**Operation Contracts**

# Contract for: Record Match Stats

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Name: RecordMatchStats (Fouls\_Committed, Passes\_Attempted,

Passes\_Completed, Red\_Cards\_awarded, Saves, Shots\_Attempted,

Shots\_on\_Target, Tackles\_Attempted, Tackles\_Completed , Yellow\_Cards\_Awarded).

Responsibility: Adds Player Match Stats in the stats pool.

Cross Reference: UC: Add Performance Data.

Exception: If the Match Analyst enters a wrong statistical information of a player as input an error message is generated.

The Match Analyst must enter the total information of the player otherwise the system will generate error message.

Pre-conditions: A Player must exists because it describes the Player\_Stats.

# Contract for: Place Sell a Player Request

Name: Place\_Sell a Player\_Request (Player,Transfer type).

Responsibility: Team Manager places the request for a player to be sold and is

kept in a transfer request register.

Cross Reference: UC: Place Transfer Request (Sell a Player).

Exceptions: If the transfer agent is not authenticated it means he is trying to transfer a player that doesn’t belong to his affiliated club.

Pre-conditions: The Player must exist.

Post-conditions: The Transfer request instance is created and contains the reference to the “Player” that is to be transferred.

The Transfer Type attribute is set to “sell”.

All the transfer request instances are associated (contained) with a transfer request register.

# Contract for: Place sign a player request

Name: Place\_Sign a Player\_Request (Player,Transfer type).

Responsibility: Team Manager places the request for a player to be signed and is

kept in a transfer request register.

Cross Reference: UC: Place Transfer Request (Sign a Player).

Exceptions: If the transfer agent is not authenticated it means he is trying to transfer a player that doesn’t belong to his affiliated club.

Pre-conditions: The Player must exist.

Post-conditions: The Transfer request instance is created and contains the reference to the “Player” that is to be transferred to the club.

The Transfer Type attribute is set to “sign”.

All the transfer request instances are associated (contained) with a transfer request register.

# Contract for: Search by characteristics.

Name:

Search\_by\_characteristics(Min\_passing\_accuracy\_percentage,Max\_passing\_accuracy\_percentage,Min\_saves\_accuracy\_percentage,Max\_saves\_accuracy\_percentage, Min\_shooting\_accuracy\_percentage,Max\_shooting\_accuracy\_percentage, Min\_tackling\_accuracy\_percentage,Max\_tackling\_accuracy\_percentage,Min\_goals\_per\_game,Max\_goals\_per\_game,Min\_assists\_per\_game,Max\_assists\_per\_game)

Responsibility: To generate the reports containing desired player for the scout depending upon the characteristics scout entered.

Cross Reference: UC: Scout Players

Exceptions: The scout’s required characteristics don’t match.

Scout enters ambiguous query.

Pre-conditions: The stat pool must contain instances of player stats.

Post-conditions: Scout Report object is created.

Scout Report attributes are modified.

Scout Report object is associated with Scout Report Register.

# Contract for: Acquire transfer request list.

Name: Acquire\_Transfer\_request\_list()

Responsibility: To show the transfer request list of the selling players to Transfer agent that is forwarded to him by the Team Manager.

Cross Reference: UC: Sell a Player

Exceptions:

Pre-conditions: The Transfer request register must contain Transfer requests placed by the Team Manager.

Post-conditions:

# Contract for: Process Transfer Request.

Name: Process\_Transfer\_Request(Transfer\_Request)

Responsibility: To process the transfer request that is chosen by the Transfer Agent.

Cross Reference: UC: Sell a Player.

Exceptions:

Pre-conditions: The Transfer request list has been acquired by the Transfer Agent.

Post-conditions: Transfer\_Request object is initiated.

Transfer\_Request object attributes are modified.

Transfer\_Request object is associated with Transfer market.

# Contract for: Acquire transfer request list.

Name: Acquire\_Transfer\_request\_list()

Responsibility: To show the transfer request list of the signing players to Transfer agent that is forwarded to him by the Team Manager.

Cross Reference: UC: Sign a Player

Exceptions:

Pre-conditions: The Transfer request register must contain Transfer requests placed by the Team Manager.

Post-conditions:

# Contract for: Process Transfer Request.

Name: Process\_Transfer\_Request(Transfer\_Request)

Responsibility: To process the transfer request that is chosen by the Transfer Agent.

Cross Reference: UC: Sign a Player.

Exceptions:

Pre-conditions: The Transfer request list has been acquired by the Transfer Agent.

Post-conditions: Transfer\_Request object is initiated and its “player and club” attributes are matched to the corresponding attributes of the object present in Transfer Market.

If match is found the object in the transfer market is de-associated and the corresponding player object’s attribute “Club” in the player pool is modified.

# Contract for: Add a new Player

Name: Add\_a\_new\_Player(Age,Club,Player\_Name,Position,Role)

Responsibility: To add the Player along with information of the Player

Cross Reference: UC: Update Player/Team/Clubs and Manager.

Exceptions: In case the club doesn’t exist. An error message is displayed “club not found”.

Pre-conditions: Club must exist.

Post-conditions: Player instance is created.

Attributes of Player are modified.

Player is associated with the player pool.

# Contract for: Add Team Manager

Name: Add\_Team\_Manager (Club\_Affiliation,Manager\_Name).

Responsibility: To add the Team Manager along with information of the Team Manager.

Cross Reference: UC: Update Player/Team/Clubs and Manager.

Exceptions: In case the club doesn’t exist. An error message is displayed “club not found”.

Pre-conditions: Club must exist.

Post-conditions: Manager instance is created.

Attributes of Manager are modified.

Manager is associated with the Team Manager register.

# Contract for: Add Club

Name: Add\_Club(Club\_Name).

Responsibility: To add the Club along with information in the Club.

Cross Reference: UC: Update Player/Team/Clubs and Manager.

Exceptions:

Pre-conditions:

Post-conditions: Club instance is created.

Attribute of club is modified.

Club is associated with the Player.

# Contract for: Delete Player

Name: Delete\_Player(Player\_Name)

Responsibility: To delete the Player along with information in the Player

Cross Reference: UC: Update Player/Team/Clubs and Team Manager.

Exceptions: In case the Player doesn’t exist. An error message is displayed “Player not found”.

Pre-conditions: Player must exist.

Post-conditions:

If Player\_Name is matched with a Player’s “Player\_Name” present in the player pool that player is disassociated from the player pool.

# Contract for: Delete Team Manager

Name: Delete\_Team\_Manager(Team\_Manager\_Name)

Responsibility: To delete the Team Manager along with information in the Team Manager.

Cross Reference: UC: Update Player/Team/Clubs and Team Manager.

Exceptions: In case the Team Manager doesn’t exist. An error message is displayed “Team Manager not found”.

Pre-conditions: Team Manager must exist.

Post-conditions:

If Team\_Manager\_Name is matched with a Team Manager’s “Team \_Manager \_Name” present in the Team Manager register that Team Manager is disassociated from the Team Manager register.

# Contract for: Player to be edited

Name: Edit\_Player(Player\_Name)

Responsibility: To find the Player attributes of the specified player.

Cross Reference: UC: Update Player/Team/Clubs and Manager.

Exceptions: In case the Player doesn’t exist. An error message is displayed “Player not found”.

Pre-conditions: Player must exist.

Post-conditions:

# Contract for: Updated Player

Name: Updated\_Player(Age,Club,Player\_Name,Position,Role)

Responsibility: To modify the Player attributes of the specified player.

Cross Reference: UC: Update Player/Team/Clubs and Manager.

Exceptions: In case the Player doesn’t exist. An error message is displayed “Player not found”.

Pre-conditions: Player must exist.

Post-conditions: Attributes of Player are modified with the new attributes passed to it.

# Contract for: Team Manager to be edited

Name: Edit\_ Team Manager (Manager\_Name)

Responsibility: To find the Team Manager attributes of the specified Team Manager.

Cross Reference: UC: Update Player/Team/Clubs and Manager.

Exceptions: In case the Team Manager doesn’t exist. An error message is displayed “Team Manager not found”.

Pre-conditions: Team Manager must exist.

Post-conditions:

# Contract for: Updated Team Manager

Name: Updated\_Team\_Manager(Club\_Affiliation,Manager\_Name)

Responsibility: To modify the Team Manager attributes of the specified Team Manager.

Cross Reference: UC: Update Player/Team/Clubs and Manager.

Exceptions: In case the Team Manager doesn’t exist. An error message is displayed “Team Manager not found”.

Pre-conditions: Team Manager must exist.

Post-conditions: Attributes of Team Manager are modified with the new attributes passed to it.

# Contract for: View Individual Reports

Name: View\_individual\_report(Player\_Name)

Responsibility: To show the individual reports containing statistical data of the specified player.

Cross Reference: UC: View Squad Reports.

Exceptions: In case the Player doesn’t exist. An error message is displayed “Player not found”.

Pre-conditions: Player must exist.

Post-conditions:

# Contract for: View Team Reports

Name: View\_Team\_Report()

Responsibility: To show the Team Reports containing statistical data of the Team.

Cross Reference: UC: View Squad Reports.

Exceptions:

Pre-conditions: Team Report must exist.

Post-conditions: