

## XDYouTube: Remote Control

You often use the cross-device YouTube app XDYouTube with your friends to watch videos together. Everyone can already queue new videos from their device and see the current video as well as the queued videos. However, everyone needs a break from watching videos sometimes, and you would prefer if you could pause the current video remotely from your mobile device instead of going to the screen that shows the video and pausing the video from there. As you developed the app yourself with a few friends, you decide to implement this feature.

### 1. Implementing Remote Control Functionality

If you look at the landscape view of a controller device, you see an overview of the current video and the queued videos. Above the current video, we already added a button with the id “pauseButton” that should be used for the remote control functionality. We also have a shared variable that states whether the video is currently playing or paused. Each device can have the role “controller” and/or “player”. Devices with the role “player” are responsible for playing the videos and devices with the role “controller” are responsible for queuing/controlling videos. Your task is to implement to functions:

- `pauseClicked()`: This function is called whenever a user clicks the play/pause button. If no video is currently playing, the function should not do anything. If video is playing (paused or not paused), it should change the state of the shared variable.
- `updatePaused()`: This function is called on all devices whenever the state of the shared variable changes. On devices that have the role “controller”, it should change the text of the control button to “PAUSE” or “PLAY” depending on the current state of the video. On devices that have the role “player”, it should play/pause the video. Remember that a single device can have both roles.

You have access to the following helper functions:

- `that.pauseVideo()`: pauses the video
- `that.unpauseVideo()`: unpauses the video
- `that.isVideoPlaying()`: returns if any video is currently active (even if it is paused)
- `that.setPausedState(state)`: sets the state of the shared variable
- `that.getPausedState()`: returns the state of the shared variable (true -> video is paused, false -> video is playing)
- `that.isPlayer()`: returns “true” if the device has the role “player”
- `that.isController()`: returns “true” if the device has the role “controller”

### 2. Styling the Remote Control Button

Your very talented friend has designed a more fashionable button for your remote control functionality. He sent you an image of how the button should and asked you to integrate it into the application. Your task is to add the appropriate CSS such that the remote control button looks similar to the button in the image below (it does not need to be exactly the same). Additionally, you want to make the button responsive so it looks good on all kinds of devices and some of your friends use your application on their low-resolution smartphones while others use it on their Full HD laptops. The button needs to look (somewhat) good on resolutions up to 1920x1080.

