
CmpE 320 – Spring 2008 –Project #2 Evaluation Criteria

General

The project was evaluated in terms of the following criteria:

Correctness (55 points)

See “Correctness Evaluation” below.

Document (15 points)

- The project document was graded with one of the points (15, 10, 5, 0) which correspond to (good, fair, poor, none), respectively.
- The document should include the sections (all or those that are sufficient to explain the project) as stated in the Programming Project Documentation.
- The sections should include sufficient information and be written in a clear way such that the document serves as both a user manual and a technical manual. In other words, when reading the document, a user should be able to use the program and a programmer should understand the code without any difficulty.

Testing Strategy (10 points)

- The testing was graded with one of the points (10, 7, 5, 0) which correspond to (thorough, good, incomplete, none), respectively.
- The test cases should include sufficient data as to test all or most of the functionality of the program.

Style (10 points)

- The style was graded with one of the points (10, 8, 6, 3, 0) which correspond to (very good, good, fair, poor, very bad), respectively.
- The program should be written in a modular way. For instance, if a task you want to do is not trivial, then probably you should use some auxiliary rules.
- The code should be **highly commented**. Marks were deducted for missing comments.
- The filenames should be the same with the ones stated in the project specification.

Logic and Efficiency (10 points)

- The logic and efficiency of the code were graded with one of the points (10, 8, 6, 3, 0) which correspond to (very good, good, fair, poor, very bad), respectively.
- Making use of any properties of the language which were not allowed as stated in the project statement greatly reduced your grade you got in logic and efficiency evaluation.
- Marks were deducted for creating unnecessary lists or variables.
- Marks were deducted for missing constraints.
- Marks were deducted for missing or unnecessary base cases. For instance, checking for empty list as base case in a predicate and then calling another predicate where it is checked again.

Correctness Evaluation

Your program was tested using the following sample database:

```

team(ankaragucu, ankara).
team(besiktas, istanbul).
team(fenerbahce, istanbul).
team(galatasaray, istanbul).
team(kayserispor, kayseri).
team(oftas, ankara).
team(sivasspor, sivas).
team(trabzonspor, trabzon).

match(1, ankaragucu, 2, kayserispor, 0).
match(1, besiktas, 1, oftas, 0).
match(1, sivasspor, 1, fenerbahce, 0).
match(1, galatasaray, 4, trabzonspor, 0).

match(2, besiktas, 2, ankaragucu, 0).
match(2, fenerbahce, 2, galatasaray, 1).
match(2, sivasspor, 0, oftas, 1).
match(2, trabzonspor, 2, kayserispor, 1).

match(3, ankaragucu, 1, oftas, 0).
match(3, fenerbahce, 1, kayserispor, 0).
match(3, besiktas, 3, galatasaray, 2).
match(3, trabzonspor, 1, sivasspor, 0).

match(4, besiktas, 2, sivasspor, 3).
match(4, galatasaray, 1, kayserispor, 0).
match(4, fenerbahce, 1, ankaragucu, 1).
match(4, oftas, 1, trabzonspor, 1).

match(5, fenerbahce, 1, oftas, 0).
match(5, besiktas, 0, trabzonspor, 0).
match(5, kayserispor, 4, sivasspor, 3).
match(5, ankaragucu, 0, galatasaray, 1).

match(6, ankaragucu, 1, sivasspor, 2).
match(6, fenerbahce, 3, trabzonspor, 1).
match(6, besiktas, 3, kayserispor, 3).
match(6, oftas, 1, galatasaray, 2).

match(7, galatasaray, 3, sivasspor, 2).
match(7, oftas, 0, kayserispor, 2).
match(7, ankaragucu, 1, trabzonspor, 1).
match(7, fenerbahce, 1, besiktas, 1).

```

For each predicate, your mark was calculated as follows:

The correctness of your program was tested with the following test predicates that you were supposed to implement. If your code took any more than 15 seconds to run for a goal, the execution was aborted and the program was accepted as unsuccessful for that goal. The cases were carefully selected so that in all situations, correct code would finish within a second or two.

For each predicate, the test cases, the expected answer, and the points are as follows:

Test Case 1: `allTeams(L,N)`.

Expected Answer:

```
L = [ankaragucu, besiktas, fenerbahce, galatasaray, kayserispor, oftas, sivasspor, trabzonspor]
N = 8 ;

L = [ankaragucu, besiktas, fenerbahce, galatasaray, kayserispor, oftas, trabzonspor, sivasspor]
N = 8 ;

L = [ankaragucu, besiktas, fenerbahce, galatasaray, kayserispor, sivasspor, oftas, trabzonspor]
N = 8 ;

L = [ankaragucu, besiktas, fenerbahce, galatasaray, kayserispor, sivasspor, trabzonspor, oftas]
N = 8

Yes
```

Points: 5

Test Case 2: `teams([galatasaray, fenerbahce, besiktas], istanbul, N)`.

Expected Answer:

```
N = 3 ;

No
```

Points: 2,5

Test Case 3: `teams(L, ankara, N)`.

Expected Answer:

```
L = [ankaragucu]
N = 1 ;

L = [ankaragucu, oftas]
N = 2 ;

L = [oftas, ankaragucu]
N = 2 ;

L = [oftas]
N = 1 ;

No
```

Points: 2,5

Test Case 4: `wins(sivasspor, 5, L, N)`.

Expected Answer:

```
L = [fenerbahce, besiktas]
N = 2 ;
```

Points: 5

Test Case 5: `losses(galatasaray, 6, [fenerbahce, besiktas], 2)`.

Expected Answer:

```
Yes
```

Points: 5

Test Case 6: `draws(ankaragucu, 7, L, N)`.

Expected Answer:

```
L = [trabzonspor, fenerbahce]
N = 2 ;
```

Points: 5

Test Case 7: `point(oftas,7,P)`.

Expected Answer:

```
P = 4 ;
No
```

Points: 5

Test Case 8: `average(kayserispor,6,A)`.

Expected Answer:

```
A = -4 ;
No
```

Points: 5

Test Case 9: `sortTeams([fenerbahce,galatasaray,ankaragucu,besiktas],3,SortedTeams)`.

Expected Answer:

```
SortedTeams = [besiktas, fenerbahce, ankaragucu, galatasaray] ;
SortedTeams = [besiktas, ankaragucu, fenerbahce, galatasaray] ;
```

Points: 5

Test Case 10: `sortTeams([ankaragucu,besiktas,kayserispor,fenerbahce,sivasspor,trabzonspor],7,SortedTeams)`.

Expected Answer:

```
SortedTeams = [fenerbahce, besiktas, sivasspor, trabzonspor, ankaragucu, kayserispor] ;
No
```

Points: 5

Test Case 11: `leagueOrder(L,7)`.

Expected Answer:

```
L = [galatasaray, fenerbahce, besiktas, sivasspor, trabzonspor, ankaragucu, kayserispor, oftas] ;
No
```

Points: 5

Test Case 12: `topFive([T1,T2,T3,T4,T5],5)`.

Expected Answer:

T1 = besiktas
T2 = fenerbahce
T3 = galatasaray
T4 = trabzonspor
T5 = ankaragucu ;

No

Points: 5

TOTAL: 55