

```
1 package com.infy.athletearena.entity;
2
3 import java.time.LocalDate;
4
5
6
7
8
9
10
11 @Entity
12 @Table(name = "athlete")
13 public class Athlete {
14     @Id
15     @GeneratedValue(strategy = GenerationType.IDENTITY)
16     private Integer athleteId;
17     private String athleteName;
18     private String gender;
19     private String contactNumber;
20     private LocalDate dateOfBirth;
21     private String sport;
22
23     public Athlete() {
24         super();
25     }
26
27     public Athlete(Integer athleteId, String athleteName, String gender, LocalDate dateOfBirth, String
28                     String sport) {
29         super();
30         this.athleteId = athleteId;
31         this.athleteName = athleteName;
32         this.gender = gender;
33         this.dateOfBirth = dateOfBirth;
34         this.contactNumber = contactNumber;
35         this.sport = sport;
36     }
37
38     public Integer getAthleteId() {
39         return athleteId;
40     }
41 }
```

Writable

Smart Insert

1:1:0

```
9 import java.time.LocalDate;
10 public class AthleteDTO {
11
12     private Integer athleteId;
13     @NotNull(message = "{athlete.name.notpresent}")
14     @Pattern(regexp = "[a-zA-Z]+([a-zA-Z])*", message = "{athlete.name.invalid}")
15     private String athleteName;
16     @NotNull(message = "{athlete.gender.notpresent}")
17     @Pattern(regexp = "Male|Female|Others", message = "{athlete.gender.invalid}")
18     private String gender;
19     private LocalDate dateOfBirth;
20     @NotNull(message = "{athlete.contactnumber.notpresent}")
21     @Pattern(regexp = "[7-9]{1}[0-9]{9}", message = "{athlete.contactnumber.invalid}")
22     private String contactNumber;
23     @NotNull(message = "{athlete.sport.notpresent}")
24     @Pattern(regexp = "[A-Za-z0-9\s]+", message = "{athlete.sport.invalid}")
25     private String sport;
26
27     public AthleteDTO() {
28         super();
29     }
30
31     public AthleteDTO(Integer athleteId, String athleteName, String gender, LocalDate dateOfBirth,
32                         String contactNumber, String sport) {
33         super();
34         this.athleteId = athleteId;
35         this.athleteName = athleteName;
36         this.gender = gender;
37         this.dateOfBirth = dateOfBirth;
38         this.contactNumber = contactNumber;
39         this.sport = sport;
40     }
41 }
```

Writable

Smart Insert

17 : 37 : 500

18:50



Mozilla Firefox

Postman

workspace - iap...

```
1 package com.infy.athletearena.validator;
2
3 import java.time.LocalDate;
4
5 public class AthleteValidator {
6
7
8     public static void validateAthlete(AthleteDTO athleteDTO) throws AthleteRegistrationException{
9         if( Boolean.FALSE.equals(isValidDateOfBirth(athleteDTO.getDateOfBirth())))
10            throw new AthleteRegistrationException("AthleteValidator.INVALID_DOB");
11     }
12
13     public static Boolean isValidDateOfBirth(LocalDate dateOfBirth) {
14         if(dateOfBirth.isAfter(LocalDate.now()) || dateOfBirth.isBefore(LocalDate.now().minusYears(100))) {
15             return false;
16         }
17         return true;
18     }
19
20 }
21
22 }
23 }
24 }
```

I

writable

Smart Insert

1:1:0

18:53



AthleteRepository.java

```
1 package com.infy.athletearena.repository;  
2  
3 @import java.util.List;  
4  
5 public interface AthleteRepository extends CrudRepository<Athlete, Integer> {  
6     List<Athlete> findBySport (String sport);  
7 }  
8  
9  
10  
11  
12
```

I

writable

Smart Insert

1:1:0

workspace - lap...

```
2 import java.util.ArrayList;
3
4
5
6
7 @Service(value = "athleteService")
8 @Transactional
9 public class AthleteServiceImpl implements AthleteService{
10     @Autowired
11     private AthleteRepository athleteRepository;
12
13     @Override
14     public List<AthleteDTO> getListOfAthletes(String sport) throws AthleteRegistrationException {
15         List<Athlete> athlete=athleteRepository.findBySport(sport);
16         if(athlete.isEmpty()) {
17             throw new AthleteRegistrationException("AthleteService.ATHLETE_UNAVAILABLE");
18         }
19         List<AthleteDTO> dto =new ArrayList<AthleteDTO>();
20         athlete.stream().forEach(x-> dto.add(new AthleteDTO().prepareDTO(x)));
21         dto.sort((x1,x2)->x1.getAthleteName().compareTo(x2.getAthleteName()));
22         return dto;
23     }
24
25     @Override
26     public AthleteDTO registerAthlete(AthleteDTO athleteDTO) throws AthleteRegistrationException {
27         AthleteValidator.validateAthlete(athleteDTO);
28         Athlete a=AthleteDTO.prepareEntity(athleteDTO);
29         a=athleteRepository.save(a);
30         athleteDTO.setAthleteId(a.getId());
31         return athleteDTO;
32     }
33
34
35     @Override
36     public AthleteDTO registerAthlete(AthleteDTO athleteDTO) throws AthleteRegistrationException {
37         AthleteValidator.validateAthlete(athleteDTO);
38         Athlete a=AthleteDTO.prepareEntity(athleteDTO);
39         a=athleteRepository.save(a);
40         athleteDTO.setAthleteId(a.getId());
41         return athleteDTO;
42     }
43
44 }
45 }
```

Writable

Smart Insert

1:1:0

18:53



Mozilla Firefox

Postman

workspace - iap...

```
1 package com.infy.athletearena.api;
2
3 import java.util.List;
4
5
6 @RestController
7 @RequestMapping(value = "api")
8 @Validated
9 public class AthleteAPI {
10
11     @Autowired
12     private AthleteService athleteService;
13
14     @GetMapping(value = "/athletes/{sport}")
15     public ResponseEntity<List<AthleteDTO>> getAthletesBySport(
16         @PathVariable @Pattern(regexp = "[A-Za-z0-9\\s]+",
17             message = "{athlete.sport.invalid}") String sport)
18         throws AthleteRegistrationException {
19
20         List<AthleteDTO> aDTO=athleteService.getListOfAthletes(sport);
21         return new ResponseEntity<>(aDTO,HttpStatus.OK);
22     }
23
24     @PostMapping(value = "/athletes")
25     public ResponseEntity<AthleteDTO> registerAthlete( AthleteDTO athleteDTO)
26         throws AthleteRegistrationException {
27
28         AthleteDTO a=athleteService.registerAthlete(athleteDTO);
29         return new ResponseEntity<>(a, HttpStatus.CREATED);
30     }
31
32 }
```

Writable

Smart Insert

1:1:0

```
22  
23 @RestControllerAdvice  
24 public class ExceptionControllerAdvice {  
25  
26     private static final Log LOGGER = LogFactory.getLog(ExceptionControllerAdvice.class);  
27  
28     @Autowired  
29     private Environment environment;  
30  
31     @ExceptionHandler(AthleteRegistrationException.class)  
32     public ResponseEntity<ErrorInfo> athleteRegistrationExceptionHandler(AthleteRegistrationException exception)  
33         LOGGER.error(exception.getMessage(), exception);  
34         ErrorInfo errorInfo = new ErrorInfo();  
35         errorInfo.setErrorCode(HttpStatus.BAD_REQUEST.value());  
36         errorInfo.setErrorMassage(environment.getProperty(exception.getMessage()));  
37         return new ResponseEntity<>(errorInfo, HttpStatus.BAD_REQUEST);  
38     }  
39  
40     @ExceptionHandler(Exception.class)  
41     public ResponseEntity<ErrorInfo> generalExceptionHandler(Exception exception) {  
42         LOGGER.error(exception.getMessage(), exception);  
43         ErrorInfo errorInfo = new ErrorInfo();  
44         errorInfo.setErrorCode(HttpStatus.INTERNAL_SERVER_ERROR.value());  
45         errorInfo.setErrorMassage(environment.getProperty("General.EXCEPTION_MESSAGE"));  
46         return new ResponseEntity<>(errorInfo, HttpStatus.INTERNAL_SERVER_ERROR);  
47     }  
48  
49     @ExceptionHandler({MethodArgumentNotValidException.class, ConstraintViolationException.class})  
50     public ResponseEntity<ErrorInfo> validatorExceptionHandler(Exception exception) {  
51         LOGGER.error(exception.getMessage(), exception);  
52         String errorMsg;  
53         // Implementation for validating method arguments and constraint violations
```

Writable

Smart Insert

1:1:0

18:54



Mozilla Firefox



workspace - lap...

		Success	Failed	Total
1	Athlete	3	0	3
2	AthleteAPI-Annotations	4	0	4
3	AthleteAPI-getAthletesBySport	2	0	2
4	AthleteAPI-registerAthlete	1	0	1
5	AthleteServiceImpl-Annotations	3	0	3
6	AthleteServiceImpl-getListOfAthletes	2	0	2
7	AthleteServiceImpl-registerAthlete	3	0	3
8	AthleteValidator-isValidDateOfBirth	4	0	4
9	AthleteValidator-validateAthlete	1	0	1
10	BeanValidationTest	8	0	8
11	DTOTest	8	0	8
12	ExceptionControllerAdviceTest	5	0	5
Total		44	0	44



18:55