

GUIDELINES: 2-5 minutes long, 'capture the nature of the project as appropriate'

Suitable for public and professional audience, gets uploaded to youtube.

No copyrighted songs, lyrics, video, or other media

INTRO:

On Intro Screen:

Hi, we are Cole Duffner, Amber Graham, and Chenning Zhang, Computer Science students at Penn State.

For our Capstone Project, we have teamed up with Hershey Medical Center to create an Orthopedic Surgery Gaming App called Operation Bones

Main Menu:

In the field of Orthopedic Surgery, there's a significant imbalance in diversity with women accounting for only 1 in 10 surgeons in this specialty. One of the contributing factors to this is that students aren't exposed to this field until they are too far in their educational and career paths.

We are creating this gaming app so that it's geared toward high school students, making sure they are aware of this field when they start to think about college and potential careers. We want to make the game informative and accurate while also being fun and entertaining.

In order to make this game fun and accessible for all students, we have gone with graphics that have a gender-neutral color scheme and are cartoonish in appearance.

We used Unity to develop the game, allowing us to share our code among our team and develop for Android and Apple devices simultaneously.

Anatomy Quiz:

... talk briefly about this we may only show the first screen of it so we can get back out to the main menu and save time

Main Menu:

We also have two Trauma Scenarios for the user to play through.

Scenario 1:

The first scenario has a patient with a broken arm. The user will go through the steps of performing surgery on a patient with a broken radius. Some of the screens provide information on certain terms used and decisions a surgeon makes when prepping the patient for surgery. The user will choose the correct materials to perform the procedure, and is allowed to try again when they make a wrong choice.

Main Menu:

Scenario 2:

The second Trauma scenario has a patient with a broken hip. The user goes through the procedure for performing surgery on a femur. The user decides which procedure to perform to repair the broken bone. Some of the screens provide background information to the user, and then are followed by screens where the user must choose which materials to use for the operation.

Main menu:

Thank you for watching our video presentation. Be sure to download our game once it's published on the app stores!