### Detailed Description of Components

#### Class Diagram

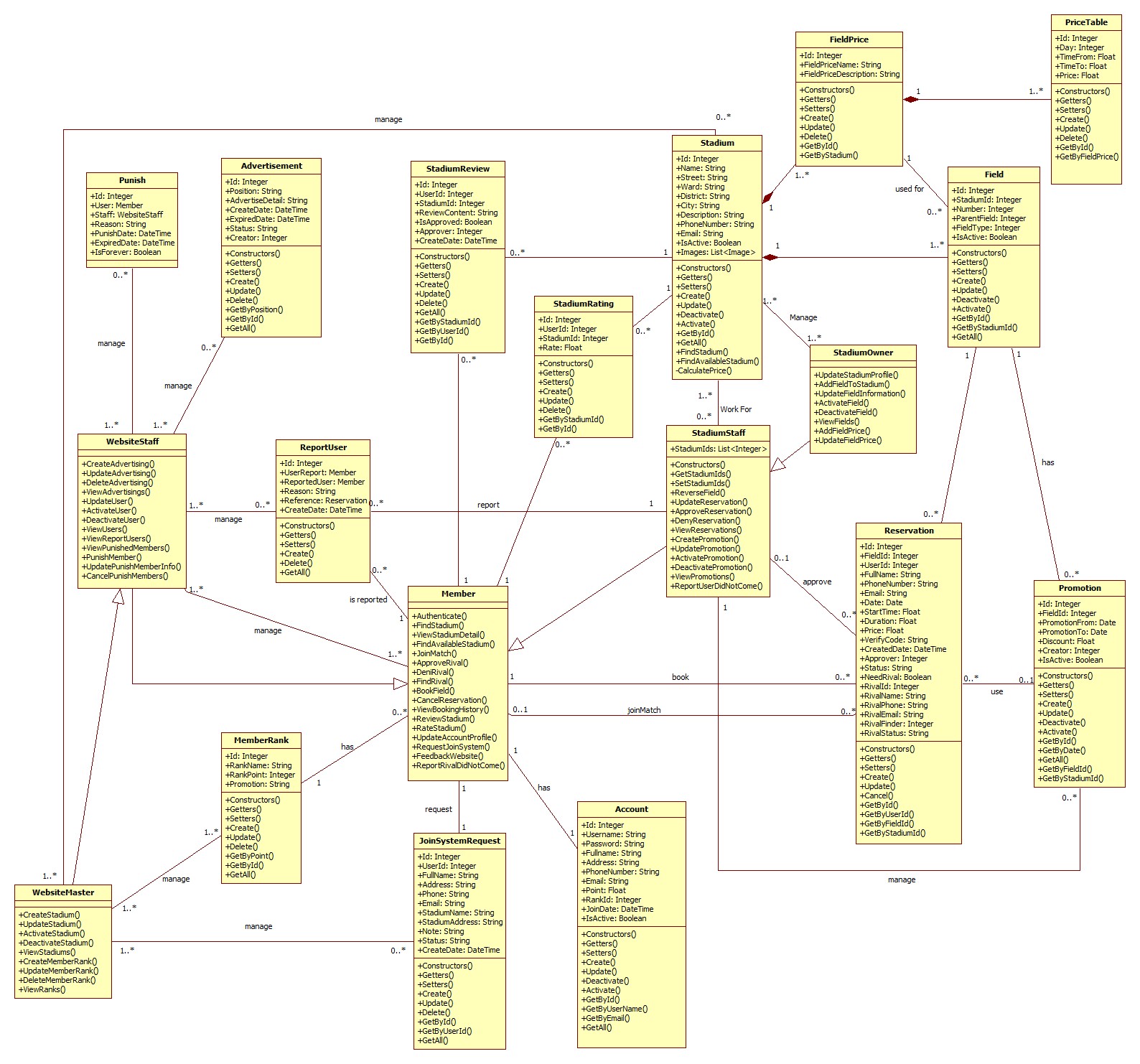


Figure 39: General Class Diagram

#### Class Diagram Explanation

##### Role

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of Role |
| Role | String | Role |
| DisplayName | String | Display name of Role |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Account | Initialize a role with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Role | Integer | Create a role and save it to database |
| Update | * Role | Integer | Update information of an existing role in database |

##### Account

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of an user in system |
| Username | String | Name of account, it is unique in system |
| Password | String | Password of account |
| FullName | String | Full name of user |
| Address | String | Address of user |
| PhoneNumber | String | Phone number of user |
| Email | String | Email of user |
| Point | Float | Point of user, it is used to calculate rank of account |
| RankId | Integer | Rank of account |
| JoinDate | Date | The date when user join this system |
| IsActive | Boolean | Is this account active |
| Role | Integer | Id of role |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Account | Initialize an account with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Account | Integer | Create an account and save it to database |
| Update | * Password * FullName * Address * PhoneNumber * Email * Point * RankId * Role | Integer | Update information of an existing account in database |
| Deactivate | N/A | Integer | De-active an account |
| Activate | N/A | Integer | Activate an account |
| GetById | * Id | Account | Get an account instance by Id of account from database |
| GetByUserName | * UserName | Account | Get an account instance by UserName of account from database |
| GetByEmail | * Email | Account | Get an account instance by Email of account from database |
| GetAll | N/A | List<Account> | Get all account from database |

##### Stadium

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of stadium |
| Name | String | Name of stadium |
| Street | String | Name of street that stadium located |
| Ward | String | Name of ward that stadium located |
| District | String | Name of district that stadium located |
| City | String | Name of city or province that stadium located |
| Description | String | Description of stadium |
| PhoneNumber | String | Phone number of stadium |
| Email | String | Email of stadium |
| IsActive | Boolean | Is the stadium active |
| MainOwner | Integer | Main owner of stadium |
| OpenTime | Float | Open time of stadium |
| CloseTime | Float | Close time of stadium |
| ExpiredDate | Date | Expired date of stadium |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Stadium | Initialize an Stadium with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Stadium | Integer | Create a stadium and save it to database |
| Update | * Name * Street * Ward * District * City * Description * PhoneNumber * Email * MainOwner * OpenTime * CloseTime * ExpiredDate | Integer | Update information of an existing stadium in database |
| Deactivate | N/A | Integer | De-active a stadium |
| Activate | N/A | Integer | Activate a stadium |
| GetById | * Id | Stadium | Get an stadium instance by Id of stadium from database |
| GetAll | N/A | List<Stadium> | Get all account from database |
| FindStadium | * Name * Address * FieldType | List<Stadium> | Get all stadiums correspond with filter |
| FindAvailable  Stadium | * Address * FieldType * Date * StartTime * Duration | List<Stadium> | Get all stadiums those are available with request date, time, location |

##### Field

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of field |
| StadiumId | Integer | Id of stadium that contain this field |
| Number | Integer | Number of field in stadium |
| ParentField | Integer | Id of another field that contain this field |
| FieldType | Integer | Type of field |
| IsActive | Boolean | Is this field active |
| PriceId | Integer | Id of price that is applied for this field |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Field | Initialize an Field with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Field | Integer | Create a field and save it to database |
| Update | * Name * Street * Ward * District * City * Description * PhoneNumber * Email | Integer | Update information of an existing field in database |
| Deactivate | N/A | Integer | De-active a field |
| Activate | N/A | Integer | Activate a field |
| GetById | * Id | Field | Get a field instance by Id of field from database |
| GetByStadiumId | * StadiumId | List<Field> | Get all field of the stadium that has corresponding id |
| GetAll | N/A | List<Field> | Get all field from database |

##### FieldPrice

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of field price |
| StadiumId | Integer | Id of stadium that has this price |
| FieldPriceName | String | Name of this price |
| FieldPriceDescription | String | Description of this price |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | FieldPrice | Initialize an FieldPrice with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class FieldPrice | Integer | Create a price of field and save it to database |
| Update | * FieldId * TimeFrom * TimeTo * Price * Day | Integer | Update information of an existing field price in database |
| Delete | * Id | Integer | Delete a field price |
| GetById | * Id | FieldPrice | Get a field price instance by Id of field pricefrom database |
| GetByDayTime | * Day * StartTime | FieldPrice | Get Field Price for Day, StartTime |
| GetAll | N/A | List<FieldPrice> | Get all field price from database |
| GetByFieldId | * FieldId | List<FieldPrice> | Get All FieldPrice of a field |

##### PriceTable

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of price table |
| FieldPriceId | Integer | Id of field price that use this price table |
| Day | Date | Date when this price is applied |
| TimeFrom | Float | This price is applied from this time |
| TimeTo | Float | This price is applied to this time |
| Price | Float | Price of this price table |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | PriceTable | Initialize an price table with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class PriceTable | Integer | Create a price table and save it to database |
| Update | * FieldPriceId * Date * TimeFrom * TimeTo * Price | Integer | Update information of an existing price table in database |
| Delete | * Id | Integer | Delete a price table |
| GetById | * Id | PriceTable | Get a price table instance by Id from database |
| GetByFieldPriceId | * FieldPriceId | List<PriceTable> | Get all price table of a field price |

##### ReportUser

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of report |
| UserReport | Integer | Id of user who created report |
| ReportedUser | Integer | Id of user who is reported |
| Reason | String | Reason of report |
| Reference | Integer | Reference of report |
| CreateDate | DateTime | Date when report is created |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Promotion | Initialize an Promotion with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Promotion | Integer | Create a promotion and save it to database |
| Update | * FieldId * PromotionFrom * PromotionTo * Discount * Creator | Integer | Update information of an existing promotion in database |
| Delete | * Id | Integer | Delete a promotion |
| GetById | * Id | Promotion | Get a Promotion instance by Id from database |
| GetByDate | * Date | List<Promotion> | Get all Promotion for date |
| GetAll | N/A | List<Promotion> | Get all Promotion from database |
| GetByFieldId | * FieldId | List<Promotion> | Get all Promotion of a field |
| GetByStadiumId | * StadiumId | List<Promotion> | Get all Promotion of a stadium |

##### Punish

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of punish |
| User | Integer | Id of user who was punished |
| Staff | Integer | Id of staff who punish user |
| Reason | String | Reason of this punish |
| PunishDate | DateTime | Date when staff punish user |
| ExpiredDate | DateTime | Date when this punish expired |
| IsForever | Boolean | Is this punish is forever |

##### Promotion

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of promotion |
| FieldId | Integer | Id of field that use this promotion |
| PromotionFrom | Date | Start date that use this promotion |
| PromotionTo | Date | Expired date of this promotion |
| Discount | Float | Discount amount of this promotion |
| Creator | Integer | Id of staff that create this promotion |
| IsActive | Boolean | Is this promotion active |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Promotion | Initialize an Promotion with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Promotion | Integer | Create a promotion and save it to database |
| Update | * FieldId * PromotionFrom * PromotionTo * Discount * Creator | Integer | Update information of an existing promotion in database |
| Delete | * Id | Integer | Delete a promotion |
| GetById | * Id | Promotion | Get a Promotion instance by Id from database |
| GetByDate | * Date | List<Promotion> | Get all Promotion for date |
| GetAll | N/A | List<Promotion> | Get all Promotion from database |
| GetByFieldId | * FieldId | List<Promotion> | Get all Promotion of a field |
| GetByStadiumId | * StadiumId | List<Promotion> | Get all Promotion of a stadium |

##### StadiumReview

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of review |
| UserId | Integer | Id of user create this review |
| StadiumId | Integer | Id of stadium being reviewed |
| ReviewContent | Float | Content of this review |
| IsApproved | Float | Is this review approved |
| Approver | Integer | Id of stadium staff approve this review |
| CreateDate | DateTime | The date that this review is created |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | StadiumReview | Initialize an StadiumReview with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class StadiumReview | Integer | Create a review of stadium and save it to database |
| Update | * ReviewContent * IsApproved * TimeTo | Integer | Update information of an existing review in database |
| Delete | * Id | Integer | Delete a Review |
| GetById | * Id | StadiumReview | Get a review by Id of StadiumReview from database |
| GetByUserId | * UserId | List<Stadium Review> | Get all review of an user |
| GetAll | N/A | List<Stadium Review> | Get all review from database |
| GetByStadiumId | * StadiumId | List<Stadium Review> | Get all review of a stadium |

##### StadiumRating

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of review |
| UserId | Integer | Id of user create this rate |
| StadiumId | Integer | Id of stadium being rated |
| Rate | Float | Rate |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | StadiumRating | Initialize an StadiumRating with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class StadiumRating | Integer | Create a rate of stadium and save it to database |
| Update | * Rate | Integer | Update rate of an existing rate in database |
| Delete | * Id | Integer | Delete a Rate |
| GetById | * Id | StadiumRating | Get a review by Id of StadiumRating from database |
| GetByStadiumId | * StadiumId | List<Stadium  Rating> | Get all rate of a stadium |

##### Reservation

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of Reservation |
| FieldId | Integer | Id of field that user book |
| UserId | Integer | Id of user create reservation |
| FullName | String | Name of person who book the field (booker) |
| PhoneNumber | String | Phone number of booker |
| Email | String | Email of booker |
| Date | Date | Date which booker want to reverse |
| StartTime | Float | Start time which booker want to start using |
| Duration | Float | How long booker want to using |
| Price | Float | Price of this reservation |
| VerifyCode | String | Verify code of this reservation, booker use this to trade with stadium manager for their approval |
| CreateDate | DateTime | The time this reservation is created |
| Approver | Integer | Id of stadium manager who approve this reservation |
| Status | String | Status of reservation |
| HasRival | Boolean | False if booker want to get a help for finding a rival  True if booker has a rival |
| RivalId | Integer | Id of an user who join as rival of booker (rival) |
| RivalName | String | Name of rival |
| RivalPhone | String | Phone number of rival |
| RivalEmail | String | Email of rival |
| RivalFinder | Integer | Id of user who found rival for this reservation  It can be Id of booker or stadium manager |
| RivalStatus | String | Status of rival |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Reservation | Initialize an Reservation with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Reservation | Integer | Create a reservation and save it to database |
| Update | * FieldId * FullName * PhoneNumber * Email * Date * StartTime * Duration * Price * CreateDate * Approver * Status * HasRival * RivalId * RivalName * RivalPhone * RivalEmail * RivalFinder * RivalStatus | Integer | Update reservation information of an existing reservation in database |
| Cancel | * Id | Integer | Cancel a Reservation |
| GetById | * Id | Reservation | Get a reservation by Id from database |
| GetByUserId | * UserId | List<Reservation> | Get all reservation of an user |
| GetByFieldId | * FieldId | List<Reservation> | Get all reservation of a field |
| GetByStadiumId | * StadiumId | List<Reservation> | Get all reservation of a stadium |

##### JoinSystemRequest

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of review |
| UserId | Integer | Id of user submit request (requester) |
| FullName | String | Full name of requester |
| Address | String | Address of requester |
| Phone | String | Phone of requester |
| Email | String | Email of requester |
| StadiumName | String | Name of stadium owned by requester |
| StadiumAddress | String | Address of stadium |
| Note | String | Note of requester |
| Status | String | Status of request |
| CreateDate | DateTime | Create date of request |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | RequestJoinSystem | Initialize an RequestJoinSystem with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class RequestJoinSystem | Integer | Create a request and save it to database |
| Update | * FullName * Address * Phone * Email * StadiumName * StadiumAddress * Note * Status | Integer | Update request information of an existing request in database |
| Delete | * Id | Integer | Delete a RequestJoinSystem |
| GetById | * Id | RequestJoin  System | Get a request by Id from database |
| GetByUserId | * UserId | List<Request  JoinSystem> | Get all request of an user |
| GetAll | N/A | List<Request  JoinSystem> | Get all request |

##### Member Rank

* **Atributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of rank |
| RankName | String | Name of rank |
| RankPoint | Integer | Minimum point to get rank |
| Promotion | String | Promotion of rank |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | MemberRank | Initialize an MemberRank with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class MemberRank | Integer | Create a MemberRank and save it to database |
| Update | * RankName * RankPoint * Promotion | Integer | Update MemberRank information of an existing MemberRank in database |
| Delete | * Id | Integer | Delete a MemberRank |
| GetByPoint | * Id | MemberRank | Get a MemberRank by point |
| GetById | * UserId | MemberRank | Get a MemberRank by id |
| GetAll | N/A | List<Member  Rank> | Get all MemberRank |

##### Advertisement

* **Atributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| Id | Integer | Id of advertisement |
| Position | String | Position of advertisement |
| AdvertiseDetail | String | Content of advertisement |
| CreateDate | DateTime | Create date of advertisement |
| ExpiredDate | DateTime | Expired date of advertisement |
| Status | String | Status of advertisement |
| Creator | Integer | Id of creator |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | Advertisement | Initialize an Advertisement with value (optional) |
| Getters | N/A | Type of attribute | Get value of an attribute corresponding with getter of attribute |
| Setters | Value of attribute | Void | Set value for an attribute corresponding with setter of attribute |
| Create | All of attribute of class Advertisement | Integer | Create an Advertisement and save it to database |
| Update | * Position * AdvertiseDetail * ExpiredDate * Status | Integer | Update Advertisement information of an existing Advertisement in database |
| Delete | * Id | Integer | Delete an Advertisement |
| GetByPosition | * Position | Advertisement | Get an Advertisement by position |
| GetById | * Id | Advertisement | Get an Advertisement by id |
| GetAll | N/A | List<Advertisement> | Get all Advertisement |

##### Member

Inherit all attributes and methods of class Account

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Authenticate | * UserName * Password | Boolean | Authenticate a user with system |
| FindStadium | * StadiumName * Location * FieldType | List<Stadium> | Find stadium with some option, let a option null to ignore that option when search |
| ViewStadiumDetail | * StadiumId | Stadium | View detail of a stadium with member view |
| FindAvailable  Stadium | * Location * FieldType * Date * StartTime * Duration | List<Stadium> | Find available stadium with options |
| FindRival | * Location * FieldType * Date * StartTime * Duration | List<Reservation> | Find list reservation that do not have rival |
| JoinMatch | * ReservationId | Void | Join a match as rival of booker |
| BookField | * FieldId * FullName * Address * Phone * Email * Date * StartTime * Duration * HasRival | Boolean | Book a field |
| CancelReservation | * ReservationId | Void | Cancel a reservation |
| ViewBookingHistory | * UserId | List<Reservation> | View history of booking with Member view |
| ReviewStadium | * StadiumId * UserId * ReviewContent | Void | Review a stadium |
| RateStadium | * StadiumId * UserId * Rate | Void | Rate a stadium |
| UpdateAccount  Profile | * UserId * Password * FullName * Address * PhoneNumber * Email | Void | Update account information |
| RequestJoinSystem | * UserId * FullName * Address * PhoneNumber * Email * StadiumName * StadiumAddress * Note | Void | Request for joining system of owned stadium |
| FeedbackWebsite | * Content * FullName * Email | Void | Send feedback content to email |

##### WebsiteStaff

Inherit all attributes and methods of class Member

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| CreateAdvertising | * Position * AdvertisementDetail * ExpiredDate * Status | Void | Create an advertisement |
| UpdateAdvertising | * AdvertisementId * Position * AdvertisementDetail * ExpiredDate * Status | Void | Update an advertisement |
| DeleteAdvertising | * AdvertisementId | Void | Delete an advertisement |
| ViewAdvertisings | N/A | List<Advertisement> | View all Advertisements with website staff view |
| UpdateUser | * UserId * Password * Email * Point * IsActive * Role | Void | Update information of an user with website staff permission |
| ActivateUser | * UserId | Void | Activate an user |
| DeactivateUser | * UserId | Void | Deactivate an user |
| ViewUsers | N/A | List<User> | View all users with website staff view |

##### WebsiteMaster

Inherit all attributes and methods of class WebsiteStaff

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| CreateStadium | * Name * Street * Ward * District * City * Description * PhoneNumber * Email * IsActive | Void | Create a stadium |
| UpdateStadium | * StadiumId * Name * Street * Ward * District * City * Description * PhoneNumber * Email * IsActive | Void | Update a stadium |
| ActivateStadium | * StadiumId | Void | Delete an advertisement |
| DeactivateStadium | * StadiumId |  |  |
| ViewStadiums | N/A | List<Stadium> | View all Stadium with website master view |
| CreateMemberRank | * RankName * RankPoint * Promotion | Void | Create a member rank |
| UpdateMemberRank | * MemberRankId * RankName * RankPoint * Promotion | Void | Update a member rank |
| DeleteMemberRank | * MemberRankId | Void | Delete a member rank |
| ViewRanks | N/A | List<Member  Rank> | View all member rank with website master view |

##### StadiumStaff

Inherit all attributes and methods of class Member

* **Attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| StadiumIds | List<Integer> | List ids of stadium those staff work for |

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| Constructors | Optional | StadiumStaff | Initialize a StadiumStaff with value (optional) |
| GetStadiumIds | N/A | List<Integer> | Get list ids of stadium those staff work for |
| SetStadiumIds | * StadiumIds | Void | Set list ids of stadium those staff work for |
| ReverseReservation | * FieldId * FullName * PhoneNumber * Email * Date * StartTime * Duration * HasRival | Void | Create a reservation for a field that staff manage |
| UpdateReservation | * FieldId * FullName * PhoneNumber * Email * Date * StartTime * Duration * HasRival * RivalName * RivalPhone * RivalEmail * RivalStatus | Void | Update a reservation that staff manage |
| ApproveReservation | * ReservationId | Void | Approve a reservation that staff manage |
| DenyReservation | * ReservationId | Void | Deny a reservation that staff manage |
| ViewReservations | N/A | List<Reservation> | View list reservation that staff manage |
| CreatePromotion | * FieldId * PromotionFrom * PromotionTo * Discount * IsActive | Void | Create a promotion for a field that staff manage |
| UpdatePromotion | * PromotionId * FieldId * PromotionFrom * PromotionTo * Discount * IsActive | Void | Update a promotion for a field that staff manage |
| ActivatePromotion | * PromotionId | Void | Activate a promotion that staff manage |
| DeactivatePromotion | * PromotionId | Void | Deactivate a promotion that staff manage |
| ViewPromotion | N/A | List<Promotion> | View list promotion that staff manage |

##### StadiumOwner

Inherit all attributes and methods of class StadiumStaff

* **Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Parameter** | **Return Type** | **Description** |
| UpdateStadium  Profile | * StadiumId * Name * Street * Ward * District * City * Description * PhoneNumber * Email | Void | Update a stadium of stadium owner |
| AddFieldTo  Stadium | * StadiumId * Number * ParentField * FieldType * IsActive | Void | Add a field to an owned stadium |
| UpdateField  Information | * FieldId * Number * ParentField * FieldType * IsActive | Void | Update an owned field |
| ActivateField | * FieldId | Void | Activate an owned field |
| DeactivateField | * FieldId | Void | Deactivate an owned field |
| ViewFields | * StadiumId | List<Field> | View list owned fields |