RELATIONAL DIAGRAM

REWARD

PK	ID
	Name
	Description
	Points
	Games
FK	Club.ID

PLAYER_REWARDS

PK,FK	Player.NIF
FK	Rewards.ID
	Date
	Time

CLUB

PK	ID
	Name
	Description
FK	Creator

CLUB_MEMBER

PK,FK	Player.NIF
PK,FK	Club.ID
	leave_date*
	leave_time*

MERCHANDISING

PK,FK	Gift.ID
	Size
	Weight

GAME

PK	ID
FK	White_Pieces
FK	Black_Pieces
	Date
	Time
	Result*
FK	Tournament.ID

PLAYER

PK	NIF
	Name
	Surname
	Gender
	Birthdate
AK	Email
AK	Nickname
	Password
	Phone_Number
	Rating
	Title

TOURNAMENT_PLAYER

PK	ID
FK	Player.NIF
FK	Club.ID
FK	Team_ID*
FK	Tournament.ID
	Date
	Score
	Ranking

ONLINE_FEATURE

PK,FK	Gift.ID
	URL

GIFT

PK	ID
	Name
	Description
	Stock
	Points
	Type

LEAGUE_PLAYER

PK,FK	Player.NIF
FK	League.ID
	Score
	Ranking

TOURNAMENT

PK	ID
AK	Name
FK	Organizer
FK	League_ID*
	Date
	Time
	Rounds
	Price_Description*
	Type

GIFT_ADQUISITION

PK,FK	Player.NIF
PK,FK	Gift.ID
PK	Date

LEAGUE

PK	ID
	Name
	Start_Date
	End_Date

MESSAGE

PK	ID
	Text
	Date
	Time
FK	Chat.ID
FK	Tournament_player.ID

TEAM

PK,FK	ID
FK	Tournament.ID
	Score
	Ranking

CHAT

PK	ID
	Name
FK	Tournament.ID

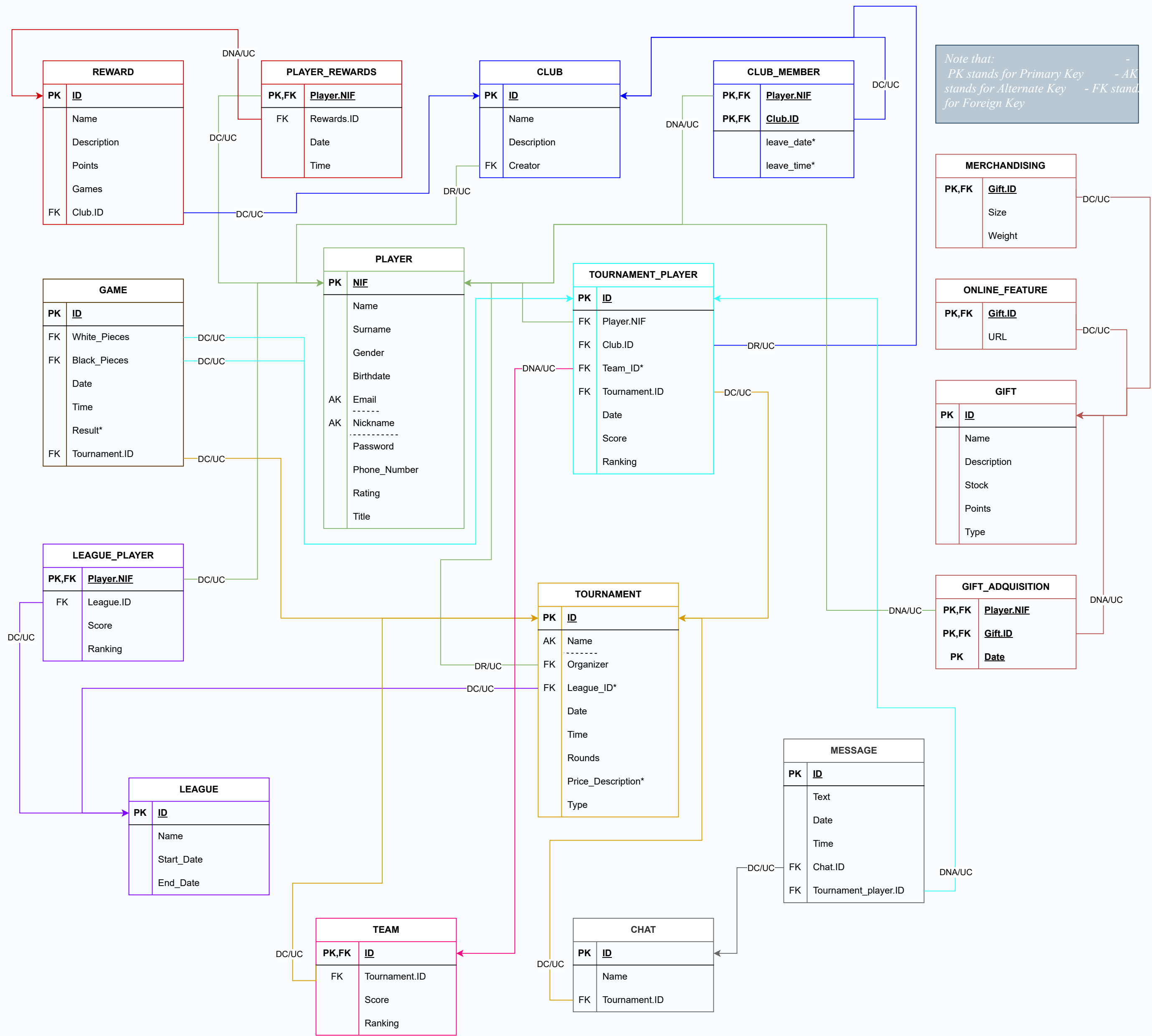## SEMANTIC ASSUMPTIONS TO THE STATEMENT

- Each player has a unique NIF.
- New titles may appear.
- Each player has only 1 title
- The organizer of a tournament is a player.
- Each tournament has a unique name.
- Each tournament team is identified by an unique id.
- The ranking will be assigned in order from the highest value of score for the tournament player to the lowest value
- Each tournament player is assigned an unique id.
- White and Black pieces represent tournament players.
- The result cannot be set before the date and time when the game takes place
- Each tournament can only be in 1 league.
- The player that created a club belongs to that club, and therefore it cannot be deleted.

DOMAINS:

- PLAYER: title = {Great Master, International Master, FIDE Master or Chess Master}
- TOURNAMENT: type = {Individual, Teams}
- GAME: result = {1,-1,0}
- GIFT: type = {Online feature, Merchandising}

SCHEME ASSUMPTIONS TO THE SCHEME

ASSUMPTIONS:

- PLAYER: rating has a default value of 1500.
- TOURNAMENT: prize description cannot be larger than 200 characters
- TOURNAMENT: Rounds >= 5
- TOURNAMENT: IF type = "Teams", Score = SUM of each TOURNAMENT_PLAYER.Score which have the same TEAM.ID
- TOURNAMENT_PLAYER: Check that Date in TOURNAMENT_PLAYER is lower for every row of TOURNAMENT.Date
- LEAGUE_PLAYER: Score = Sum of TOURNAMENT_PLAYER.score
- LEAGUE_PLAYER: TOURNAMENT_PLAYER.Team_ID is NULL and Player.NIF is equal
- LEAGUE_PLAYER: Thnking is calculated assigning numbers according to their scores in relation to the others.
- MESSAGES: Text cannot be larger than 256 characters
- LEAGUE: Check TOURNAMENT.TYPE is "Individual" for rows in LEAGUE
- REWARDS: Check that REWARDS.DATE & REWARDS.TIME is equal for any row in GAME.DATE & GAME.TIME
- PLAYER_REWARD: Check PLAYER.NIF value is equal for any row in CLUB_MEMBER.Player.NIF
- PLAYER_REWARDS: REWARDS.CLUB.ID value is equal for any row in CLUB_MEMBER.Club_ID
- ONLINE_FEATURE: Check that Type in GIFT is "Online Feature" for all rows in ONLINE_FEATURE
- MERCHANDISING: Check that Type in GIFT is "Merchandising" for all rows in MERCHANDISING
- TEAM: Ranking is calculated assigning numbers according to their scores in relation to the others.
- TOURNAMENT_PLAYER: If Team_ID is not NULL, its ranking is the teams ranking
- CHECK: TEAM.ranking == TOURNAMENT_PLAYER.ranking where TEAM.ID == TOURNAMENT_PLAYER.Team_ID
- When a Gift is purchased, Gift.Point is substracted from Player.Rating