

## **AuditTrail API -**

### **Objective**

Develop an audit trail .NET Core Web API that tracks changes in objects and returns the changed columns & values along with meta data.

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### **Requirements -**

#### **1. Audit Logging:**

- The API should have inputs as object before change and object after change.
- Track only the changed columns when an update occurs.
- Support the following Audit Action Types using an Enum:

```
public enum AuditAction
```

```
{
```

```
    Created,
```

```
    Updated,
```

```
    Deleted
```

```
}
```

- The API should return only the changed columns & values along with metadata.
- Include metadata such as:
  - Timestamp (when the change happened)
  - User ID (who made the change)
  - Entity Name (which entity was modified)

### **Hints –**

- API should be written with the quality of an enterprise application.
- Data can be persisted according to developers' preference.
- This API will be used in an existing solution but will be an individual service.