W11-P1: Synchronous vs. Asynchronous

=> Synchronous demo

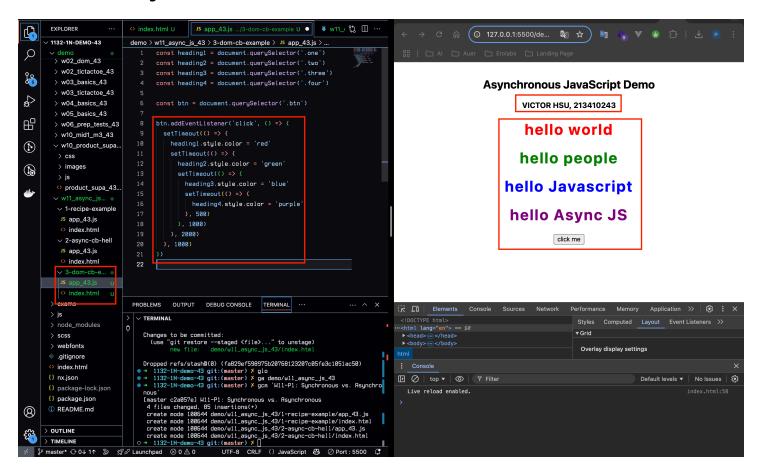# => Asynchronous demo


```javascript
function boilWater(time) {
  console.log('boiling...')
  setTimeout(() => {
    console.log('add carrot')
    console.log('boiling...')
    setTimeout(() => {
      console.log('done')
      console.log('chop union')
      console.log('boiling...')
      setTimeout(() => {
        console.log('done')
        console.log('add union')
        console.log('boiling...')
        setTimeout(() => {
          console.log('done')
          console.log('all done')
        }, 1000)
      }, 1000)
    }, 1000)
  }, time)
  console.log('done')
}

console.log('chop carrot')
boilWater(2000)
// console.log('add carrot')
// boilWater(1000)
// console.log('chop union')
// boilWater(1000)
// console.log('add union')
// boilWater(1000)
// console.log('all done')
```

Asynchronous JavaScript Demo
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Console output:
```
chop carrot        app_43.js:24
boiling...         app_43.js:2
done               app_43.js:21
add carrot         app_43.js:4
boiling...         app_43.js:5
done               app_43.js:7
chop union         app_43.js:8
boiling...         app_43.js:9
done               app_43.js:11
add union          app_43.js:12
boiling...         app_43.js:13
done               app_43.js:15
all done           app_43.js:16
```

c2a057e victor_xu   Thu May 1 19:28:01 2025 +0800   W11—P1: Synchronous vs. Asynchr
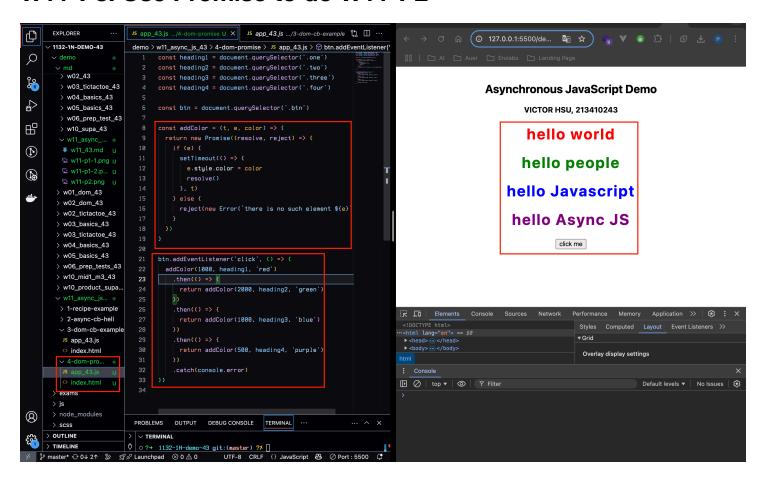
W11-P2: Asynchronous DOM demo


```
d40d35b victor_xu          Thu May 1 19:54:24 2025 +0800    W11-P2: Asynchronous DOM demo
```

W11-P3: Use Promise to do W11-P2


```javascript
1   const heading1 = document.querySelector('.one')
2   const heading2 = document.querySelector('.two')
3   const heading3 = document.querySelector('.three')
4   const heading4 = document.querySelector('.four')
5
6   const btn = document.querySelector('.btn')
7
8   const addColor = (t, e, color) => {
9     return new Promise((resolve, reject) => {
10      if (e) {
11        setTimeout(() => {
12          e.style.color = color
13          resolve()
14        }, t)
15      } else {
16        reject(new Error(`there is no such element ${e}`
17      }
18    })
19  }
20
21  btn.addEventListener('click', () => {
22    addColor(1000, heading1, 'red')
23      .then(() => {
24        return addColor(2000, heading2, 'green')
25      })
26      .then(() => {
27        return addColor(1000, heading3, 'blue')
28      })
29      .then(() => {
30        return addColor(500, heading4, 'purple')
31      })
32      .catch(console.error)
33  })
34
```

Asynchronous JavaScript Demo

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hello world

hello people

hello Javascript

hello Async JS

click me
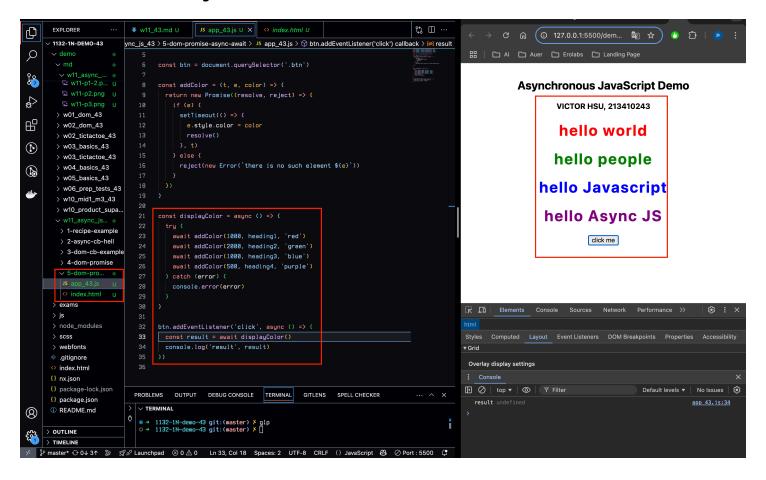
f3b65e4 victor_xu   Thu May 1 20:22:38 2025 +0800   W11-P3: Use Promise to do W11-P

W11-P4: Use Async Await to do W11-P3


```
 5    const btn = document.querySelector('.btn')
 6
 7
 8    const addColor = (t, e, color) => {
 9        return new Promise((resolve, reject) => {
10            if (e) {
11                setTimeout(() => {
12                    e.style.color = color
13                    resolve()
14                }, t)
15            } else {
16                reject(new Error(`there is no such element ${e}`))
17            }
18        })
19    }
20
21    const displayColor = async () => {
22        try {
23            await addColor(1000, heading1, 'red')
24            await addColor(2000, heading2, 'green')
25            await addColor(1000, heading3, 'blue')
26            await addColor(500, heading4, 'purple')
27        } catch (error) {
28            console.error(error)
29        }
30    }
31
32    btn.addEventListener('click', async () => {
33        const result = await displayColor()
34        console.log('result', result)
35    })
36
```

Asynchronous JavaScript Demo

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hello world

hello people

hello Javascript

hello Async JS

click me
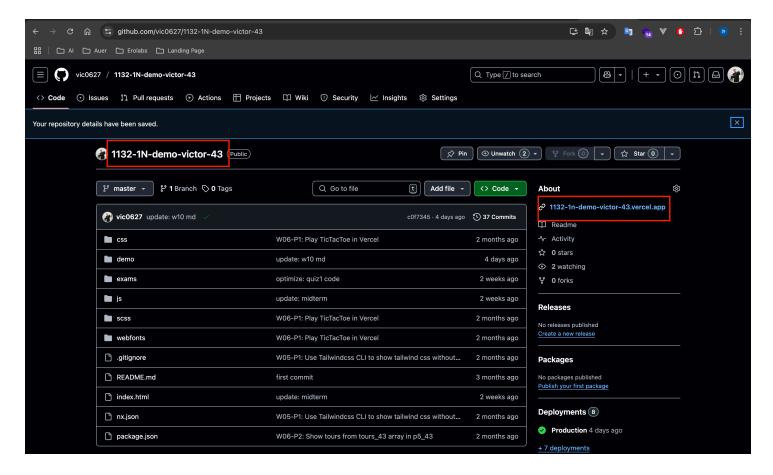
result undefined   app_43.js:34

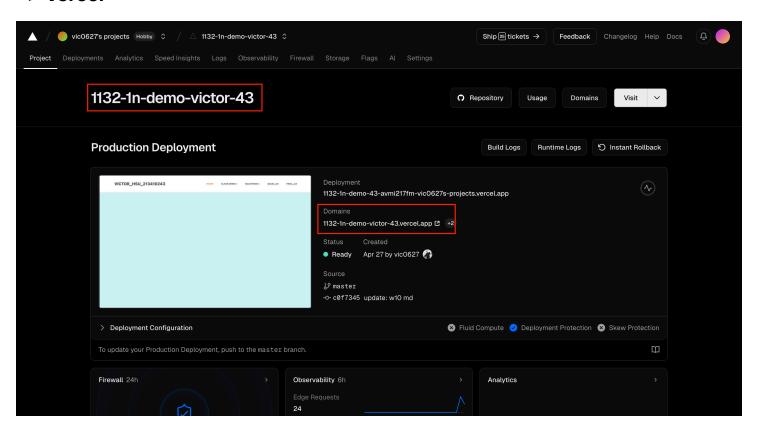971d9fd victor_xu   Thu May 1 20:39:18 2025 +0800   W11-P4: Use Async Await to do W

W11-P5: Change GitHub repo name, and Vercel URL

=> GitHub

=> Vercel

W11-logs: git logs of W11

vic0627 / 1132-1N-demo-victor-43

<> Code   Issues   Pull requests   Actions   Projects   Wiki   Security   Insights   Settings

Commits

master ▾   All users ▾   All time ▾

○ Commits on May 1, 2025

W11-P4: Use Async Await to do W11-P3   971d9fd [] <>
victor_xu committed 13 minutes ago · ● 0 / 1

W11-P3: Use Promise to do W11-P2   f3b65e4 [] <>
victor_xu committed 30 minutes ago

W11-P2: Asynchronous DOM demo   d40d35b [] <>
victor_xu committed 1 hour ago

W11-P1: Synchronous vs. Asynchronous   c2a057e [] <>
victor_xu committed 1 hour ago

○ Commits on Apr 27, 2025

update: w10 md   c0f7345 [] <>
vic0627 committed 4 days ago · ✓ 1 / 1

W10-P4: Upload 12 images to Supabase storage and show these remote images b3e5867 [] <>
vic0627 committed 4 days ago · ✓ 1 / 1

W10-P3: Get 12 products from Supabase   df4be01 [] <>
vic0627 committed 4 days ago

W10-P2: Setup Supabase with project yourcode_1n_43   3927a6c [] <>
vic0627 committed 4 days ago