WELCOME

TO

ALL OF YOU

The serial garbage collector - Group

In this PPT,this PPT divided into groups

1.introduction, definition and examples : yogesh.s.chavan

2. key characteristics, advantages and disadvantages : Banuprakash.v

Serial garbage collection:-

*serial garbage collection is well-mached for single-threaded environment.

***Garbage means:-**unreferenced objects.

*It is managed by jvm

*It is the automatic process to destroy the unused objects.

*It is performed for memory management.

Two types of java:-

*stack memory
*heap memory

->Garbage collection runs on the heap memory

Example:-

1.By nulling the reference,
Eg.

```
Student s=new student();
    S=null
```

2.object created inside a method,
Eg.

```
Void go()
  {
   Student s=new student()
  }
```

- Key Characteristics:

*Single-threaded:-

The Serial Garbage Collector uses only one thread to perform both minor and major garbage collections. This can lead to long pause times, especially in large applications, as it has to stop the entire application while performing garbage collection.

*Stop-the-World:

Like other garbage collectors, it operates in "stop-the-world" mode, meaning the application is paused while garbage collection happens.

*Simple to Implement:

It is easy to implement and works well for small applications or those running on single-processor machines.

- **Advantages:**
- Simple and efficient for single-threaded applications.
- Low overhead due to the absence of multi-threading complexities.

- **Disadvantages:**
- Does not take advantage of multi-core processors.
- "Stop-the-world" events can cause noticeable pauses in larger or multi-threaded applications.