

```
1 import components.map.Map1L;
2 import components.sequence.Sequence;
3 import components.standard.Standard;
4
5 /**
6  * Kernel interface for managing college basketball team
7  * statistics.
8  */
9 public interface CollegeBasketballTeamKernel
10     extends Standard<CollegeBasketballTeamComponent> {
11
12     /**
13      * Retrieves all statistics for the specified team from an
14      * external source.
15      *
16      * @param teamName
17      *     the name of the team
18      * @requires teamName != null
19      * @ensures statistics for the specified team are retrieved
20      * and stored
21      */
22     void getAllStatistics(String teamName);
23
24     /**
25      * Adds a custom statistic to the team's data.
26      *
27      * @param category
28      *     the category of the statistic
29      * @param rank
30      *     the rank of the statistic
31      * @param value
32      *     the value of the statistic
33      * @requires category != null && value != null
34      * @ensures the custom statistic is added to the team's data
35      */
36     void addCustomStatistic(String category, int rank, String
37         value);
38
39     /**
40      * Removes a statistic category from the team's data.
41      *
42      * @param category
43      *     the category of the statistic to remove
44      * @requires category != null
```

```
41     * @ensures the specified statistic category is removed from
    the team's data
42     */
43     void removeStatistic(String category);
44
45     /**
46     * Retrieves statistics by category for the team.
47     *
48     * @param category
49     *         the category of statistics to retrieve
50     * @return a map containing the statistics for the specified
    category
51     * @requires category != null
52     * @ensures returns a map containing the statistics for the
    specified
53     *         category
54     */
55     Map1L<Integer, String> getStatisticsByCategory(String
    category);
56
57     /**
58     * Retrieves all categories of statistics for the team.
59     *
60     * @return a sequence containing all statistic categories
61     * @ensures returns a sequence containing all statistic
    categories
62     */
63     Sequence<String> getAllCategories();
64
65     /**
66     * Identifies the top 5 and bottom 5 statistics for the
    team.
67     *
68     * @ensures the top 5 and bottom 5 statistics for the team
    are identified
69     */
70     void bestAndWorstStatistics();
71 }
72
```