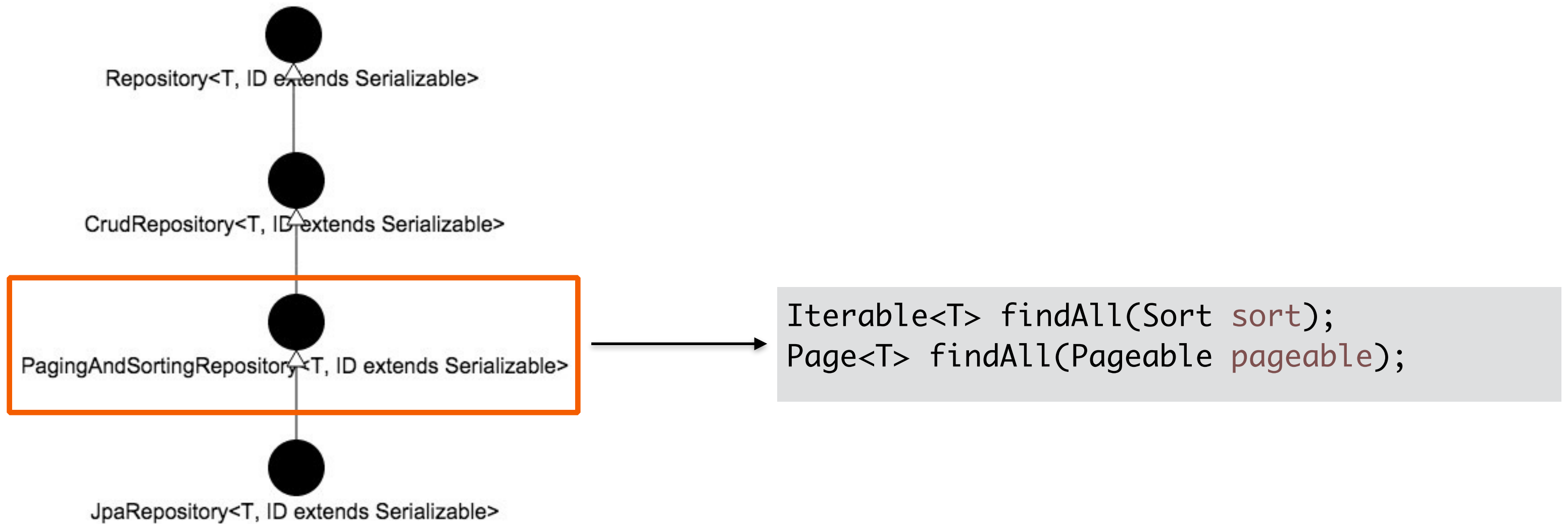
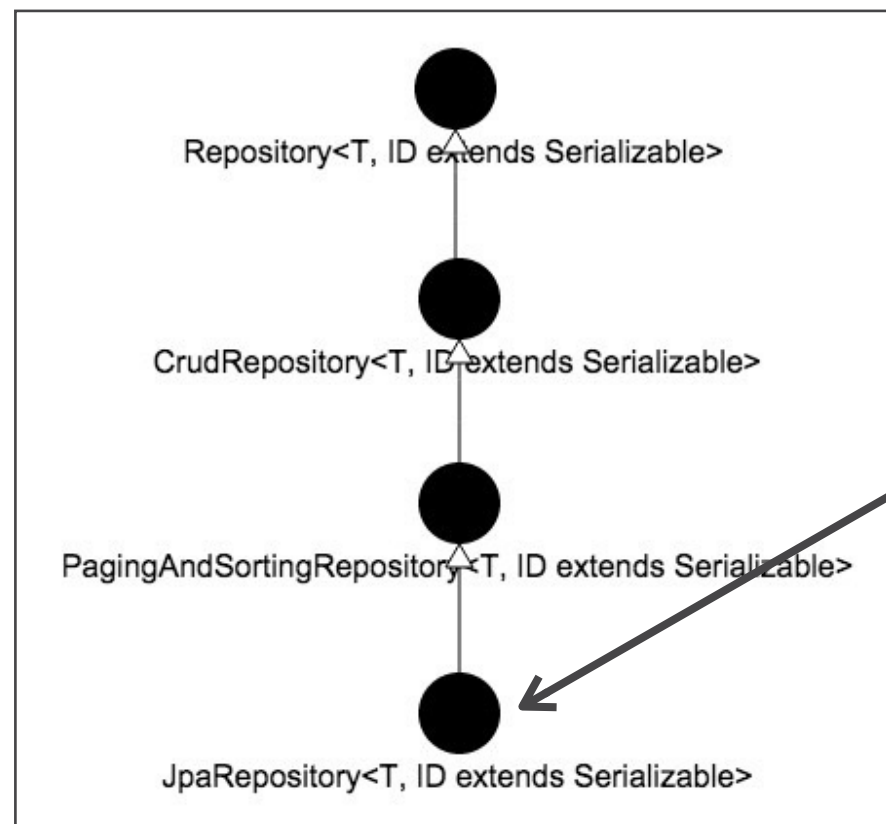


Paging and Sorting

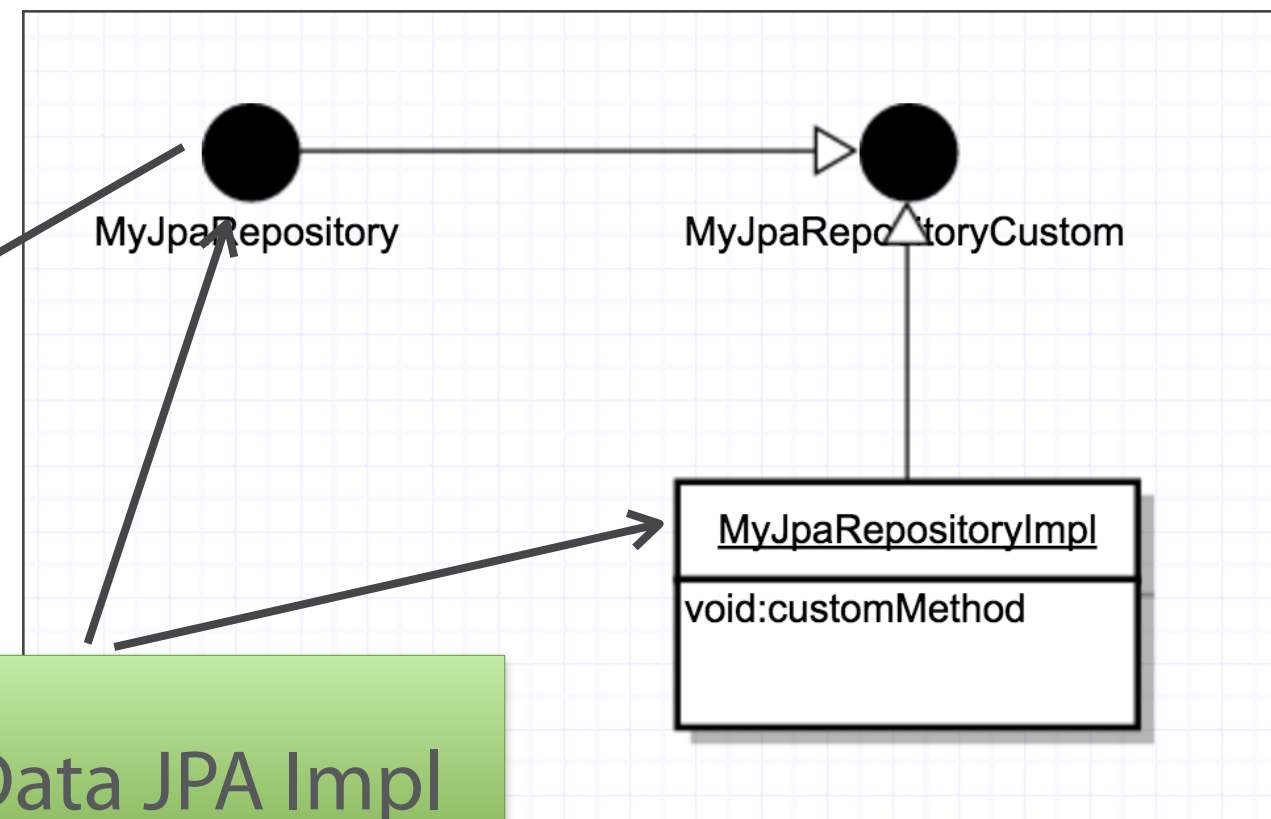


Custom Repositories

Spring Data JPA



Your Code



Spring Data JPA Impl

```
<jpa:repositories base-package="com.guitar.db.repository" />
<jpa:repositories base-package="com.guitar.db.repository" repository-impl-postfix="CustomClass"/>
```

Auditing Support

Spring Data JPA Annotations

- `@CreatedBy`
- `@CreatedDate`
- `@LastModifiedBy`
- `@LastModifiedDate`

Auto Set

```
@Entity
public class Model {
    @CreatedBy
    private User user;

    @CreatedDate
    private DateTime createdDate;
}
```

```
public class SecurityAuditorAware
    implements AuditorAware<User> {

    public User getCurrentAuditor() {
        //...
        return user;
    }
}
```

```
<jpa:auditing auditor-aware-ref="securityAuditorAware" />
```

```
@Configuration
@EnableJpaAuditing
public class Config {
    @Bean
    public AuditorAware<User> auditorProvider() {
        return new SecurityAuditorAware();
    }
}
```

Locking

```
@Entity
public class Model {
    @Version
    private int version;
    ...
}
```

Optimistic Locking

- If version number doesn't match, throws OptimisticLockException

Pessimistic Locking

- Long term locks the data for the transaction duration, preventing others from accessing the data until the transaction commits

```
@Lock(LockModeType.PESSIMISTIC_WRITE)
List<Model> findByModelTypeNameIn(List<String> types);
```

Summary



Paging and sorting
Custom repositories
Auditing
Locking