

# SYNCHRONOUS CODE

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Browsers can be **synchronous** or **asynchronous**

Servers can too, but let's focus on the browser

Synchronous code → if I perform a task, I have to **wait** until that process / task / function is complete

# SYNCHRONOUS CODE

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## Upload video

Video title:

Your video title

Video thumbnail:

Attach your video's image

Video description:

What is your video about?

Submit

# SYNCHRONOUS CODE

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## Upload video

Video title:

My good dogs

Video thumbnail:

doggy.jpeg

Video description:

A quick video showing how well behaved  
my dogs are

Submit

# SYNCHRONOUS CODE

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# SYNCHRONOUS CODE

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### Upload video

Video title:

Video thumbnail:

Video description: 

A quick video showing how well behaved my dogs are

Uploading ...

When the user hits  
“submit” everything is  
disabled

# SYNCHRONOUS CODE

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### Upload video

Video title:

Video thumbnail:

Video description: 

A quick video showing how well behaved my dogs are

Uploading ...

```
upload() {  
    print('Uploading ...')  
    x = UploadVideo()  
    print("successUrl: " + x)  
}
```

# SYNCHRONOUS CODE


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### Upload video

Video title:

Video thumbnail:

Video description: 



o showing how well behaved  
my dogs are

Uploading ...

Submit

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Video title:

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Uploading ...

```
upload() {  
    print('Uploading ...')  
    x = UploadVideo()  
    print("successUrl: " + x)  
}
```



We have to wait



# SYNCHRONOUS CODE

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### Upload video

Video title:

Video thumbnail:

Video description: 

A quick video showing how well behaved my dogs are

**successUrl:** <http://yourvid/id=1234>

```
upload() {  
    print('Uploading ...')  
    x = UploadVideo()  
    print("successUrl: " + x)  
}
```

# SYNCHRONOUS CODE

---

GOOD

Easy to read code

Top to bottom

BAD

Have to wait

Not user friendly

# A SYNCHRONOUS CODE

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# ASYNCHRONOUS CODE

---

### Upload video

Video title:

Video thumbnail:

Video description: 

You can also change the description

<http://yourvid/id=1234>

When you hit “submit” you immediately get back the URL

# ASYNCHRONOUS CODE

---

**Upload video**

Video title: 

Video thumbnail: 

Video description: 

<http://yourvid/id=1234>

When you hit “submit” you immediately get back the URL

The user is unblocked and can change titles, thumbnails and descriptions

# ASYNCHRONOUS CODE

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### Upload video

Video title:

Video thumbnail:

Video description: 

You can also change the description

successful: <http://yourvid/id=1234>

When you hit “submit” you immediately get back the URL

The user is unblocked and can change titles, thumbnails and descriptions



# ASYNCHRONOUS CODE

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### Upload video

Video title:

Video thumbnail:

Video description: 

You can also change the description

successful: <http://yourvid/id=1234>

```
upload() {  
    ...  
    x = UploadVideo(uploadDone)  
    print(x)  
}  
  
uploadDone(x) {  
    ...  
    print("successful: " + x)  
}
```

# ASYNCHRONOUS CODE

---

GOOD

Immediate results

No refresh or waiting

Improved user experience

BAD

Can be difficult to read code

Not as simple as top-to-bottom