DATABASE AND APPLICATION

PROJECT PHASE 3

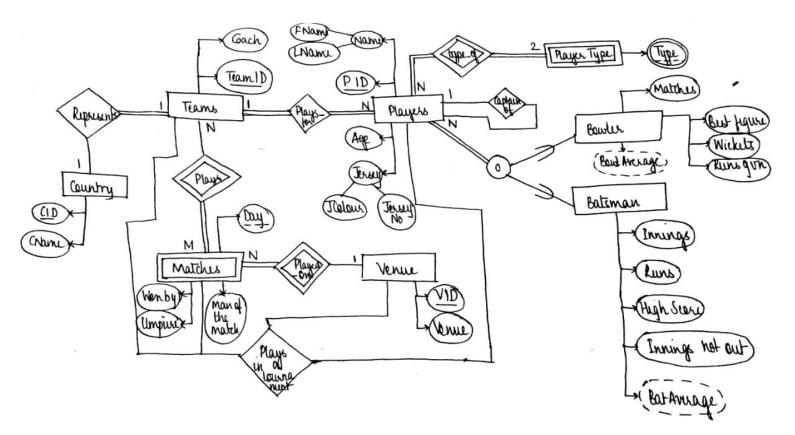
Team Name:

A_2

Team members:

Kushagra Agarwal (2018113012) Shreeya Pahune (2018113011)

ER MODEL



The SRS we made mentioned Matches entity as a weak entity, but in the list of weak entities in the SRS, we called it Schedule by mistake. The team assigned to create the ER misinterpreted and created Matches to be a strong entity and created an extra weak entity Schedule. The mistake has been corrected in the ER model above.

The weak entity Schedule and its identifying relationship have been removed.

Country					
CID	CName				
P.K.					
Teams					
<u>TeamID</u>	Coach				
P.K.					
Venue					
VID	Venue				
P.K.					
Players					
		Name			Jersey
PID	Fname	Lname	Age	Jersey No	JColour
P.K.					

) L Z						
Country						
CID	CName					
P.K.						
Teams			1			
TeamID	Coach					
P.K.						
Matches						
1	MID				8	
TID1	TID1 TID2		Man of the Match	Umpire	Day	
F.K. = {TID1,	TID2}				Partial Key	
Venue						
VID	Venue					
P.K.						
Players						
	j s	Name			Jersey	
PID	Fname	Lname	Age	Jersey No	JColour	
P.K.	10 1011	1 11 1		100	100	
Player Type						
PID	<u>Type</u>					
F.K.	Partial Key					

Country					
CID	CName				
P.K.					
Teams					
TeamID	Coach	CID			
P.K.		F.K.			
Matches					
	MID			i i	S.
TID1	TID2	Won by	Man of the Match	Umpire	Day
F.K. = {TID1, 7	TID2}				Partial Key
Venue					
VID	Venue				
P.K.		ř			
Players					
ST FIL		Name			Jersey
PID	Fname	Lname	Age	Jersey No	JColour
P.K.					
Player Type					
<u>PID</u>	Type				
F.K.	Partial Key				

Country							
CID	CName						
P.K.							
Teams							
TeamID	Coach	CID					
P.K.		F.K.					
Matches							
(c)	MID			· ·		21	
TID1	TID2	Won by	Man of the Match	Umpire	Day	VenuelD	
F.K. = {TID1,	TID2}				Partial Key	F.K.	
Venue							
VID	Venue						
P.K.							
Players							
		Name	1		Jersey		1788
PID	Fname	Lname	Age	Jersey No	JColour	TeamID	CaptainID
P.K.						F.K.	2-11-1-11-11-1
Player Type							
<u>PID</u>	Type						
F.K.	Partial Key						

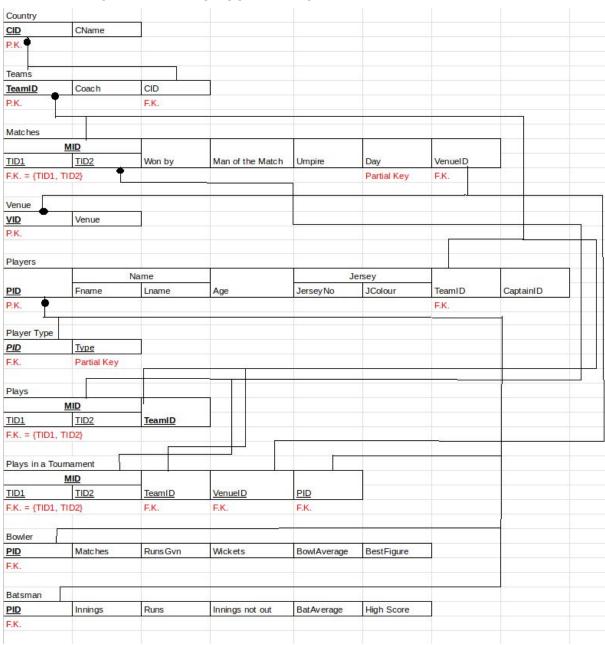
Country			1			T .	
CID	CName						
P.K.							
Teams							
TeamID	Coach	CID					
P.K.		F.K.					
Matches							
S	MID		i i				
TID1	TID2	Won by	Man of the Match	Umpire	Day	VenuelD	
F.K. = {TID1,	TID2}				Partial Key	F.K.	
Venue							
VID	Venue						
P.K.							
Players							
		Name		Jersey			1
PID	Fname	Lname	Age	Jersey No	JColour	TeamID	CaptainID
P.K.						F.K.	
Player Type							
PID	Type						
F.K.	Partial Key			1			
Plays							
	MID						
TID1	TID2	<u>TeamID</u>					
F.K. = {TID1,	TID2}						

Country							
CID	CName						
P.K.							
Teams							
TeamID	Coach	CID					
P.K.		F.K.					
Matches							
10	MID						
TID1	TID2	Won by	Man of the Match	Umpire	Day	VenuelD	
F.K. = {TID1, 7	TID2}				Partial Key	F.K.	8
Venue							
VID	Venue						
P.K.							
Players	0.						
	- 9	Name		Jersey		- 5	
PID	Fname	Lname	Age	Jersey No	JColour	TeamID	CaptainID
P.K.						F.K.	
Player Type							
PID	Type						
F.K.	Partial Key						
Plays							
	MID						
TID1	TID2	TeamID					
F.K. = {TID1, 1	TID2}	- 22					

Country	4.						19
CID	CName						
P.K.							
Teams							
TeamID	Coach	CID					
P.K.		F.K.					
Matches							i)
	MID						
TID1	TID2	Won by	Man of the Match	Umpire	Day	VenueID	
F.K. = {TID1,	TID2}				Partial Key	F.K.	
Venue							
VID	Venue						
P.K.							
Players		Name	*		•	4	
DID	*1500*			Jersey		TeamID	Contributo
P.K.	Fname	Lname	Age	Jersey No	JColour	F.K.	CaptainID
P.K.						F.N.	
Player Type							
PID	Type						
F.K.	Partial Key						
Plays							
	MID	T					
TID1	TID2	TeamID					
F.K. = {TID1,	TID2}	75					
Plays in a Tou	ımament						
, 5 4 100	MID	Ť					
CAN TO STATE OF STATE		- 15		DID			
TID1	TID2	TeamID	<u>VenueID</u>	PID			

Country							
CID	CName	- C					
P.K.		-					
Teams							
TeamID	Coach	CID					
P.K.		F.K.					
Matches							
	MID				1	77	9.5
TID1	TID2	Won by	Man of the Match	Umpire	Day	Venuel D	
F.K. = {TID1,					Partial Key	F.K.	
Venue							
VID	Venue						
P.K.		1.5					
Players							
		Name		J	ersey		- 1
PID	Fname	Lname	Age	Jersey No	JColour	TeamID	CaptainID
P.K.			800000			F.K.	8 15
Player Type							
PID	Type						
F.K.	Partial Key						
Plays	111						
2	MID		36				
TID1	TID2	<u>TeamID</u>					
F.K. = {TID1,	TID2}						
Plays in a Tou	rnament		46		y.		
	MID						
TID1	TID2	<u>TeamID</u>	Venuel D	PID			
F.K. = {TID1, 1	TID2}	F.K.	F.K.	F.K.			
Bowler							
PID	Matches	RunsGvn	Wickets	BowlAverage	BestFigure		
F.K.		8					
Batsman	5-11	1 1		> -		J.	
PID	Innings	Runs	Innings not out	BatAverage	High Score	50	
F.K.							

FINAL RELATIONAL DATABASE SCHEMA MODEL



1NF - Composite and Multivalued attributes removed

Country							
CID	CName						
P.K.							
Teams							
TeamID	Coach	CID					
P.K.		F.K.					
Matches							
	8		0		1	2.	
TID1	TID2	Won by	Man of the Match	Umpire	Day	Venuel D	
F.K. = TID1, 1	TID2	1			Partial Key	F.K.	
Venue							
VID	Venue						
P.K.							
Players							
PID	Fname	Lname	Age	JerseyNo	JColour	TeamID	CaptainID
P.K.				1 1		F.K.	
Player Type	8.0						
PID	<u>Type</u>						
F.K.	Partial Key						
Plays							
		les ses					
TID1	TID2	<u>TeamID</u>					
F.K. = TID1, T	ID2						
Plays in a Tou	rnament		la l		,		
TID1	TID2	<u>TeamID</u>	Venuel D	PID			
F.K. = TID1, T		F.K.	F.K.	F.K.	8-		
Bowler							
PID	Matches	RunsGvn	Wickets	BowlAverage	BestFigure		
F.K.						Î	
Batsman							
PID	Innings	Runs	Innings not out	BatAverage	High Score	5	
F.K.	-			-			

2NF - Same as 1NF

Country	Des					16	1
	CName						
CID	Civame						
P.K.							
Teams							
TeamID	Coach	CID					
P.K.		F.K.					
Matches							
TID1	TID2	Won by	Man of the Match	Umpire	Day	Venuel D	
F.K. = TID1, T		Worldy	With or the Water	Ompire	Partial Key	F.K.	
Venue							
VID	Venue						
P.K.							
Players							
PID	Fname	Lname	Age	JerseyNo	JColour	TeamID	CaptainID
P.K.						F.K.	01.00
Player Type							
PID	Туре						
F.K.	Partial Key						
Plays							
i mys							
TID1	TID2	TeamID					
F.K. = TID1, T		- Swille					
Plays in a Tou	nament						
TID1	TID2	<u>TeamID</u>	Venuel D	PID			
F.K. = TID1, T	ID2	F.K.	F.K.	F.K.			
Bowler							
PID	Matches	RunsGvn	Wickets	BowlAverage	BestFigure	of the second	
F.K.	Material	Adisovii	FIGROIS	Downveilage	Death Iguite		
Patemen							
Batsman PID	Innings	Runs	Innings not out	BatAverage	High Score		
<u>- 10</u>	minigs	Ruis	minings flut out	DalAvelage	nigii Scole	- 6	

3NF - Players broken down to Players1 and Players2

Country		-	oror ana riayoro			
CID	CName		1			
P.K.			1			1
			1			
Teams						
TeamID	Coach	CID				
P.K.		F.K.				
Matches						
	(A)	100	- 65		N	8
TID1	TID2	Won by	Man of the Match	Umpire	Day	Venuel D
F.K. = TID1,	TID2	22 11 22	×		Partial Key	F.K.
Venue	8					
VID	Venue					
P.K.	4:					
			7			
Players1						
	77 2002	Ï	100	E	9831.53	
PID	Fname	Lname	Age	Jersey No	JColour	
P.K.						
Dissore 2						
Players2						
TeamID	CaptainID					
TeamID P.K	- sq. sanna					
			9			
Player Type		66				
PID F.K.	<u>Type</u>					
F.K.	Partial Key					
Plays						
		100				
TID1	TID2	Team ID				
F.K. = TID1,	TID2		9			
Plays in a To	urnament		-			
	(0/3/8/00)	25-27 25-38	BAC 186.9	descrip		
TID1	TID2	<u>TeamID</u>	<u>Venuel D</u>	PID		
F.K. = TID1,	TID2	F.K.	F.K.	F.K.		
-						
Bowler						- 1
PID	Matches	RunsGvn	Wickets	BowlAverage	BestFigure	Ja
F.K.						
Batsman				- In it	10.0	
PID	Innings	Runs	Innings not out	BatAverage	High Score	

EXAMPLE TUPLES

Country							
		CName					
CID							
		INDIA					
		AUSTRALIA					
		USA					
-	4	SOUTH AFRICA					
Teams							
TeamID		Coach	CID				
7	3	BARRY	2		1		
		JOHN	- 4				
		SHASTRI	1				
Matches							
Materies	M	ID					
TID1		TID2	Won by	Man of the Match	Umpire	Day	Venuel D
3	1			KOHLI	BOWDEN	1	1
	2	3		SACHIN	TAUFFELL	3	
	1	3		SMITH	SIMON	2	
		3					
Venue							
VID		Venue					
VID	1	EDEN GARDEN					
		MANSINGH					
		WANKHEDE					
Players1		Na	me		ler	sey	8.4
DID		Fname	Lname	A 00	JerseyNo	JColour	
PID	- 1	VIRAT	KOHLI	Age 30		BLUE	
		SACHIN	TENDULKAR	42		BLUE	
		STEVEN	SMITH	29		YELLOW	
		ABD MITCHELL	VILLIERS STARK	36 30		GREEN YELLOW	
	J	WITCHELL	SIARK	50	5	TELLOW	
Players 2							
TeamID		CaptainID					
	2						
	3						
	1	4					
Player Type							
PID		Type					
		BATSMAN					
		BOWLER					
	2						
	2	BATSMAN					
	2 3						

Plays	IID.				
	TID2	T 10			
TID1	Chicago Character	<u>TeamID</u>			
1		1			
		1			
1 2		2			
1		3			
2	3	3			
Plays in a Tourn	ament				
	IID	8			
TID1	TID2	TeamID	<u>Venuel D</u>	PID	
1	2	2	1	1	
1	2	2	1	2	1
1	2	1	1	4	
1	. 3	1	1	4	
1	. 3	3	1	3	
1	. 3	3	1	5	
2	3	2	3	1	
2	3	2	3	2	
2		3		3	
2	3	3	3	5	
Bowler					
PID	Matches	RunsGvn	Wickets	BowlAverage	BestFigure
		980	140	7	45-8
5	150		400	5	5-9
Batsman PID	Innings	Runs	Innings not out	BatAverage	High Score
1		10000	40	DalAverage 40	183
2		18000	100	60	
3				32	
4				40	
	200	0000	30	40	213