

1. Working with Camera Input

To ensure the cross-browser compatibility of any device handling code in this article, use the latest WebRTC adapter kit:

```
<script src="https://webrtcchacks.github.io/adapter/adapter-latest.js"></script>
```

When displaying the camera stream within a video element, make sure you flip the video element horizontally (to mirror it). This applies only when you want to capture an image from the user-facing camera (selfie or webcam):

```
video {  
  transform: scale(-1, 1); /*For Firefox (& IE) */  
  -webkit-transform: scale(-1, 1); /*for Chrome & Opera (& Safari) */  
}
```

Now we're ready to request the stream and access from the Camera device:

```
let constraints = {}  
let track  
  
// set desired audio/video configurations  
constraints = {  
  audio: false,  
  video: {  
    width: { min: 800, ideal: 1920 },  
    height: { min: 600, ideal: 1080 }  
  }  
};  
  
// reference the video tag  
video = document.getElementById('video_id')  
  
// handle the video object ONLY when the actual stream starts playing  
video.addEventListener('play', onVideoStart)  
  
// request access to input devices  
navigator.mediaDevices.getUserMedia(constraints)  
  .then( stream =>  
  {  
    // keep the reference to the stream so it could be stopped when not needed anymore  
    track = stream.getVideoTracks()[0];  
  }  
);
```

```

// attach the stream to the video object
try {
  video.srcObject = stream;
} catch (error) {
  video.srcObject = URL.createObjectURL(stream);
}

//Now enumerate devices
navigator.mediaDevices.enumerateDevices().then(gotDevices)

})
.catch( err =>
{
  console.error('getUserMedia error!', error);
});

function onVideoStart()
{
  // video is now ready for handling
  // and/or to capture image from video output
}

```

In case there are multiple cameras available its a good practice to store them in case we need to offer them to the user for selection:

```

var devices

gotDevices(deviceInfos)
{
  devices = []

  for (let i = 0; i !== deviceInfos.length; ++i)
  {
    const deviceInfo = deviceInfos[i];

    if (deviceInfo.kind === 'videoinput')
    {
      var option = {};
      option.value = deviceInfo.deviceId;
      option.text = deviceInfo.label || `camera ${i}`;
      devices.push( option )
    }
  }
}

```

When you no longer need the camera of the user, and in order to respect the user's privacy, it's a good practice to stop accessing the stream input:

```
if( track ) track.stop();  
video.srcObject = null;
```