UML Class Diagram - U10 Soccer Team Manager

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<<Enumerator>> Gender

- MALE
- FEMALE
- OTHERS

<<Enumerator>> PlayingPosition

- GOALIE
- DEFENDER
- MIDFIELDER
- FORWARD

<<U10SoccerTeamPerson>>

+ getFirstName(): String
+ getLastName(): String
+ getAge(): int
+ getBirthDate(): String
+ getPreferredPosition(): PlayingPosition
+ getGender(): Gender
+ getHeight(): double
+ getWeight(): double
+ getFavoriteColor(): String
+ getPersonInfo(): ArrayList<String>

<<U10SoccerTeamPlayer>>

+ isOnTeam(): boolean
+ hasPlayingPosition(): boolean
+ getPlayingPosition(): PlayingPosition
+ getJerseyNumber(): JerseyNumber
+ getSkillLevel(): int
+ isFit(): boolean
+ getTeamMemberRating(): int
+ isTeamPlayer(): boolean
+ getTotalMatchesPlayed(): int
+ getTotalMatchesWon(): int
+ getTotalGoalsScored(): int
+ wonLastMatch(): boolean
+ getTotalInfractions(): int
+ getAverageMatchesWon(): int
+ onProbation(): boolean
+ isBenched(): boolean
+ getYearPlayerJoinedClub(): int
+ getAgeWithClub(int currentYear): int
+ getYearSelectedToTeam(): int
+ getAgeWithTeam(int currentYear): int
+ getFullPlayerProfile(): ArrayList<String>
+ getCoachListOfPlayers(): ArrayList<String>

U10SoccerTeamPersonImpl

- firstName: String
- lastName: String
- age: Date
- getBirthDate: Date
- preferredPosition: PlayingPosition
- gender: Gender
- height: double
- weight: double
- favoriteColor: String

+ getFirstName(): String
+ getLastName(): String
+ getAge(): int
+ getBirthDate(): String
+ getPreferredPosition(): PlayingPosition
+ getGender(): Gender
+ getHeight(): double
+ getWeight(): double
+ getFavoriteColor(): String
+ getPersonInfo(): ArrayList<String>
+ toString(): String

Date

- dayOfBirth: int
- monthOfBirth: int
- yearOfBirth: int
- currentDay: int
- currentMonth: int
- currentYear: int

+ getDayOfBirth(): int
+ getMonthOfBirth(): int
+ getYearOfBirth(): int
+ getCurrentDay(): int
+ getCurrentMonth(): int
+ getCurrentYear(): int

U10SoccerTeamPlayerImpl

- person: Person
- playerProfile: ArrayList<String>
- isOnTeam: boolean
- hasPlayingPosition: boolean
- assignedPlayingPosition: Playing Position
- jerseyNumber: JerseyNumber
- skillLevel: int
- isFit: boolean
- teamMemberRating: int
- goodTeamFit: boolean
- totalMatchesPlayed: int
- totalMatchesWon: int
- totalGoalsScored: int
- wonLastMatch: boolean
- totalInfractions: int
- onProbation: boolean
- isBenched: boolean
- yearPlayerJoinedClub: int
- ageWithClub: int
- yearSelectedToTeam: int
- ageWithTeam: int

+ isOnTeam(): boolean
+ hasPlayingPosition(): boolean
+ getPlayingPosition(): PlayingPosition
+ getJerseyNumber(): JerseyNumber
+ getSkillLevel(): int
+ isFit(): boolean
+ getTeamMemberRating(): int
+ isTeamPlayer(): boolean
+ getTotalMatchesPlayed(): int
+ getTotalMatchesWon(): int
+ getTotalGoalsScored(): int
+ wonLastMatch(): boolean
+ getTotalInfractions(): int
+ getAverageMatchesWon(): int
+ onProbation(): boolean
+ isBenched(): boolean
+ getYearPlayerJoinedClub(): int
+ getAgeWithClub(int currentYear): int
+ getYearSelectedToTeam(): int
+ getAgeWithTeam(int currentYear): int
+ getFullPlayerProfile(): ArrayList<String>
+ getCoachListOfPlayers(): ArrayList<String>
+ toString(): String

<<U10SoccerTeamManagerModel>>

+ setClubName(String set): String
+ getClubName(): String
+ countAllPlayers(TreeMap treeMap): int
+ countTeamMembers(TreeMap treeMap): int
+ countStartingLineup(TreeMap treeMap): int
+ isTeamFull(TreeMap treeMap): boolean
+ isStartingLineupFull(TreeMap treeMap): boolean
+ assignJerseyNumber(Player newPlayer): Player
+ assignPlayingPosition(Player newPlayer): Player
+ setPlayerPosition(Player newPlayer): PlayerPosition
+ addPlayerToTeam(Player player, boolean madeTeam): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllPlayersInAcademy(Player player): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllPlayersInTeam(Player player): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllPlayersOnBench(Player player): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllStartingLineup(Player player, PlayerPosition position): TreeMap<JerseyNumber, ArrayList<Player>>
+ getCoachVersionListOfAllPlayers: TreeMap<JerseyNumber, ArrayList<Player>>
+ getCoachVersionStartingLineup: TreeMap<JerseyNumber, ArrayList<Player>>

U10SoccerTeamManagerModelImpl

- clubName: String
- newPlayer: Player
- countAllPlayers: int
- countTeamMembers: int
- countStartingLineup: int
- newGroup: TreeMap<JerseyNumber, ArrayList<Player>>
- minTeamMembers: int
- maxTeamMembers: int
- maxStartingLineup: int

+ setClubName(String set): String
+ getClubName(): String
+ countAllPlayers(TreeMap treeMap): int
+ countTeamMembers(TreeMap treeMap): int
+ countStartingLineup(TreeMap treeMap): int
+ isTeamFull(TreeMap treeMap): boolean
+ isStartingLineupFull(TreeMap treeMap): boolean
+ assignJerseyNumber(Player newPlayer): Player
- setJerseyNumber(): JerseyNumber
+ assignPlayingPosition(Player newPlayer): Player
+ setPlayerPosition(Player newPlayer): PlayerPosition
+ addPlayerToTeam(Player player, boolean madeTeam): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllPlayersInAcademy(Player player): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllPlayersInTeam(Player player): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllPlayersOnBench(Player player): TreeMap<JerseyNumber, ArrayList<Player>>
+ getAllStartingLineup(Player player, PlayerPosition position): TreeMap<JerseyNumber, ArrayList<Player>>
+ getCoachVersionListOfAllPlayers: TreeMap<JerseyNumber, ArrayList<Player>>
+ getCoachVersionStartingLineup: TreeMap<JerseyNumber, ArrayList<Player>>

SoccerTeamDriver

- Person newPerson: Person
- Player newPlayer: Player
- Team newTeam: Team

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newPerson: personOne():
newPlayer(newPerson):
Team createTeam(newPlayer):

<<Enumerator>> JerseyNumber

- ONE
- TWO
- THREE
- FOUR
- FIVE
- SIX
- SEVEN
- EIGHT
- NINE
- TEN
- ELEVEN
- TWELVE
- THIRTEEN
- FOURTEEN
- FIFTEEN
- SIXTEEN
- SEVENTEEN
- EIGHTEEN
- NINETEEN
- TWENTY