendly is Blackboard?

99 responses

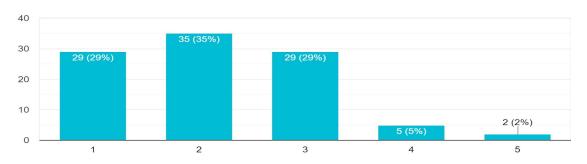


1=Not-friendly 5=Friendly

Figure 6

## How user-friendly is Cunyfirst?

100 responses



1= Not friendly 5=Friendly

Figure 7

# Have your homework assignments not been turned in because of Blackboard?

100 responses

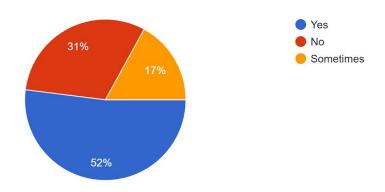


Figure 8

# What do you think about the CCNY website?

100 responses

