



◆ CS EDUCATION ◆

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동기/비동기 블록/논블록



24.09.20
채다희



동시성 concurrent

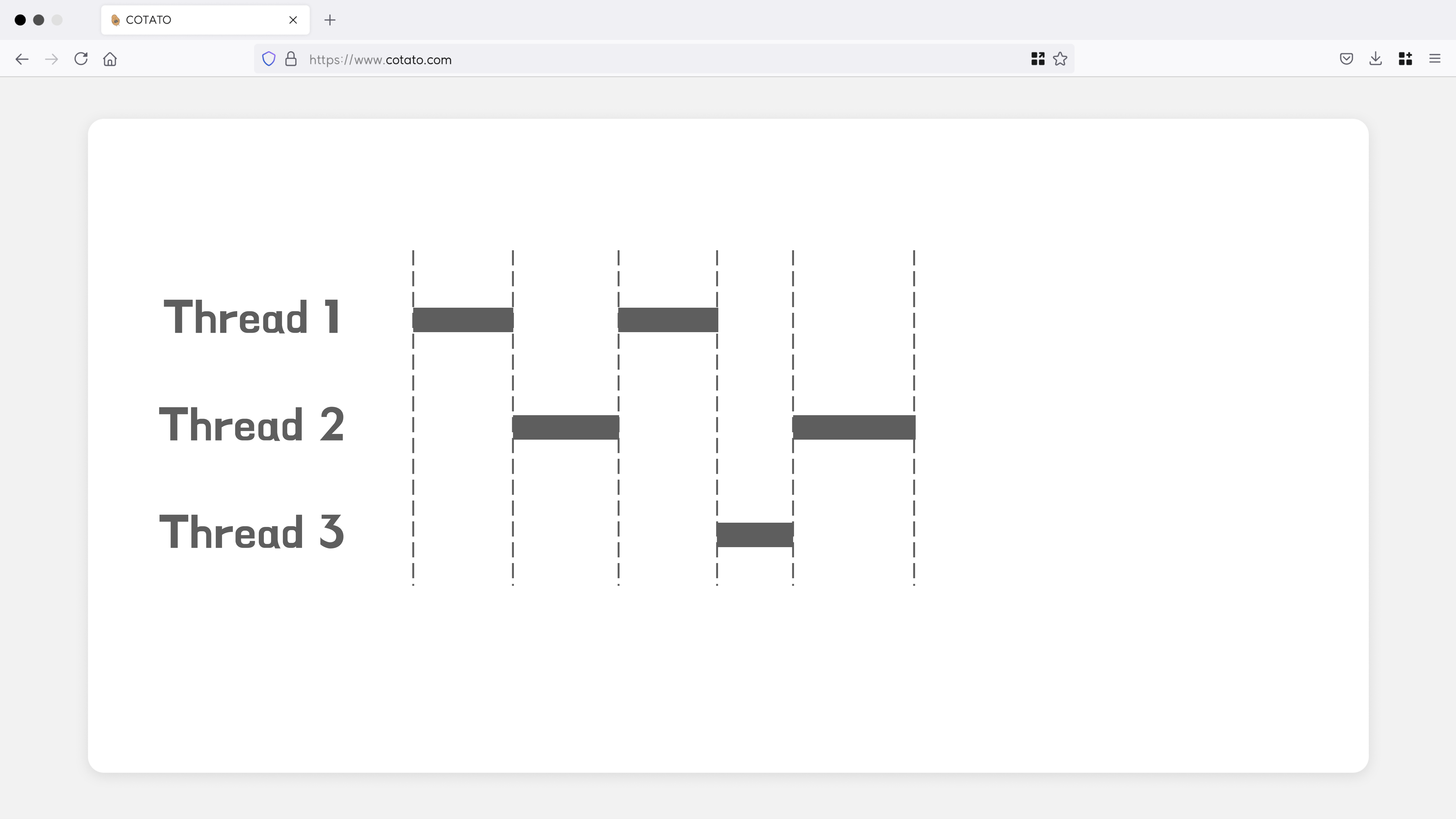
concurrent

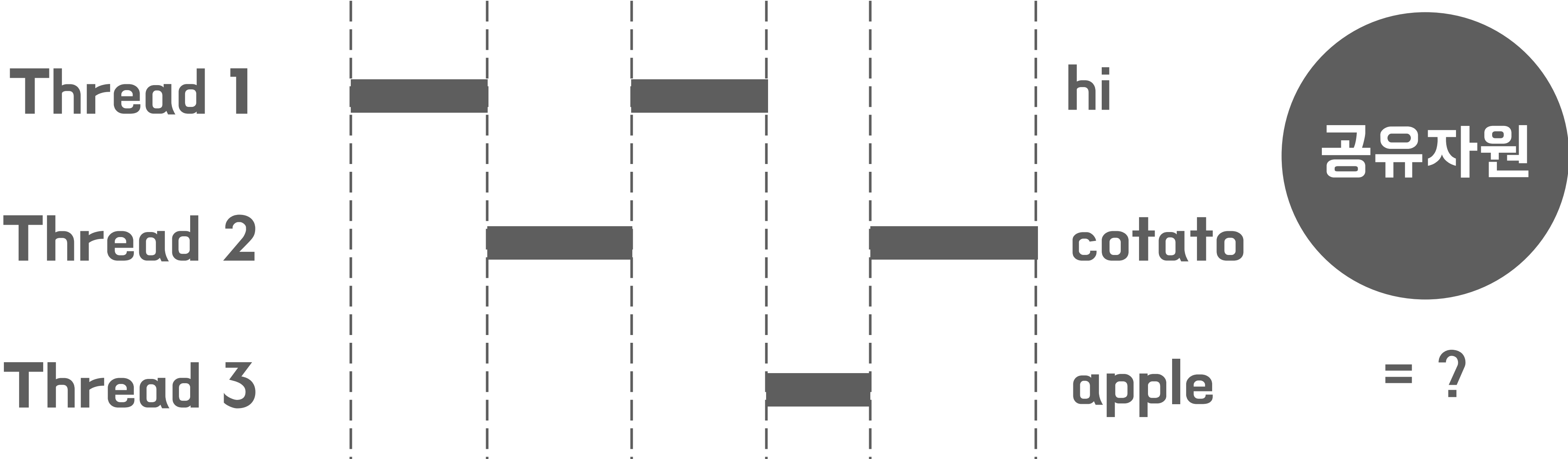
미국식 [kən|kɜːrənt] 🔊 영국식 [kən|kʌrənt] 🔊

형용사

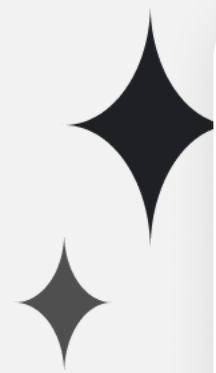
공존하는, 동시에 발생하는

효율적, 성능, 반응성, 확장성



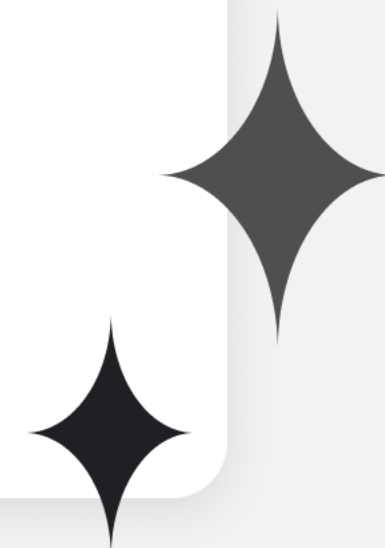


경쟁 상태 Race Condition

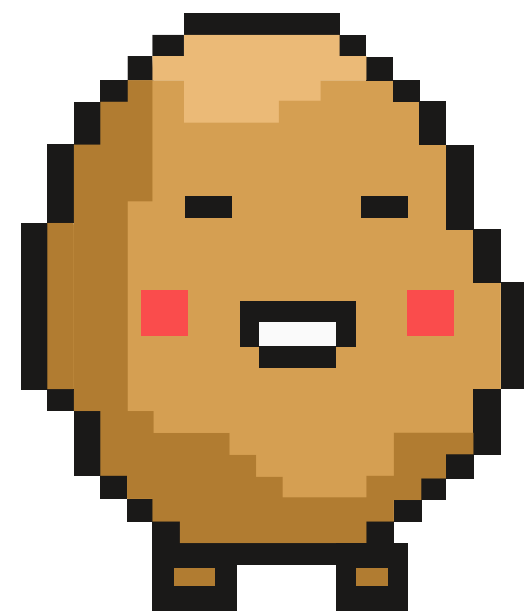


동기
Syn + chrono + us
With, together time

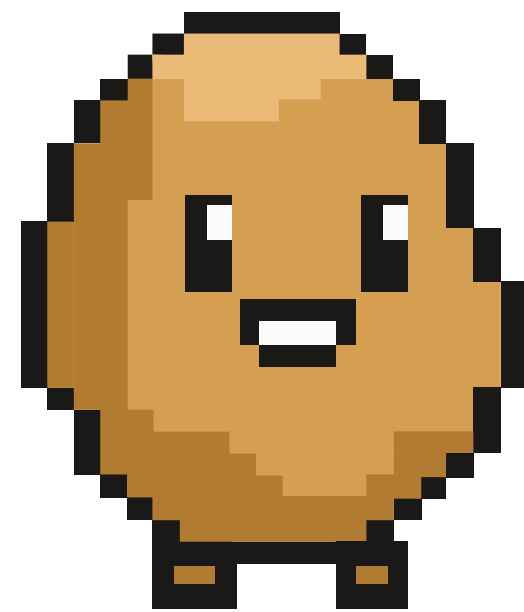
비동기
A + synchronous

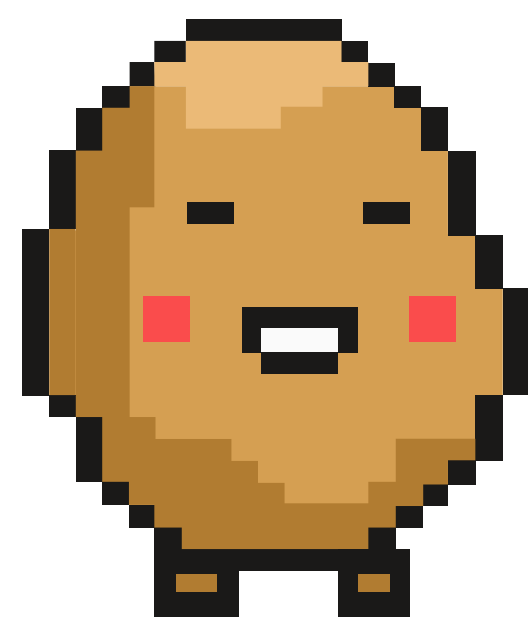


동기 Sync



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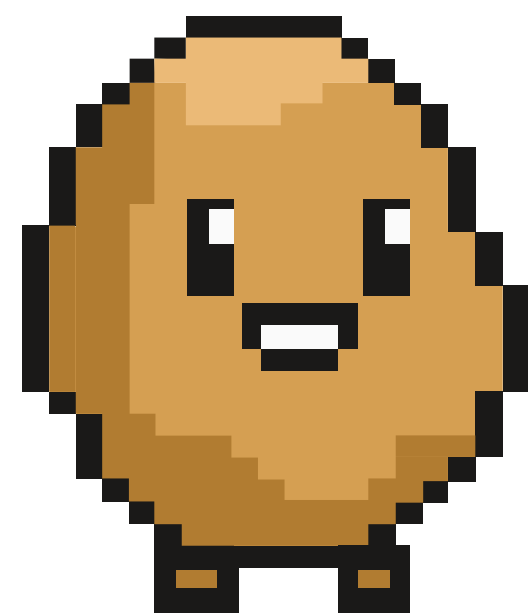




김감자



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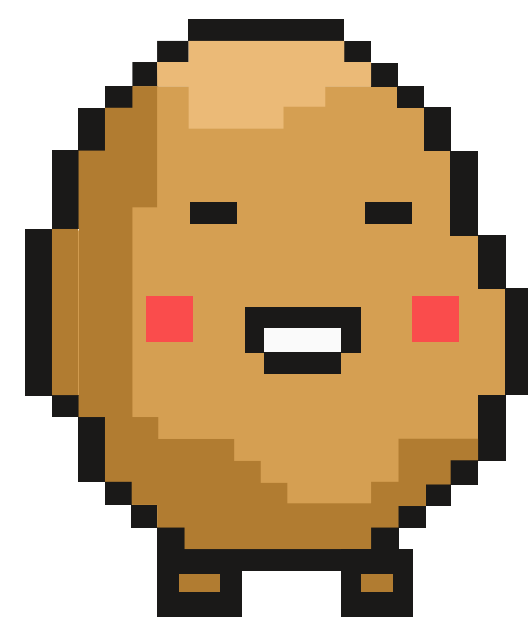
채감자

시작



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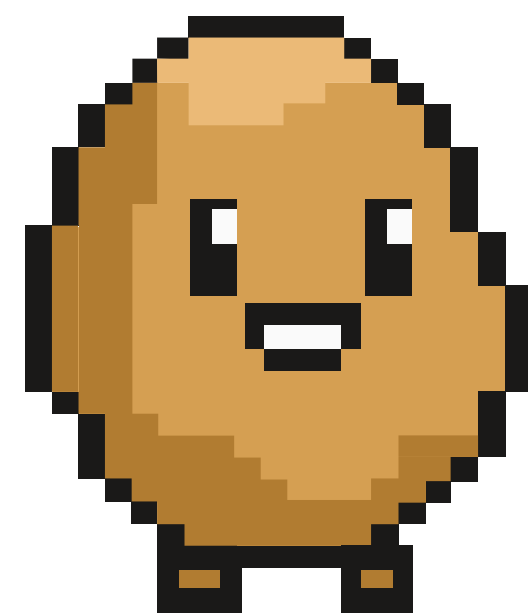
비동기 Async



김감자



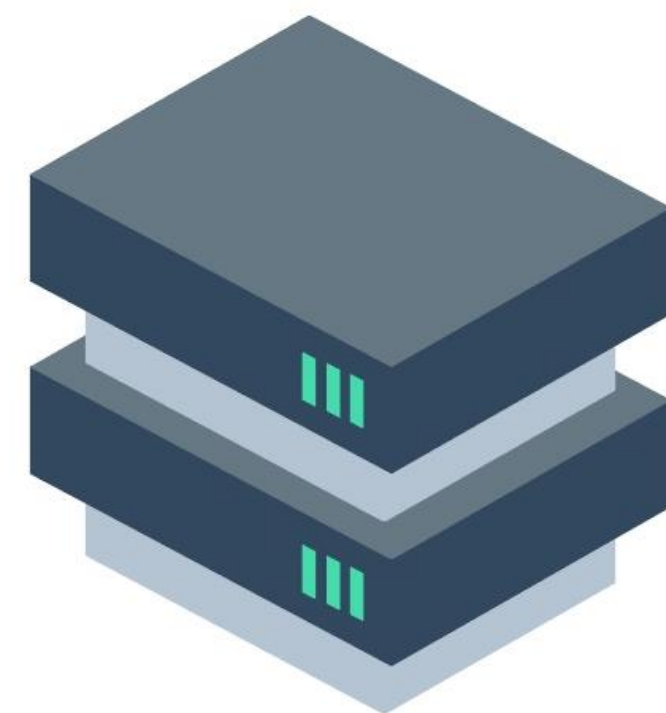
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채감자



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비동기 Async Callback 함수

블로킹
Blocking

논블로킹
Non-Blocking

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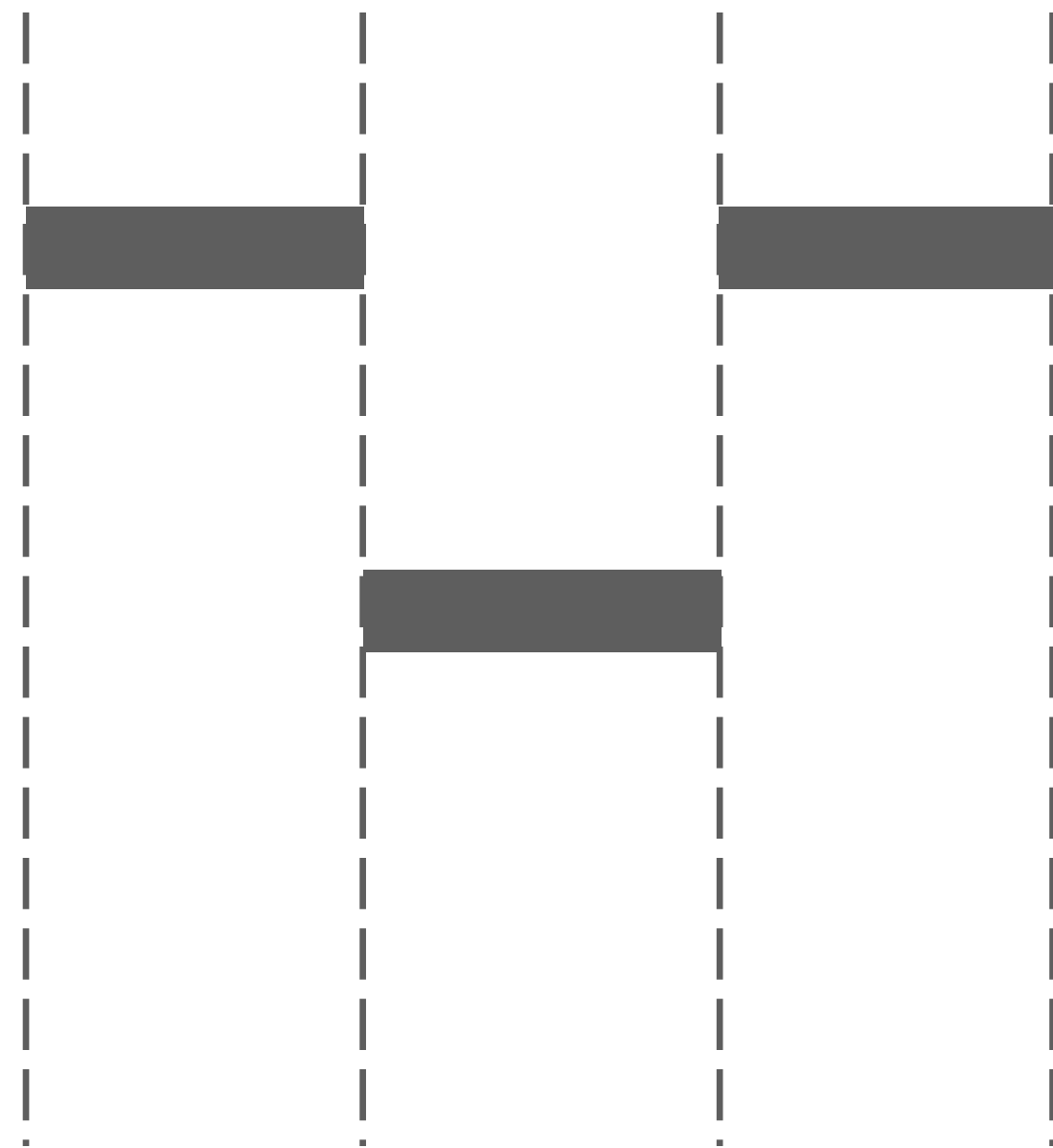
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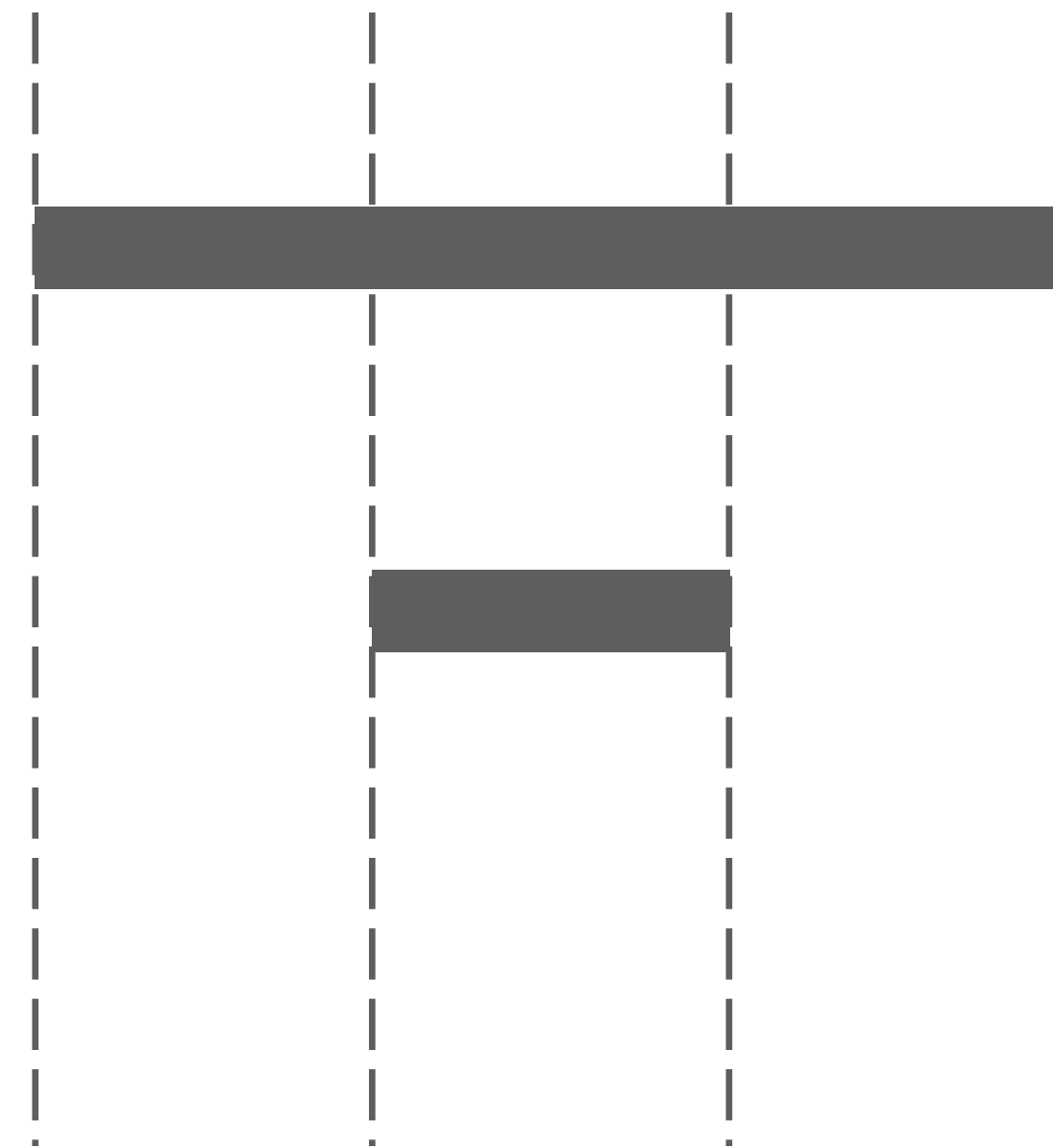
Thread 1

Thread 2

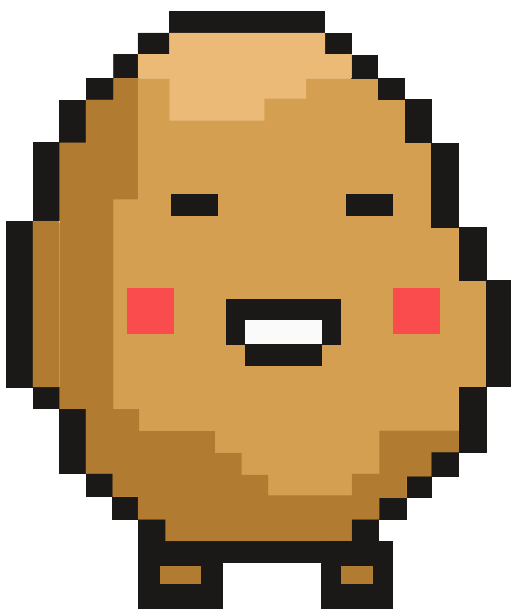


Thread 1

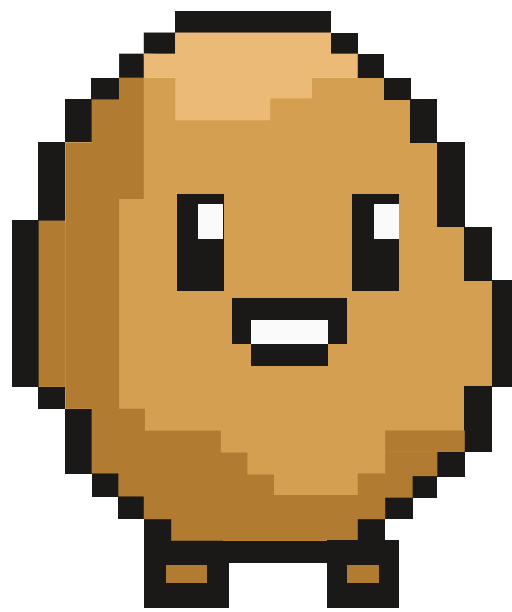
Thread 2



블로킹 Blocking



김감자

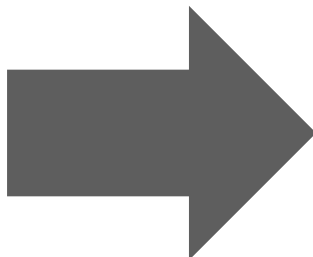


채감자



중지

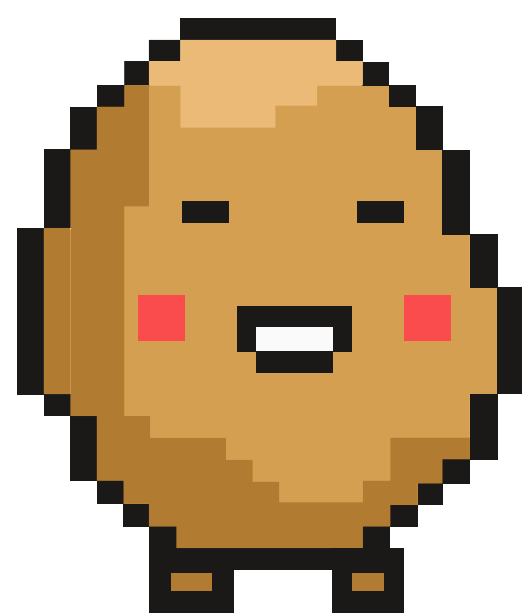
재시작



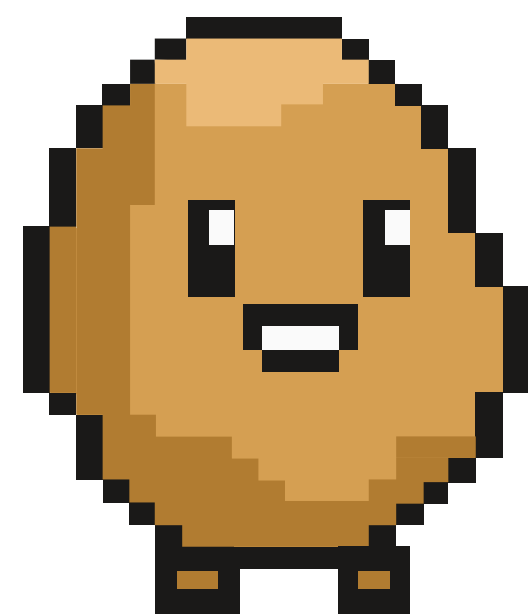
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블로킹 Blocking



김감자



채감자

제어권

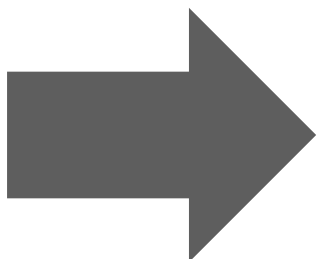


중지

재시작

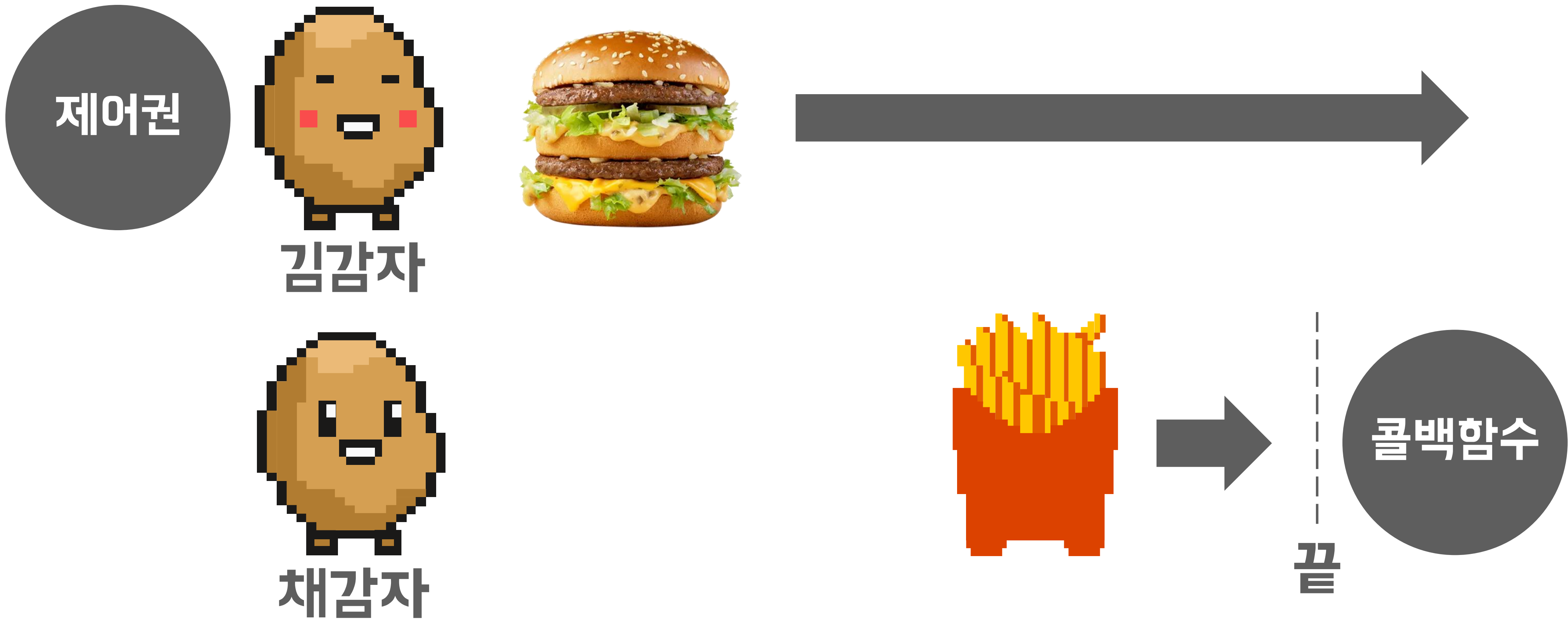


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논블로킹 Non-Blocking



동기 / 비동기

실행 순서

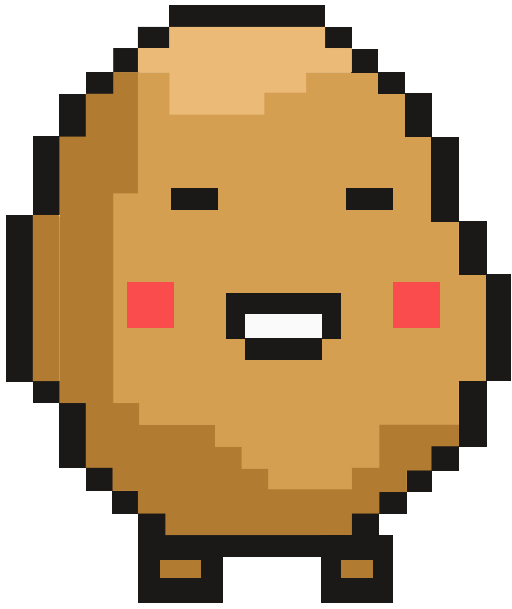
블로킹 / 논블로킹

실행 차단

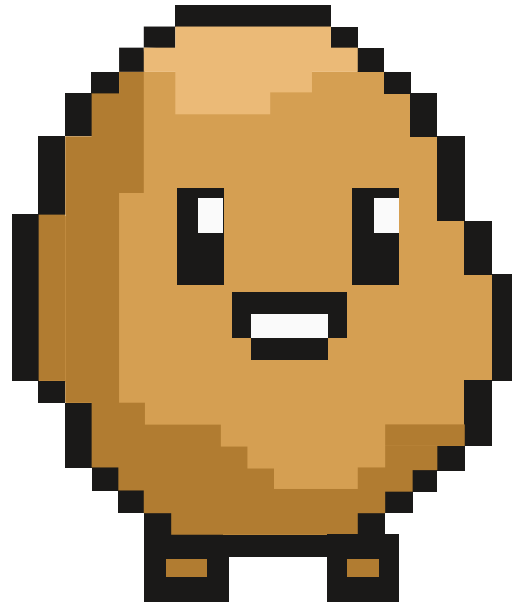
1. 동기 - 블로킹

동기 - 블로킹

제어권
리턴값



김감자

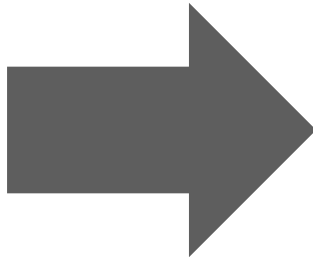


채감자



중지

재시작



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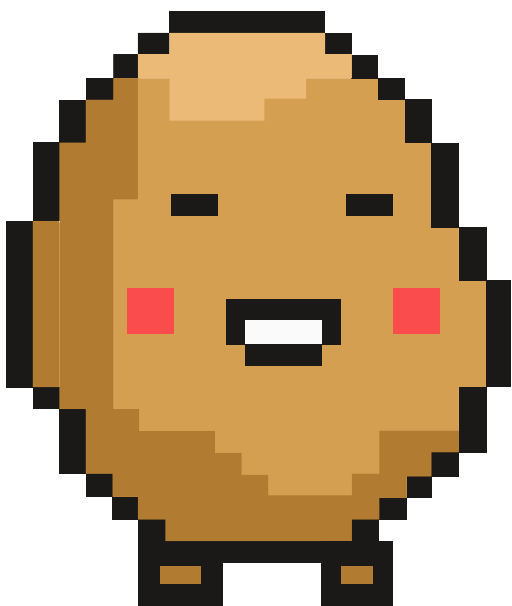
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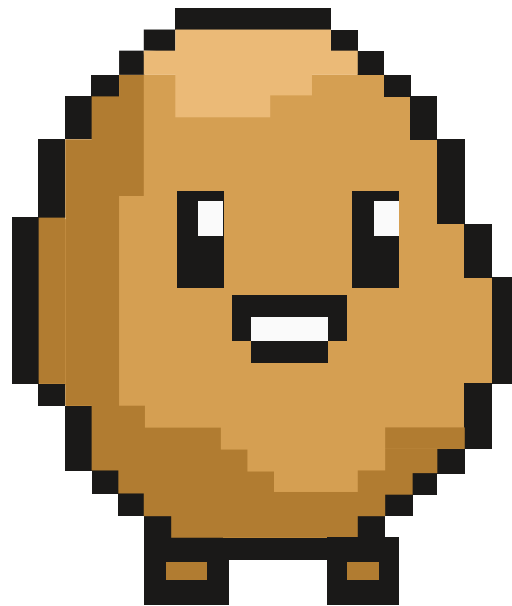
2. 비동기 - 논블로킹

비동기 - 논블로킹

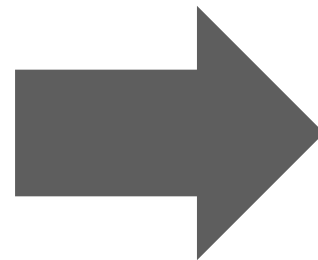
제어권



김감자



채감자



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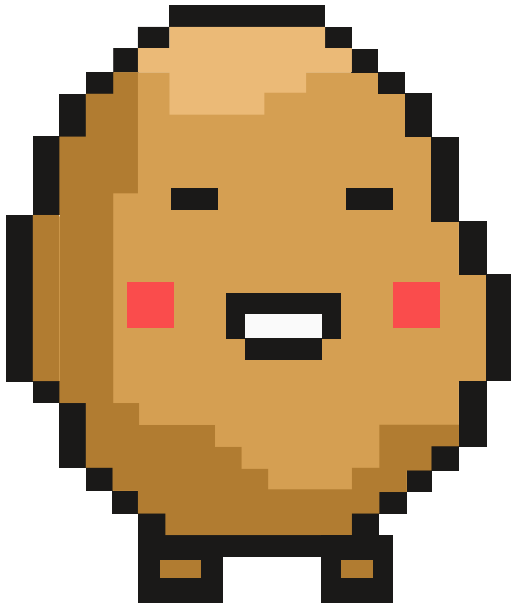
콜백함수

3. 동기 - 논블로킹 ?

4. 비동기 - 블로킹 ?

동기 - 논블로킹

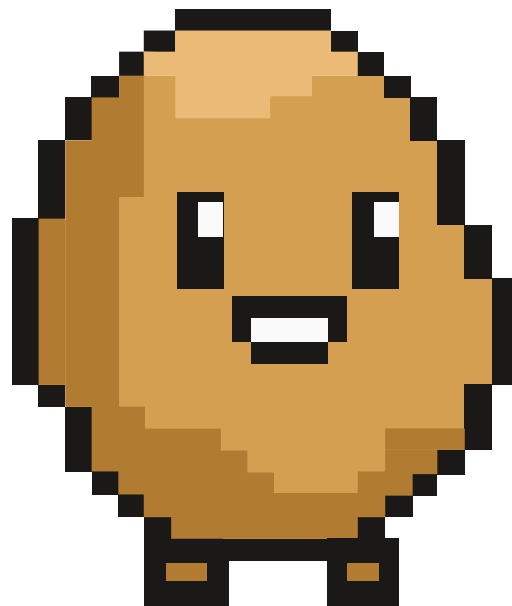
제어권



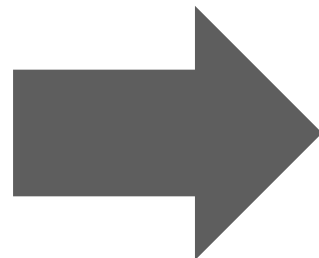
김감자



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채감자



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비동기 VS 논블로킹



```
console.log("시작");  
  
setTimeout(() => {  
  console.log("1초 후에 실행됩니다!");  
}, 1000);  
  
console.log("끝");
```



시작
끝
1초 후에 실행됩니다!