```
2 package acme.features.manager.assignment;
4 import java.util.Collection;
 5 import java.util.HashSet;
 6 import java.util.Set;
 7 import java.util.stream.Collectors;
9 import org.springframework.beans.factory.annotation.Autowired;
10 import org.springframework.stereotype.Service;
12 import acme.client.data.models.Dataset;
13 import acme.client.services.AbstractService;
14 import acme.entities.project.Assignment;
15 import acme.features.manager.project.ManagerProjectRepository;
16 import acme.roles.Manager;
17
18@Service
19 public class ManagerAssignmentListService extends AbstractService<Manager, Assignment> {
21
      // Internal state -----
22
23
      @Autowired
24
      private ManagerProjectRepository repository;
25
26
      // AbstractService interface -------
27
28
29
      @Override
30
      public void authorise() {
31
          boolean status;
32
          int id;
33
34
          id = super.getRequest().getData("projectId", int.class);
35
          Manager manager = this.repository.findManagerByProjectId(id);
36
          status = super.getRequest().getPrincipal().getActiveRoleId() == manager.getId();
37
38
          super.getResponse().setAuthorised(status);
39
40
      @Override
41
      public void load() {
42
43
          int id = super.getRequest().getData("projectId", int.class);
          Collection<Assignment> objects = this.repository.findAllAssignmentsOfAProjectById
44
  (id).stream().distinct().collect(Collectors.toList());
45
          objects = this.deleteDuplicated(objects);
46
          super.getBuffer().addData(objects);
      }
47
48
49
      @Override
50
      public void unbind(final Assignment assignment) {
51
52
          assert assignment != null;
53
54
          Dataset dataset;
55
56
          dataset = super.unbind(assignment, "project", "userStory");
57
58
          super.getResponse().addData(dataset);
59
          if (assignment.getProject() != null)
              dataset.put("title", assignment.getProject().getTitle());
60
          if (assignment.getUserStory() != null)
61
```

```
62
              dataset.put("usTitle", assignment.getUserStory().getTitle());
63
64
      }
65
      private Collection<Assignment> deleteDuplicated(final Collection<Assignment> objects) {
66
67
          Set<String> uniquePairs = new HashSet<>();
          return objects.stream().filter(assignment -> {
68
              String pair = assignment.getProject() + "-" + assignment.getUserStory();
69
70
              if (uniquePairs.contains(pair))
71
                  return false;
72
              else {
73
                  uniquePairs.add(pair);
74
                  return true;
75
          }).collect(Collectors.toList());
76
77
      }
78
79 }
80
```