

I. Please enumerate and shortly characterize technical Software Engineering Development activities.

2p

II. The employee of a company are organized in teams. Each employer is member of only one team. A team has a name and a maximum number of members. Team members may participate at different meetings organized by their company. A participant to a meeting may be organizer, speaker or ordinary participant. Each meeting has a title and is organized in a day.

a) Using UML, please specify a class diagram describing the structure modeling the above problem.

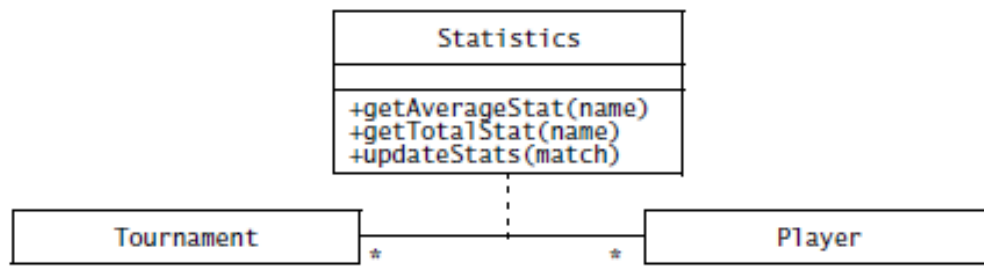
b) Using OCL, please specify appropriate invariants checking that:

- the meetings attended by team members are the same with the meetings organized by the company
- each team member does not participate at many meetings in the same day.

c) Using OCL, please specify an observer returning a team whose members participated at the largest number of meetings.

3.5p

III. Please represent the UML diagram equivalent with the following one and specify the Java code for the classes Tournament and Statistics that can be automatically generated for managing the associations of this model.



2p

IV. Please shortly characterize the blackbox and whitebox test cases.

1p