Group: Security Dawgs

HCI: Milestone 3

Members:

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Part A:

A1.

Professors:

P1. As a professor, I want to be able to prevent disruptions in my online class in order to be able to have a more focused classroom.

https://www.education.gov.gy/web/index.php/teachers/tips-for-teaching/item/1674-negatives-of-disruptive-behavior-in-the-classroom

P2. As a professor I want to be able to control who can enter my online classroom in order to only have authorized users attend meetings and prevent potentially disruptive users from joining.

https://www.pcmag.com/how-to/how-to-prevent-zoom-bombing

P3. As a professor I want to know who owns an account so that I can know who I am letting into my meetings.

https://www.pcmag.com/how-to/how-to-prevent-zoom-bombing

P4. As a professor I want to be able to have multiple meeting platforms available for use so that I can have the freedom to choose a platform that has the features that meet my needs for my online classrooms.

https://blog.clickmeeting.com/what-is-the-best-platform-for-online-meetings

#### Students:

- S1. As a student, I want to be able to verify my credentials in a convenient way so that I do not have to spend unnecessary time logging into my account.
- -One example of this is with Duo Mobile being able to store a UGA student's data for over 30 days before you have to approve your login again.

https://medium.com/@guillaume.viguierjust/making-two-factor-authentication-more-user-friendly-through-trusted-devices-257acc27b24b

S2. As a student, I want to be able to attend meetings without worry of being harrassed by an outside source.

https://www.forbes.com/sites/zakringelstein/2020/09/15/5-reasons-zoom-schooling-is-detrimenta l-to-children/?sh=39d820c91223 S3. As a student, I want to be able to attend meetings without my learning being disrupted. <a href="https://it.newschool.edu/services/collaboration/zoom-web-conferencing/how-to-prevent-zoombombings-classes">https://it.newschool.edu/services/collaboration/zoom-web-conferencing/how-to-prevent-zoombombings-classes</a>

#### A2.

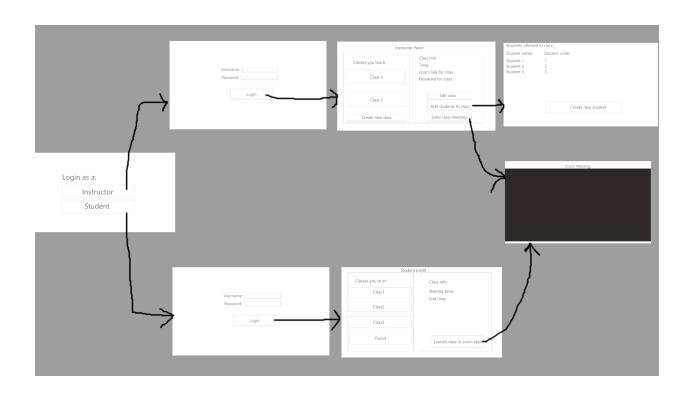
P2 - Our goal is to stop disruptions caused by zoom bombing in online classrooms. P2 is one of the most relevant user stories to this since out of all of our proposed solutions so far it has only some minor drawbacks such as needing students to log into an account, and avoids many of the problems that other solutions might have such as being time consuming, or only being reactive instead of preventative. It also creates a huge obstacle for zoom bombers by making it very difficult to get into a meeting in the first place, which is a great way to stop zoom bombing in the first place. Also by achieving this user story, we will also achieve, or atleast make great progress towards, many of the other user stories that have to do with having an uninterrupted meeting.

S1 - Since our goal is to minimize the disruptions in an online classroom we believe that our solution should not be disruptive as well. Making the system easy to use for students is important for this reason, and one way we can do this is by having trusted devices or some other way to easily log into your account after you have already done so once on a device.

#### Part B:

#### Wireframe 1:

Our first idea was to have a simple login page, and have the teacher manage which students can access their classes. We felt that this would be a good way to achieve the S1 user story by making it convenient for students to sign into the application, and would not have the issues of having to wait in a waiting room since students would automatically be allowed in if they were on the list. This still also meets the main purpose of preventing zoom bombing by preventing links from being shared since the students will not ever see the zoom links, only the teachers. The student and teacher menu layouts are designed so that they are easy to navigate, and the affordances that the application provides are easily discoverable.

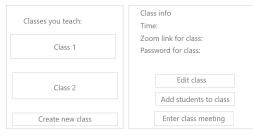


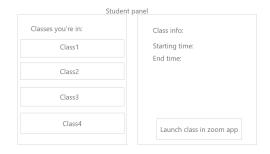
## Login as a:

Instructor Student



#### Instructor Panel





#### Zoom Meeting

# Students allowed in class: Student name: Student code:

 Student 1
 1

 Student 2
 2

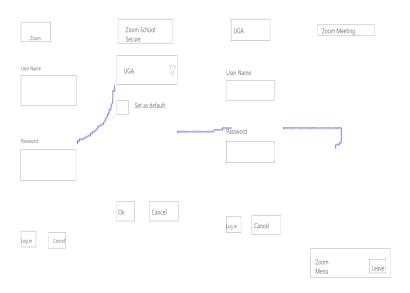
 Student 3
 3

Create new student

#### Wireframe 2:

For this wireframe, in regards to the user story, we thought of using zoom for you to login to, then after that you would login to your student account. That way you are able to use zoom or any other conference software to login to there first, then you'd have to be a student or instructor of the school in question to be able to get into the meeting in question. This would help make the meetings more secure, and free from interruption making it meet the requirements of user story P2 very well.

https://xd.adobe.com/view/49a4957b-e530-47c1-8b0d-2a9c2241f6f2-1cf7/?fullscreen



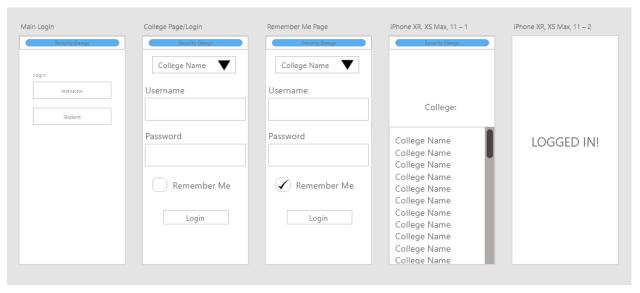
#### Wireframe 3:

For this wireframe, we thought about using a two-factor authentication system to control who can gain entry into the zoom meeting. This wireframe is applicable for both the student and instructors user stories because it tries to create a more secure meeting joining system for all parties. We felt that this model would better help with solving the S2 user story due to the

## secure process to join a meeting.



https://xd.adobe.com/view/49f98af8-8dc9-4718-a23d-7990833e8a0b-1caa/



#### Wireframe 4:

## https://xd.adobe.com/view/191b8533-fb3b-4d09-acea-7a46c5792c99-4c48/

This wireframe is a solution to S1 allowing a student to select their college and recall their information when they want to log back into the application. It only wants to prove the user experience by allowing the scrolling through of colleges and not just UGA college. So we can integrate several colleges' login screens just as some applications do. It's primary focus is towards accessibility and ease of usability for the user.

#### Part C:

## Mockup 1:

For user story S1 we decided that wireframe 1 would best fit the requirements. The reasons for this is it required the least amount for the students to login and access the classes. This wireframe simply required students to login with their usernames and passwords, they do not have to download any apps for 2 factor authentication, or login to multiple platforms. We felt that this would be the most convenient for students and therefore fit the best with user story S1 which was focused on having convenient verification of credentials.

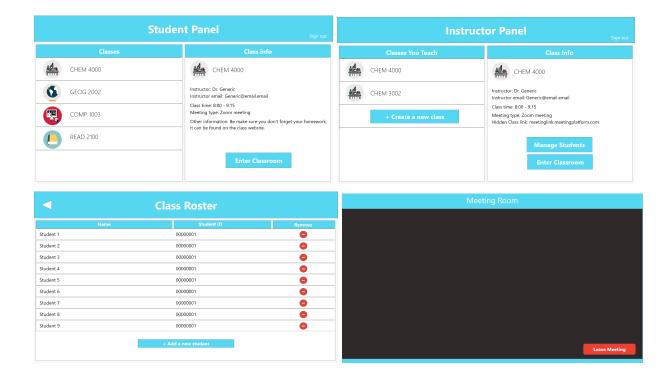
Since we were focusing on preventing the application from being inconvenient for students to use we decided to keep the interface simple, and make any features easily discoverable. For this reason there are only a few buttons per page, there are no features hidden behind drop down menus, and all buttons are clearly labeled. The color scheme was chosen to keep the application from looking drab, but it is also not overly colorful to avoid distracting the user.

Link for Demo: <a href="https://xd.adobe.com/view/739916b6-e7c1-408c-8ab2-fbde1c45cb74-26ca/">https://xd.adobe.com/view/739916b6-e7c1-408c-8ab2-fbde1c45cb74-26ca/</a>
Download Link:

https://drive.google.com/file/d/19avFiOuwzIO9une7CEU\_6JxGEwFiUegi/view?usp=sharing

### Images of mockup 1:

Security Dawgs Meeting Platform	Student Login
l am a:	Username: Password:
Instructor	
Student	Remember me  Login



#### Mockup 2:

This mockup was designed more for mobile devices such as androids, since one of the ways that we authorize ourselves at UGA and at some other colleges/universities are in things like Duo Mobile. The mobile app thus allows students to select which school they're going towards, has them login like normal and also authorizes the login into the zoom meeting in question. It is a good design because it is helpful for students who attend zoom or any other video conference meeting software on their mobile devices, it also helps students in the S1 part of the user story. It is also relevant for P2 since it forces a requirement for the person joining the meeting to be a student at the school.

#### Link for demo:

https://xd.adobe.com/view/638cef80-5c10-4468-9028-3a9345c85e1f-36df/?fullscreen Download link:

https://drive.google.com/file/d/1LQ3p8FZLys4WmuOOBYX2uEshUTXEZ1XA/view?usp=sharing Images:

