

Lab 3.1 - Singleton Bean

Cross Application Scope

- A Singleton bean has a scope for the entire Application. Consequently, we can hold state that the whole application can maintain.
- Create a new class `com.student.ejb.Auditor`
- It is to be annotated as a Singleton Bean that should be instantiated at application startup

```
@Singleton  
@Startup  
public class Auditor
```

- Create a single method, `public void increment()`
 - ❑ That increments a class member variable “ `int increment`” each time the method is called
 - ❑ Then prints out the current value of increment

Inject the Singleton into a Managed Resource

- In your class StudentInterceptor
- inject in your Singleton Bean

```
@Inject  
private Auditor auditor;
```

- In the method Object log(InvocationContext inv) throws Exception, execute auditor.increment() before the proceed step in this method
- Restart your server
- Open a web browser (Firefox will do)
- Navigate to <http://localhost:8080/student>
- Get a single Student, then Get All students

Student Search
Enter Student Id: 1 ▾

1:Eric Colbert
Department: English Literature
Fees: \$145.0

Auditor Application scoped

- Your console shows the Auditor being triggered
- And incrementing the number of requests
- Close this browser and open Firefox again, repeat the instructions to get One Student and get All Students
- The Auditor continues to increment where it left off, as its is scoped for the entire application while it is running on our server