

Football Match Result Database v0.9.4

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Contents

1	Mission Statement	3
2	Mission Objectives	4
3	Business Rules	4
4	Database Specifications	4
4.1	Events table (tblEvents)	4
4.1.1	eventID field	5
4.1.2	evtDate field	5
4.1.3	competitionID field	6
4.1.4	roundID field	6
4.1.5	venueID field	7
4.1.6	evtHomeTeamID field	7
4.1.7	evtHomeMgrID field	8
4.1.8	evtAwayTeamID field	9
4.1.9	evtAwayMgrID field	10
4.1.10	refereeID field	11
4.2	Competitions lookup table (tblCompetitions)	11
4.2.1	compID field	12
4.2.2	compName field	12
4.3	Competition Phase lookup table (tblRounds)	13
4.3.1	roundID field	13
4.3.2	roundDesc field	14
4.4	Teams lookup table (tblTeams)	14
4.4.1	teamID field	15
4.4.2	tmName field	15
4.5	Venue lookup table (tblVenues)	16
4.5.1	venueID field	16
4.5.2	teamID field	17
4.5.3	venName field	17
4.6	Home Teams linking table (tblHomeTeams)	18
4.6.1	eventID field	18
4.6.2	teamID field	19
4.7	Away Teams linking table (tblAwayTeams)	19
4.7.1	eventID field	19
4.7.2	teamID field	19
4.8	Home Managers linking table (tblHomeManagers)	19
4.8.1	eventID field	20
4.8.2	managerID field	20
4.9	Away Managers linking table (tblAwayManagers)	20

4.9.1	eventID field	20
4.9.2	managerID field	20
4.10	Environments table (tblEnvironments)	21
4.10.1	enviroID field	21
4.10.2	eventID field	22
4.10.3	envKickoffTime	22
4.10.4	envTemperature	23
4.10.5	envAltitude field	23
4.10.6	envKickoffWxID field	24
4.10.7	envHalftimeWxID field	24
4.10.8	envFulltimeWxID field	25
4.11	Weather conditions lookup table (tblWeather)	25
4.11.1	weatherID field	26
4.11.2	wxConditionDesc field	26
4.12	Players table (tblPlayers)	27
4.12.1	playerID field	27
4.12.2	countryID field	28
4.12.3	plyrFirstName field	28
4.12.4	plyrLastName field	29
4.13	Managers table (tblManagers)	29
4.13.1	managerID field	30
4.13.2	countryID field	30
4.13.3	mgrFirstName field	30
4.13.4	mgrLastName field	30
4.14	Referees table (tblReferees)	30
4.14.1	refereeID field	31
4.14.2	countryID field	31
4.14.3	refFirstName field	31
4.14.4	refLastName field	31
4.15	Country lookup table (tblCountries)	31
4.15.1	countryID field	32
4.15.2	ctyName field	32
4.16	Lineup table (tblLineups)	33
4.16.1	lineupID field	33
4.16.2	eventID field	33
4.16.3	teamID field	33
4.16.4	playerID field	34
4.16.5	positionID field	34
4.16.6	lpStarting field	35
4.17	Positions lookup table (tblPositions)	35
4.17.1	positionID field	36
4.17.2	posFieldID field	36
4.17.3	posFlankID field	37
4.18	Field position name table (tblFieldNames)	37
4.18.1	posFieldID field	38
4.18.2	posFieldName field	38
4.19	Flank name table (tblFlankNames)	39
4.19.1	posFlankID field	39
4.19.2	posFlankName field	40
4.20	Goals table (tblGoals)	40
4.20.1	goalID field	41
4.20.2	teamID field	41
4.20.3	lineupID field	42
4.20.4	gtsTypeID field	42

4.20.5	gteTypeID field	43
4.20.6	glstTime field	43
4.21	Goal strike lookup table (tblGoalStrikes)	44
4.21.1	gtsTypeID field	44
4.21.2	gtsDesc field	45
4.22	Goal field event lookup table (tblGoalEvents)	45
4.22.1	gteTypeID field	46
4.22.2	gteDesc field	46
4.23	Penalties table (tblPenalties)	47
4.23.1	penaltyID field	47
4.23.2	lineupID field	47
4.23.3	foulID field	48
4.23.4	penOutcomeID field	48
4.23.5	penTime field	49
4.24	Penalty outcome lookup table (tblPenOutcomes)	49
4.24.1	penOutcomeID field	50
4.24.2	poDesc field	50
4.25	Offenses table (tblOffenses)	51
4.25.1	offenseID field	51
4.25.2	lineupID field	51
4.25.3	foulID field	51
4.25.4	cardID field	52
4.25.5	ofnsTime field	52
4.26	Fouls lookup table (tblFouls)	53
4.26.1	foulID field	53
4.26.2	foulDesc field	54
4.27	Card lookup table (tblCards)	54
4.27.1	cardID field	55
4.27.2	cardType field	55
4.28	Substitution table (tblSubstitutions)	56
4.28.1	subsID field	56
4.28.2	lineupOffID field	57
4.28.3	lineupOnID field	57
4.28.4	subsTime field	58
4.29	Players substituted into match linking table (tblLineupOn)	58
4.29.1	lineupOnID field	59
4.29.2	lineupID field	59
4.30	Players substituted out of match linking table (tblLineupOff)	59
4.30.1	lineupOffID field	60
4.30.2	lineupID field	60
4.31	Switch Positions table (tblSwitchPositions)	60
4.31.1	switchID field	61
4.31.2	lineupID field	61
4.31.3	switchPositionID field	61
4.31.4	switchTime field	62

1 Mission Statement

The purpose of the Football Match Result Database is to maintain the data needed to support football research activities that are conducted for the benefit of the football analytics community.

2 Mission Objectives

The Football Match Result Database will support the following:

- Maintain complete information on event details.
- Maintain complete information on match details.
- Maintain complete information on players.
- Keep track of club managers.
- Keep track of match referees.

3 Business Rules

The following business rules shall be enforced on the Football Match Result Database:

- Starting player lists shall consist of exactly 11 players of which exactly one player is designated as the goalkeeper.
- Maximum substitution rules are enforced during a match.
- If a goalkeeper is expelled from a match, a new goalkeeper must be designated by either switching the positions of a field player or substituting a field player for a goalkeeper.

4 Database Specifications

The following sections describe the table-, field-, and relationship-level specifications of the Football Match Result Database. These specifications include the table names, descriptions, and member fields and their descriptions and types. The primary and foreign keys of each table will be identified and the characteristics between related tables will be defined from the perspective of the primary table.

4.1 Events table (tblEvents)

tblEvents	High level information on the football match and its participants. The information in this table is required in order to track all matches played in a football competition as well as the teams, players, managers, and referees who participated in them.			
Primary Key	eventID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
competitionID	tblCompetitions	—	Optional	(0,N)
roundID	tblRounds	—	Optional	(0,N)
venueID	tblVenues	—	Optional	(0,N)
refereeID	tblReferees	—	Optional	(0,N)
—	tblEnvironments	Restrict	Mandatory	(1,1)
—	tblLineups	Restrict	Mandatory	(1,1)

4.1.1 eventID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEnvironments, tblLineups, tblHomeTeams, tblAwayTeams, tblHomeManagers, tblAwayManagers
<i>Description</i>	A unique number used to identify matches in a football competition.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1000000-9999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.1.2 evtDate field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The date on which the football match occurred.
<i>Data Type</i>	DateTime
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	YYYY-MM-DD
<i>Display Format</i>	Day Month Year
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal, Greater Than, Less Than
<i>Operations Allowed</i>	Subtraction

4.1.3 competitionID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblCompetitions
<i>Source Specification</i>	competitionID in tblCompetitions table
<i>Description</i>	The identification number of the football competition
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	3
<i>Decimal Places</i>	0
<i>Input Mask</i>	###
<i>Display Format</i>	000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing competitionID value in tblCompetitions
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.1.4 roundID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblRounds
<i>Source Specification</i>	roundID in tblRounds table
<i>Description</i>	The identification number of matchday or phase of football competition
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	3
<i>Decimal Places</i>	0
<i>Input Mask</i>	###
<i>Display Format</i>	000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing roundID value in tblRounds
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	Subtraction

4.1.5 venueID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblVenues
<i>Source Specification</i>	venueID in tblVenues table
<i>Description</i>	The identification number of the venue used in the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing venueID value in tblVenues
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.1.6 evtHomeTeamID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblTeams
<i>Source Specification</i>	teamID in tblTeams table
<i>Description</i>	The identification number of the designated home team participating in the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	5
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	00000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing teamID value in tblTeams distinct from value of evtAwayTeamID
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.1.7 evtHomeMgrID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblManagers
<i>Source Specification</i>	managerID in tblManagers table
<i>Description</i>	The identification number of the manager of the designated home team participating in the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing managerID value in tblManagers distinct from value of evtAwayMgrID
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.1.8 evtAwayTeamID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblTeams
<i>Source Specification</i>	teamID in tblTeams table
<i>Description</i>	The identification number of one of the designated away team participating in the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	5
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	00000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing teamID value in tblTeams distinct from value of evtHomeTeamID
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.1.9 evtAwayMgrID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblManagers
<i>Source Specification</i>	managerID in tblManagers table
<i>Description</i>	The identification number of the manager of the designated away team participating in the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing managerID value in tblManagers distinct from value of evtHomeMgrID
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.1.10 refereeID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblReferees
<i>Source Specification</i>	refereeID in tblReferees table
<i>Description</i>	The identification number of the referee officiating the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing refereeID value in tblReferees
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.2 Competitions lookup table (tblCompetitions)

tblCompetitions	This table contains the names of the football competitions, and this information is used to track all matches played under a certain competition.			
Primary Key	competitionID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblEvents	Restrict	Mandatory	(1,1)

4.2.1 compID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEvents
<i>Description</i>	A unique number used to differentiate football competitions.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	3
<i>Decimal Places</i>	0
<i>Input Mask</i>	###
<i>Display Format</i>	000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	100-999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.2.2 compName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The name of the football competition.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters, Numbers
<i>Length</i>	100
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.3 Competition Phase lookup table (tblRounds)

tblRounds	This table contains the names of the rounds of the football competition, and allows for tracking of matches and performances in a single round or multiple rounds. This table can be expanded for knockout or hybrid league/knockout competitions.			
Primary Key	roundID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblRounds	Restrict	Mandatory	(1,1)

4.3.1 roundID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEvents
<i>Description</i>	A unique number used to identify the matchday or phase of the football competition.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	10-99
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.3.2 roundDesc field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The matchday number or phase of the football competition.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters, Numbers
<i>Length</i>	20
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a number or capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.4 Teams lookup table (tblTeams)

tblTeams	This table contains the names of the clubs that participate in a football competition.			
Primary Key	teamID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblHomeTeams	Restrict	Mandatory	(1,1)
—	tblAwayTeams	Restrict	Mandatory	(1,1)
—	tblGoals	Restrict	Mandatory	(1,1)

4.4.1 teamID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEvents, tblVenues, tblPlayers, tblLineups, tblGoals
<i>Description</i>	A unique number used to identify football clubs.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	5
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	00000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	10000-99999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.4.2 tmName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The name of the football club or team.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters, Numbers
<i>Length</i>	50
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.5 Venue lookup table (tblVenues)

tblEvents	Contains the stadiums that are used in the football competition, and the clubs that predominately reside there. This table is used to perform performance studies against different venues or neutral sites.			
Primary Key	venueID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
teamID	tblTeams	Deny	Mandatory	(0,N)
—	tblEvents	Deny	Mandatory	(1,1)

4.5.1 venueID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEvents, tblTeams
<i>Description</i>	A unique number used to identify venues used in football competitions.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	1000-9999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.5.2 teamID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblTeams
<i>Source Specification</i>	teamID in tblTeams table
<i>Description</i>	The identification number of the team which plays the majority of its matches at the venue
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	5
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	00000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	Nulls Allowed
<i>Values Entered By</i>	User
<i>Required Value</i>	No
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing teamID value in tblTeams, or NULL
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.5.3 venName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The name of the football venue used in the football competition.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters, Numbers
<i>Length</i>	40
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.6 Home Teams linking table (tblHomeTeams)

tblHomeTeams	This table contains the names of the clubs that are designated home teams in a football match.			
Primary Key	eventID, teamID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
eventID	tblEvents	Restrict	Mandatory	(1,1)
teamID	tblTeams	Restrict	Mandatory	(1,N)

4.6.1 eventID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblEvents
<i>Source Specification</i>	eventID in tblEvents table
<i>Description</i>	The identification number of the match played in a football competition.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Composite
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing eventID value in tblEvents
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.6.2 teamID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblTeams
<i>Source Specification</i>	teamID in tblTeams table
<i>Description</i>	The identification number of the team which plays the majority of its matches at the venue
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	5
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	00000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Composite
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing teamID value in tblTeams
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal To
<i>Operations Allowed</i>	—

4.7 Away Teams linking table (tblAwayTeams)

tblAwayTeams	This table contains the names of the clubs that are designated away teams in a football match.			
Primary Key	eventID, teamID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
eventID	tblEvents	Restrict	Mandatory	(1,1)
teamID	tblTeams	Restrict	Mandatory	(1,N)

4.7.1 eventID field

See specification in Section 4.6.1.

4.7.2 teamID field

See specification in Section 4.6.2.

4.8 Home Managers linking table (tblHomeManagers)

tblHomeManagers	This table contains the names of the managers of the home teams in a football match.			
Primary Key	eventID, managerID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
eventID	tblEvents	Restrict	Mandatory	(1,1)
managerID	tblManagers	Restrict	Mandatory	(1,N)

4.8.1 eventID field

See specification in Section 4.6.1.

4.8.2 managerID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblManagers
<i>Source Specification</i>	managerID in tblManagers table
<i>Description</i>	The identification number that refers to the club manager.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Composite
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing managerID value in tblManagers
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.9 Away Managers linking table (tblAwayManagers)

tblAwayManagers	This table contains the names of the managers of the away teams in a football match.			
Primary Key	eventID, managerID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
eventID	tblEvents	Restrict	Mandatory	(1,1)
managerID	tblManagers	Restrict	Mandatory	(1,N)

4.9.1 eventID field

See specification in Section 4.6.1.

4.9.2 managerID field

See specification in Section 4.8.2.

4.10 Environments table (tblEnvironments)

tblEnvironments	Records the ambient conditions under which the football match took place. This table is used to track match performance relative to weather and other natural conditions.			
Primary Key	enviroID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
eventID	tblEvents	Restrict	Optional	(1,1)
envKickoffWxID	tblWeather	—	Optional	(0,N)
envHalftimeWxID	tblWeather	—	Optional	(0,N)
envFulltimeWxID	tblWeather	—	Optional	(0,N)

4.10.1 enviroID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEvents
<i>Description</i>	A unique number used to tie environmental conditions to the matches in which they are played.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	1000000-9999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.10.2 eventID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblEvents
<i>Source Specification</i>	eventID in tblEvents table
<i>Description</i>	The identification number of the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing eventID value in tblEvents
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.10.3 envKickoffTime

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The time at which the football match kicked off.
<i>Data Type</i>	DateTime
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	HH:MM
<i>Display Format</i>	HH:MM
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal, Greater Than, Less Than
<i>Operations Allowed</i>	—

4.10.4 envTemperature

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The ambient temperature at kickoff, in degrees Celsius.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	1
<i>Input Mask</i>	##.##
<i>Display Format</i>	20.0°C
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	20.0
<i>Range of Values</i>	-15.0 - 40.0
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal, Greater Than, Less Than
<i>Operations Allowed</i>	—

4.10.5 envAltitude field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The altitude above mean sea level at which the football match occurred, in meters.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000 m
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal, Greater Than, Less Than
<i>Operations Allowed</i>	—

4.10.6 envKickoffWxID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblWeather
<i>Source Specification</i>	weatherID in tblWeather table
<i>Description</i>	The identification number for the type of weather condition at kickoff
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing weatherID value in tblWeather
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.10.7 envHalftimeWxID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblWeather
<i>Source Specification</i>	weatherID in tblWeather table
<i>Description</i>	The identification number for the type of weather condition at halftime
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing weatherID value in tblWeather
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.10.8 envFulltimeWxID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblWeather
<i>Source Specification</i>	weatherID in tblWeather table
<i>Description</i>	The identification number for the type of weather condition at fulltime
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing weatherID value in tblWeather
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.11 Weather conditions lookup table (tblWeather)

tblWeather	Contains a list of weather conditions during a football match.			
Primary Key	weatherID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblEnvironments	Restrict	Mandatory	(1,1)

4.11.1 weatherID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEnvironments
<i>Description</i>	A unique number used to identify specific weather conditions.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	10-99
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.11.2 wxConditionDesc field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the predominate weather condition during the football match.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	40
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.12 Players table (tblPlayers)

tblPlayers	Contains the list of players who participate in the football competition, allowing for the tracking of player participation and performance in the club and the competition.			
Primary Key	playerID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
countryID	tblCountries	—	Optional	(0,N)
—	tblLineups	Restrict	Mandatory	(1,1)

4.12.1 playerID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblLineups
<i>Description</i>	A unique number used to identify players in a football competition.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	100000-999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.12.2 countryID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblCountries
<i>Source Specification</i>	countryID in tblCountries table
<i>Description</i>	The identification number of the nationality of the player
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	3
<i>Decimal Places</i>	0
<i>Input Mask</i>	###
<i>Display Format</i>	000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing countryID value in tblCountries
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.12.3 plyrFirstName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The player's first name.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	20
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.12.4 plyrLastName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The player's last name.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	30
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.13 Managers table (tblManagers)

tblManagers	Contains the list of managers who participate in the football competition, allowing for the tracking of managerial changes at the club during a competition.			
Primary Key	managerID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
countryID	tblCountries	—	Optional	(0,N)
—	tblEvents	Restrict	Mandatory	(1,1)

4.13.1 managerID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEvents
<i>Description</i>	A unique number used to identify managers in a football competition.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	1000-9999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.13.2 countryID field

See specification in section 4.12.2.

4.13.3 mgrFirstName field

Specification is identical to that defined in section 4.12.3.

4.13.4 mgrLastName field

Specification is identical to that defined in section 4.12.4.

4.14 Referees table (tblReferees)

tblReferees	Contains the list of match referees who participate in the football competition, allowing for the tracking of their participation and performance in the competition.			
Primary Key	refereeID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
countryID	tblCountries	—	Optional	(0,N)
—	tblEvents	Restrict	Mandatory	(1,1)

4.14.1 refereeID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblEvents
<i>Description</i>	A unique number used to identify match referees in a football competition.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	4
<i>Decimal Places</i>	0
<i>Input Mask</i>	####
<i>Display Format</i>	0000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	1000-9999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.14.2 countryID field

See specification in section 4.12.2.

4.14.3 refFirstName field

Specification is identical to that defined in section 4.12.3.

4.14.4 refLastName field

Specification is identical to that defined in section 4.12.4.

4.15 Country lookup table (tblCountries)

tblCountries	Contains the list of countries represented by personnel who participate in a football competition.			
Primary Key	countryID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblPlayers	Restrict	Mandatory	(1,1)
—	tblManagers	Restrict	Mandatory	(1,1)
—	tblReferees	Restrict	Mandatory	(1,1)

4.15.1 countryID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblPlayers, tblManagers, tblReferees
<i>Description</i>	A unique number used to identify the country of personnel.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	3
<i>Decimal Places</i>	0
<i>Input Mask</i>	###
<i>Display Format</i>	000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	N/A
<i>Range of Values</i>	100-999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.15.2 ctyName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	Country name.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	40
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.16 Lineup table (tblLineups)

tblLineups	This table contains the players who participate in matches of the football competition, whether they are starting players or on the substitutes' list. The information is necessary to track the level of participation of players over a season.			
Primary Key	lineupID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
eventID	tblEvents	—	Optional	(22,36)
teamID	tblTeams	—	Optional	(1,N)
playerID	tblPlayers	—	Optional	(1,N)
positionID	tblPositions	—	Optional	(1,N)
—	tblGoals	Restrict	Mandatory	(1,1)
—	tblPenalties	Restrict	Mandatory	(1,1)
—	tblOffenses	Restrict	Mandatory	(1,1)
—	tblSubs	Restrict	Mandatory	(1,1)
—	tblSwitchPositions	Restrict	Mandatory	(1,1)

4.16.1 lineupID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblGoals, tblPenalties, tblOffenses, tblSubstitutions
<i>Description</i>	A unique number used to identify players who participate in football matches.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1000000-9999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.16.2 eventID field

See specification in section 4.10.2.

4.16.3 teamID field

See specification in section 4.5.2.

4.16.4 playerID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblLineups
<i>Source Specification</i>	playerID in tblLineups table
<i>Description</i>	The identification number of the player who participates in the lineup.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing playerID value in tblPlayers
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.16.5 positionID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblPositions
<i>Source Specification</i>	positionID in tblPositions table
<i>Description</i>	The identification number of the football positions
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing positionID value in tblPositions
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.16.6 lpStarting field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A flag to designate starting players in the match lineup.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	0
<i>Range of Values</i>	0-1
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.17 Positions lookup table (tblPositions)

tblPositions	This table contains information on the field positions (including goalkeeper) and their flanks they occupy on the field. The information is used to track the tactical organization of the lineup during a match.			
Primary Key	positionID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
posFieldID	tblFieldNames	—	Optional	(1,3)
posFlankID	tblFlankNames	—	Optional	(1,3)
—	tblLineups	Restrict	Mandatory	(1,1)

4.17.1 positionID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblLineups
<i>Description</i>	A unique number used to identify football positions.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	10-40
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.17.2 posFieldID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblFieldNames
<i>Source Specification</i>	posFieldID in tblFieldNames table
<i>Description</i>	The identification number of the football positions
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing posFieldID value in tblFieldNames
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.17.3 posFlankID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblFlankNames
<i>Source Specification</i>	posFlankID in tblFlankNames table
<i>Description</i>	The identification number of the football positions
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing posFlankID value in tblFlankNames
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.18 Field position name table (tblFieldNames)

tblFieldNames	This table contains a list of the basic field positions.			
Primary Key	posFieldID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblPositions	Restrict	Mandatory	(1,1)

4.18.1 posFieldID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblLineups
<i>Description</i>	A unique number used to identify football positions.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1-9
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.18.2 posFieldName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the generic field position.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	15
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.19 Flank name table (tblFlankNames)

tblFlankNames	This table contains a list of the basic flanks on the field.			
Primary Key	posFlankID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblPositions	Restrict	Mandatory	(1,1)

4.19.1 posFlankID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblLineups
<i>Description</i>	A unique number used to identify flank areas.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1-3
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	—

4.19.2 posFlankName field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the flank area on the field.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	6
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	Nulls Allowed
<i>Values Entered By</i>	User
<i>Required Value</i>	No
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.20 Goals table (tblGoals)

tblGoals	This table contains information on the goals that were scored during a match, excluding penalties. The information in this table is used to track match scorelines, scoring records of players in a match, and the types of goals scored.			
Primary Key	goalID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
teamID	tblTeams	—	Optional	(0,N)
lineupID	tblLineups	—	Optional	(0,N)
gtsTypeID	tblGoalStrikes	—	Optional	(0,N)
gtfTypeID	tblGoalEvents	—	Optional	(0,N)

4.20.1 goalID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify goals scored in a football match.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	100000-999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.20.2 teamID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblTeams
<i>Source Specification</i>	teamID in tblTeams table
<i>Description</i>	The identification number of one of the teams credited with the goal scored in the football match
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	5
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	00000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	evtAwayTeamID or evtHomeTeamID
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.20.3 lineupID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblLineups
<i>Source Specification</i>	lineupID in tblLineups table
<i>Description</i>	The identification number of player participations in match lineups
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing lineupID value in tblLineups
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.20.4 gtsTypeID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblGoalStrikes
<i>Source Specification</i>	gtsTypeID in tblGoalStrikes table
<i>Description</i>	The identification number of body parts used to score goals from open play.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing gtsTypeID value in tblGoalStrikes
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.20.5 gteTypeID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblGoalEvents
<i>Source Specification</i>	gteTypeID in tblGoalEvents table
<i>Description</i>	The identification number of field events from which goals were scored.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing gteTypeID value in tblGoalEvents
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.20.6 glsTime field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The match time at which the goal was scored.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	2
<i>Input Mask</i>	##.##
<i>Display Format</i>	00.00
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	0.00 - 90.15
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	Subtraction

4.21 Goal strike lookup table (tblGoalStrikes)

tblGoalStrikes	This table contains a list of the body parts used to score goals from open play.			
Primary Key	gtsTypeID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblGoals	Restrict	Mandatory	(1,1)

4.21.1 gtsTypeID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblGoals
<i>Description</i>	A unique number that identifies the body part used to score open play goals.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1-9
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.21.2 gtsDesc field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the body part used to score open play goals.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	15
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.22 Goal field event lookup table (tblGoalEvents)

tblGoalEvents	This table contains a list of the types of plays from which open play goals are scored.			
Primary Key	gteTypeID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblGoals	Restrict	Mandatory	(1,1)

4.22.1 gteTypeID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	tblGoals
<i>Description</i>	A unique number used to identify match events that produced goals.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1-9
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.22.2 gteDesc field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the match event that led to a goal in open play.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	20
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.23 Penalties table (tblPenalties)

tblPenalties	This table lists the penalties given during a football competition. The information stored here will be used to track fouls that resulted in penalties, the referees who awarded them, and the performance of penalty kick takers and goalkeepers.			
Primary Key	penaltyID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
lineupID	tblLineups	—	Optional	(0,N)
foulID	tblFouls	—	Optional	(0,N)
penOutcomeID	tblPenOutcomes	—	Optional	(0,N)

4.23.1 penaltyID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify penalties that occur during a football match.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	5
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	00000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	10000-99999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.23.2 lineupID field

See specification in section 4.20.3.

4.23.3 foulID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblFouls
<i>Source Specification</i>	foulID in tblFouls table
<i>Description</i>	The identification number of the types of fouls that result in bookings or penalties.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing foulID value in tblFouls
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.23.4 penOutcomeID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblPenOutcomes
<i>Source Specification</i>	penOutcomeID in tblPenOutcomes table
<i>Description</i>	The identification number of penalty kick outcomes.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing penOutcomeID value in tblPenOutcomes
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.23.5 penTime field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The match time at which the penalty was given.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	2
<i>Input Mask</i>	##.##
<i>Display Format</i>	00.00
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	0.00 - 90.15
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	Subtraction

4.24 Penalty outcome lookup table (tblPenOutcomes)

tblPenOutcomes	This table lists the possible penalty outcomes during a football match.			
Primary Key	penOutcomeID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblPenalties	Restrict	Mandatory	(1,1)

4.24.1 penOutcomeID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify penalty kick outcomes.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1-9
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.24.2 poDesc field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the penalty kick outcome.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	12
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.25 Offenses table (tblOffenses)

tblOffenses	This table lists the cautions and expulsions given out during a football match. The information stored here will allow the tracking of disciplinary records of players and the performance of referees during a football competition.			
Primary Key	offenseID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
lineupID	tblLineups	—	Optional	(0,N)
foulID	tblFouls	—	Optional	(0,N)
cardID	tblPenOutcomes	—	Optional	(0,N)

4.25.1 offenseID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify bookings that occur during a football match.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	100000-999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.25.2 lineupID field

See specification in section 4.20.3.

4.25.3 foulID field

See specification in section 4.23.3.

4.25.4 cardID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblCards
<i>Source Specification</i>	cardID in tblCards table
<i>Description</i>	The identification number of caution/expulsion cards.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing cardID value in tblCards
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.25.5 ofnsTime field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The match time at which the booking occurred.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	2
<i>Input Mask</i>	##.##
<i>Display Format</i>	00.00
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	0.00 - 90.15
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	Subtraction

4.26 Fouls lookup table (tblFouls)

tblFouls	This table lists the fouls that result in either penalties, cautions, or expulsions.			
Primary Key	foulID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblPenalties	Reject	Mandatory	(1,1)
—	tblOffenses	Reject	Mandatory	(1,1)

4.26.1 foulID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify fouls that result in a booking or penalty.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	0
<i>Input Mask</i>	##
<i>Display Format</i>	00
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	10-99
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.26.2 foulDesc field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the foul that resulted in a booking.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters
<i>Length</i>	25
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.27 Card lookup table (tblCards)

tblCards	This table lists the type of cards that are shown during a football match.			
Primary Key	cardID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
—	tblOffenses	Reject	Mandatory	(1,1)

4.27.1 cardID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify caution card types.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	1
<i>Decimal Places</i>	0
<i>Input Mask</i>	#
<i>Display Format</i>	0
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	1-3
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.27.2 cardType field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The description of the caution cards.
<i>Data Type</i>	Character
<i>Character Support</i>	Letters and Symbols
<i>Length</i>	12
<i>Decimal Places</i>	—
<i>Input Mask</i>	—
<i>Display Format</i>	Each description should start with a capital letter.
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	—
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	—
<i>Operations Allowed</i>	—

4.28 Substitution table (tblSubstitutions)

tblSubstitutions	This table stores the substitutions that occur during a football match. The data scored here would be used to track player participation during a football competition.			
Primary Key	subsID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
lineupOffID	tblLineups	Reject	Mandatory	(1,1)
lineupOnID	tblLineups	Reject	Mandatory	(1,1)

4.28.1 subsID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify substitutions that occur during a football match.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	100000-999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.28.2 lineupOffID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblLineupOff
<i>Source Specification</i>	lineupOffID in tblLineupOff table
<i>Description</i>	The identification number of off substitution events
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing lineupOffID value in tblLineupOff
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.28.3 lineupOnID field

<i>Specification Type</i>	Replica
<i>Parent Table</i>	tblLineupOn
<i>Source Specification</i>	lineupOnID in tblLineupOn table
<i>Description</i>	The identification number of on substitution events
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	7
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	0000000
<i>Key Type</i>	Foreign
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	Any existing lineupOnID value in tblLineupOn
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.28.4 subsTime field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The match time at which the substitution was made.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	2
<i>Input Mask</i>	##.##
<i>Display Format</i>	00.00
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	0.00 - 90.15
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	Subtraction

4.29 Players substituted into match linking table (tblLineupOn)

tblLineupOn	This table lists the players in the match lineup who are substituted into a football match.			
Primary Key	lineupOnID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
lineupID	tblLineups	—	Optional	(0,N)

4.29.1 lineupOnID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify on substitution events.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	100000-999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.29.2 lineupID field

See specification in Section 4.20.3.

4.30 Players substituted out of match linking table (tblLineupOff)

tblLineupOff	This table lists the players in the match lineup who are substituted out of a football match.			
Primary Key	lineupOffID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
lineupID	tblLineups	—	Optional	(0,N)

4.30.1 lineupOffID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify on substitution events.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	100000-999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.30.2 lineupID field

See specification in Section 4.20.3.

4.31 Switch Positions table (tblSwitchPositions)

tblSwitchPositions	This table stores the instances in which field positions are switched during the match, whether required by goalkeeper expulsion or a tactical change.			
Primary Key	switchID			
Foreign Key	Related Table	Deletion Rule	Participation Type	Participation Degree
lineupID	tblLineups	Reject	Optional	(0,1)
positionID	tblPositions	Reject	Optional	(0,1)

4.31.1 switchID field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	A unique number used to identify position switches that occur during a football match.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	6
<i>Decimal Places</i>	0
<i>Input Mask</i>	#####
<i>Display Format</i>	000000
<i>Key Type</i>	Primary
<i>Key Structure</i>	Simple
<i>Uniqueness</i>	Unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	System
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	100000-999999
<i>Edit Rule</i>	Enter Now, Edits Not Allowed
<i>Comparisons Allowed</i>	Equal, Not Equal
<i>Operations Allowed</i>	—

4.31.2 lineupID field

See specification in section 4.20.3.

4.31.3 switchPositionID field

See specification in section 4.17.2.

4.31.4 switchTime field

<i>Specification Type</i>	Unique
<i>Shared By</i>	—
<i>Description</i>	The match time at which the switch in playing positions was made.
<i>Data Type</i>	Numeric
<i>Character Support</i>	Numbers
<i>Length</i>	2
<i>Decimal Places</i>	2
<i>Input Mask</i>	##.##
<i>Display Format</i>	00.00
<i>Key Type</i>	Non-key
<i>Key Structure</i>	—
<i>Uniqueness</i>	Non-unique
<i>Null Support</i>	No Nulls
<i>Values Entered By</i>	User
<i>Required Value</i>	Yes
<i>Default Value</i>	—
<i>Range of Values</i>	0.00 - 90.15
<i>Edit Rule</i>	Enter Now, Edits Allowed
<i>Comparisons Allowed</i>	Equal To, Not Equal To
<i>Operations Allowed</i>	Subtraction