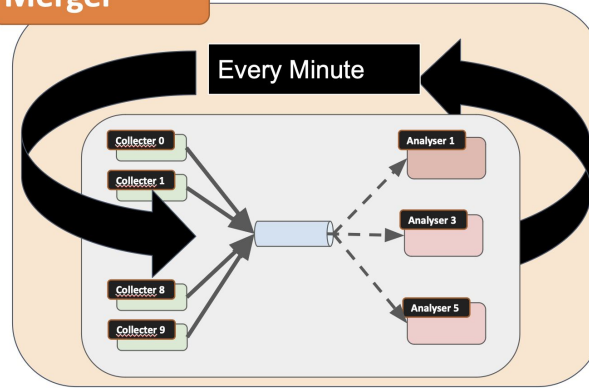


Merger




MultiThreading Program Simülasyonu

Dr. Uzay Çetin

Değerli Öğrenciler,

3 Kasım Perşembe günü 2. quizini olacaksınız. Quiz Python dilinde Multi-processing ve Threading kütüphanelerini birlikte kullanarak paralel ve eş-zamanlı bir mimari kullanmanızı gerektirecek. Bunu nasıl yapacağınızı araştırarak gelerseniz, quizinizi daha hızlı bitirebilirsiniz.

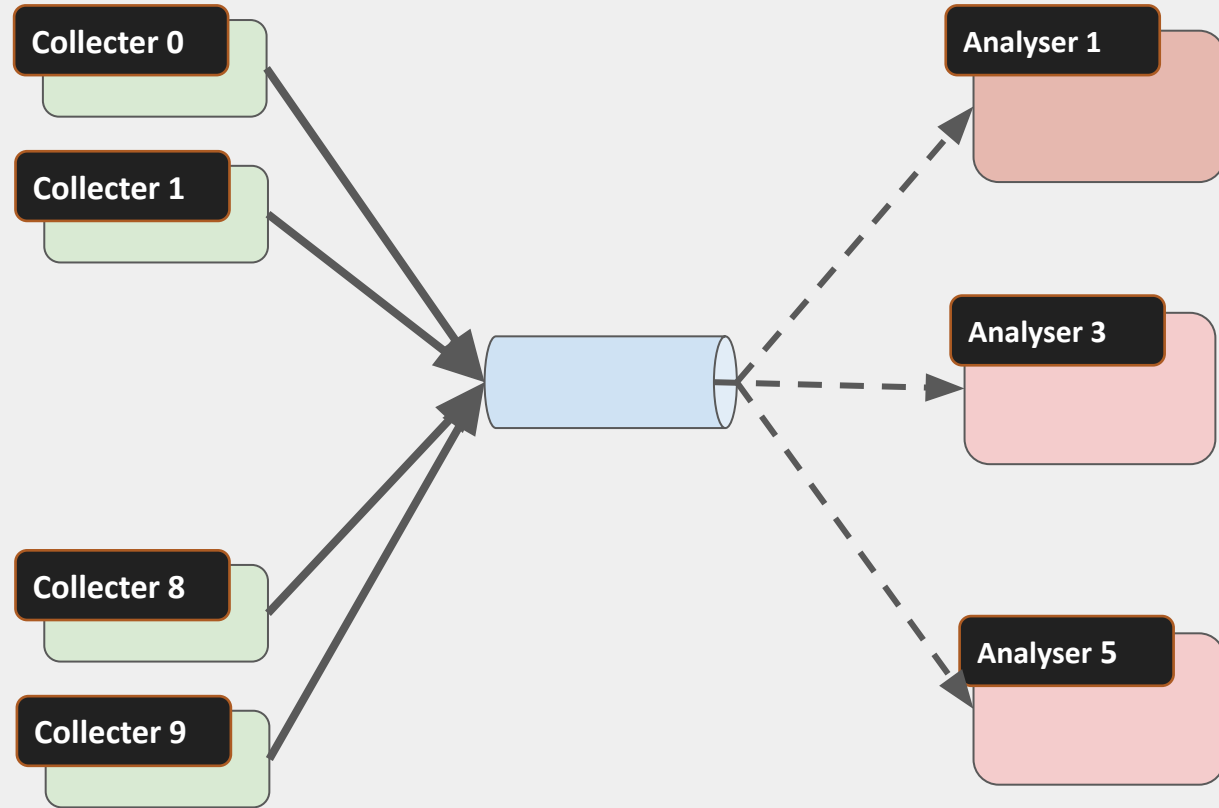
Başarılar dilerim
Uzay



We will simulate a multi-threading program. Our aim is to understand how many times Influencers mentioned 'our company' in social media.

Collector's task is to collect data from 10 source. Each collection takes 10 seconds.

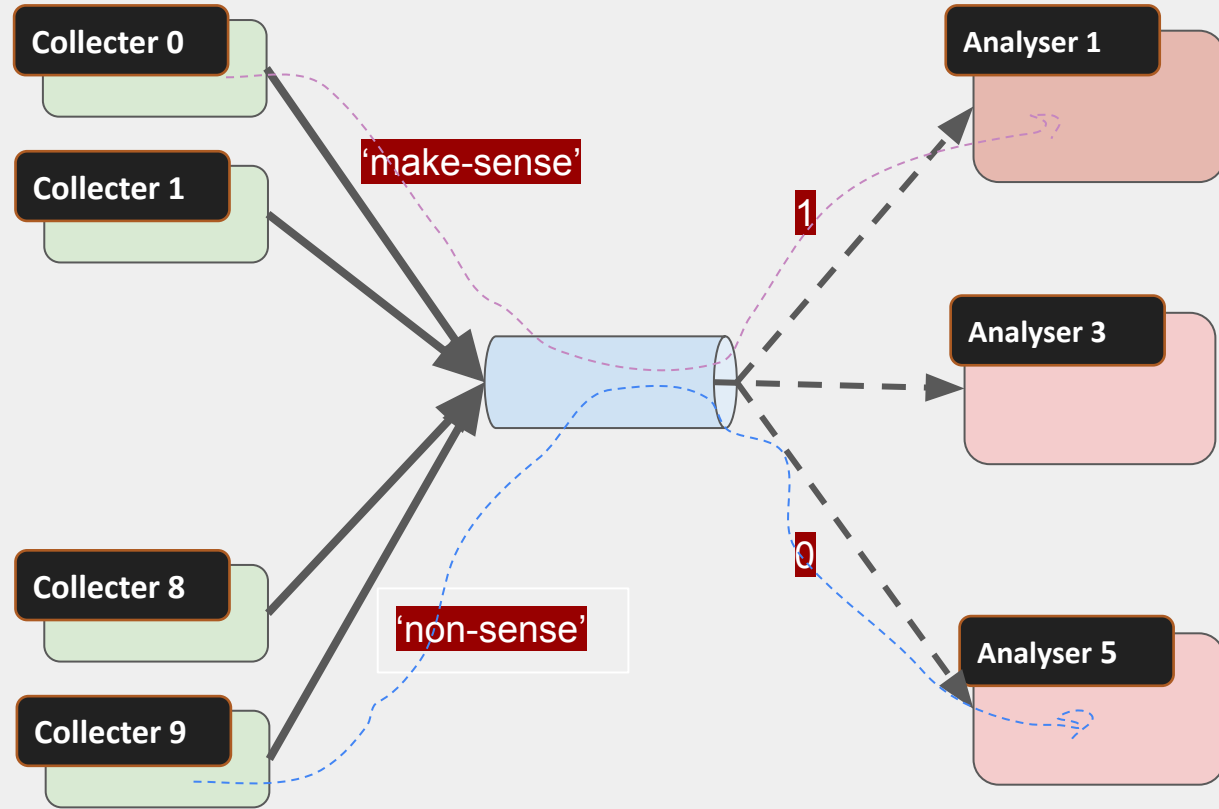
Analyser's task is to analyse data coming through a queue. Each analysis takes 5 seconds.



Collector's task: Collect social media data from 10 influencers. Each collection takes 10 seconds.

Influencers produce data that **'make-sense'** or make **'non-sense'**

Analyser's task is to count number of data that make sense. Each analysis takes 5 seconds.



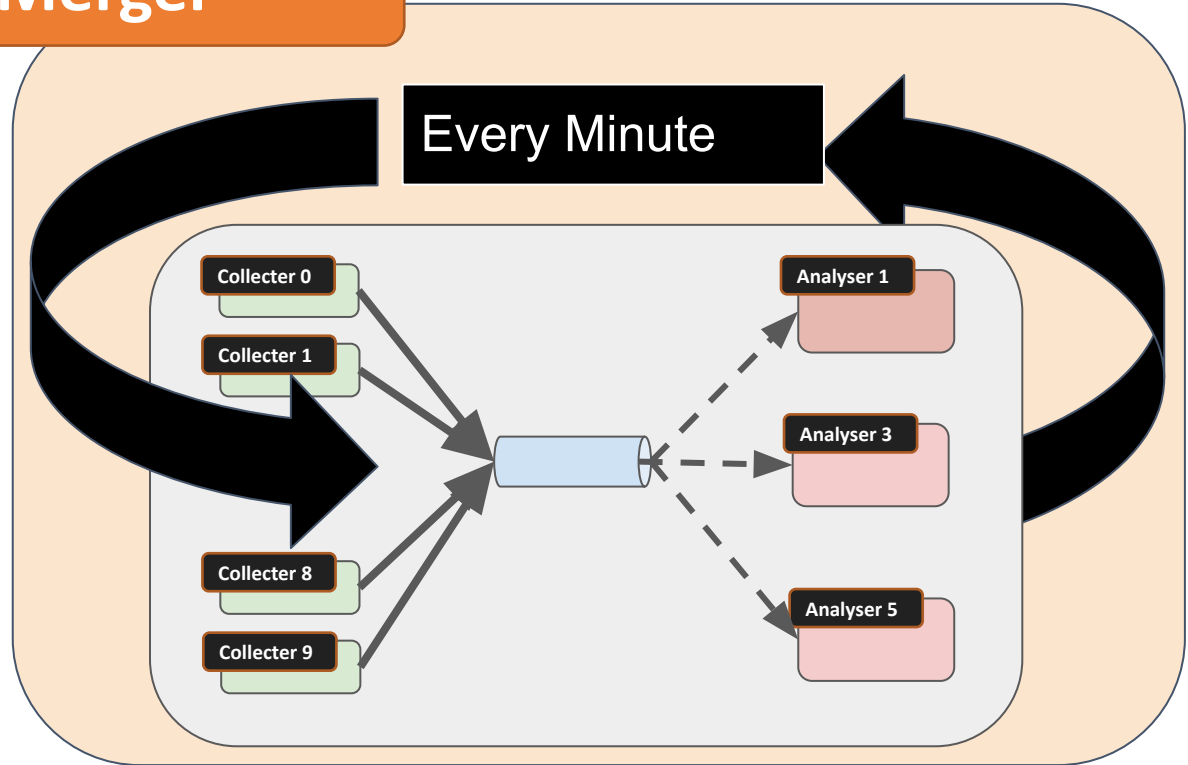
Collector's task: Collect social media data from 10 influencers. Each collection takes 10 seconds.

Influencers produce data that 'make-sense' or make 'non-sense'

Analyser's task is to count number of data that make sense. Each analysis takes 5 seconds.

Merger's task is to aggregate all counts coming from **Analysers**

Merger



Teşekkürler

TALK IS CHEAP
SHOW ME THE
</CODE>

-Linus Torvald

Multi-Threaded Social Media Analyser

1. **[50P]** Run base Producer-Consumer OOP code
2. **[10P]** Modify base Producer-Consumer OOP code (It does not terminate)
3. **[10P] Do**
 - a. **[5P]** Create Collector to produce 'Make-Sense' with 0.15 prob and 'Non-Sense' with 0.85 prob then sleeps for 1 sec
 - b. **[5P]** Create Analyser that counts the number of 'Make-Sense' strings then sleeps for 0.5 sec
4. **[10P]** Construct 10x5 Collector-Analyser architecture
5. **[20P]** Put all in one python script and run it from a merger every one minute