CSE 301: Database Systems [Summer 2020]

Project Report

Tour de France 2020

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https://apex.oracle.com/pls/apex/jni_summer_2020
            /r/tour-de-france-
    2020/home?session=716698210357398
```
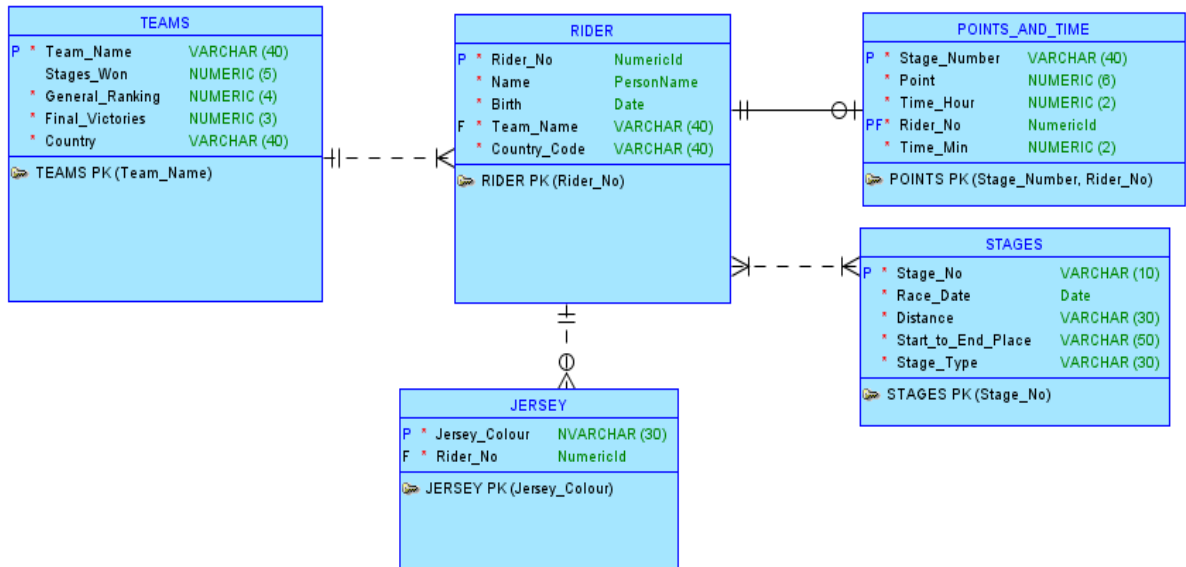
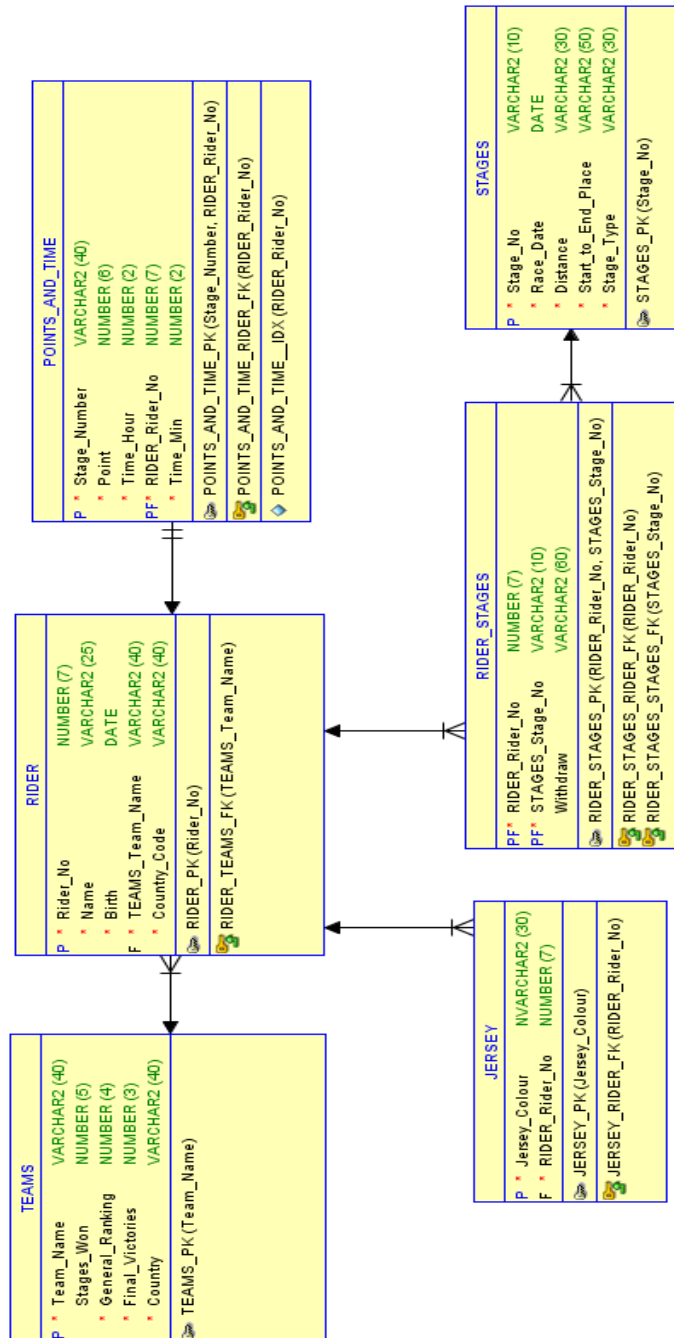**Course Code and Section: CSE301(2)**

Submitted by:
Jannatul Naim
Id: 2017-2-60-029

1. Final version of the E-R Model of the Project

TEAMS

P	* Team_Name	VARCHAR (40)
	Stages_Won	NUMERIC (5)
	* General_Ranking	NUMERIC (4)
	* Final_Victories	NUMERIC (3)
	* Country	VARCHAR (40)

TEAMS PK (Team_Name)

RIDER

P	* Rider_No	NumericId
	* Name	PersonName
	* Birth	Date
F	* Team_Name	VARCHAR (40)
	* Country_Code	VARCHAR (40)

RIDER PK (Rider_No)

POINTS_AND_TIME

P	* Stage_Number	VARCHAR (40)
	* Point	NUMERIC (6)
	* Time_Hour	NUMERIC (2)
PF	* Rider_No	NumericId
	* Time_Min	NUMERIC (2)

POINTS PK (Stage_Number, Rider_No)

STAGES

P	* Stage_No	VARCHAR (10)
	* Race_Date	Date
	* Distance	VARCHAR (30)
	* Start_to_End_Place	VARCHAR (50)
	* Stage_Type	VARCHAR (30)

STAGES PK (Stage_No)

JERSEY

P	* Jersey_Colour	NVARCHAR (30)
F	* Rider_No	NumericId

JERSEY PK (Jersey_Colour)

2. Final Version of the Relational Data Model of the Project

TEAMS

P	* Team_Name	VARCHAR2 (40)
	Stages_Won	NUMBER (5)
	* General_Ranking	NUMBER (4)
	* Final_Victories	NUMBER (3)
	* Country	VARCHAR2 (40)

⚷ TEAMS_PK (Team_Name)

RIDER

P	* Rider_No	NUMBER (7)
	* Name	VARCHAR2 (25)
	* Birth	DATE
F	* TEAMS_Team_Name	VARCHAR2 (40)
	* Country_Code	VARCHAR2 (40)

⚷ RIDER_PK (Rider_No)
🔑 RIDER_TEAMS_FK (TEAMS_Team_Name)

POINTS_AND_TIME

P	* Stage_Number	VARCHAR2 (40)
	* Point	NUMBER (8)
	* Time_Hour	NUMBER (2)
PF	* RIDER_Rider_No	NUMBER (7)
	* Time_Min	NUMBER (2)

⚷ POINTS_AND_TIME_PK (Stage_Number, RIDER_Rider_No)
🔑 POINTS_AND_TIME_RIDER_FK (RIDER_Rider_No)
◇ POINTS_AND_TIME_IDX (RIDER_Rider_No)

STAGES

P	* Stage_No	VARCHAR2 (10)
	* Race_Date	DATE
	* Distance	VARCHAR2 (30)
	* Start_to_End_Place	VARCHAR2 (50)
	* Stage_Type	VARCHAR2 (30)

⚷ STAGES_PK (Stage_No)

RIDER_STAGES

PF	* RIDER_Rider_No	NUMBER (7)
PF	* STAGES_Stage_No	VARCHAR2 (10)
	Withdraw	VARCHAR2 (80)

⚷ RIDER_STAGES_PK (RIDER_Rider_No, STAGES_Stage_No)
🔑 RIDER_STAGES_RIDER_FK (RIDER_Rider_No)
🔑 RIDER_STAGES_STAGES_FK (STAGES_Stage_No)

JERSEY

P	* Jersey_Colour	NVARCHAR2 (30)
F	* RIDER_Rider_No	NUMBER (7)

⚷ JERSEY_PK (Jersey_Colour)
🔑 JERSEY_RIDER_FK (RIDER_Rider_No)

3. Implementation Checklist

Description	Remarks
Project ID	Application 121373
Workspace Name	JNI_SUMMER_2020
Workspace Email	2017-2-60-029@STD.EWUBD.EDU
Workspace Password	99babama
Authentication Type	Custom
Username and Password to Login	
admin	123456
user1	user123
user2	user2123
user3	user3123
Uploaded and Displayed Images in Reports	Yes
Implemented Page-wise Authorization	Yes
Number of Reports with Forms	2
Number of Master-detail Forms	1
Number of Reports based on Queries, Aggregate Queries	1
Number of Parameterized Reports	1
Number of Graphs/Charts	1
Included any trigger/other feature which is not taught in class. If yes, please explain briefly.	No
Write the most unique feature/functionality in your application or the page of your application which you are proud of. Explain briefly.	For every individual stage we have showed first three riders.

4. Reports with Forms

Report Page Number and Name	Form Page Number and Name	Table
9-RIDER Report	10-RIDER Form	RIDER
15-TEAMS Report	16-TEAMS Form	TEAMS
12- Points_and_Time Report	13- Points_and_Time Form	POINTS_AND_TIME
26- Withdraw Report	27- Withdraw Form	RIDER_STAGES

Figure 4.1: RIDER

RIDER Report

	Rider No	Name	Birth	Teams Team Name	Country Code	Image
✎	68	RAFAEL VALLS FERRI	6/25/1987	BAHRAIN - MCLAREN	ESP	
✎	34	PIERRE LATOUR	10/12/1993	AG2R LA MONDIALE	FRA	
✎	44	RÉMI CAVAGNA	8/10/1995	DECEUNINCK - QUICK - STEP	FRA	
✎	15	ROBERT GESINK	5/31/1986	TEAM JUMBO - VISMA	SEPP	
✎	55	MATTHIEU LADAGNOUS	12/12/1984	GROUPAMA - FDJ	FRA	
✎	38	ALEXIS VUILLERMOZ	6/1/1988	AG2R LA MONDIALE	FRA	
✎	4	JONATHAN CASTROVIEJO	4/27/1987	INEOS GRENADIERS	ESP	

Figure 4.2: RIDER

Figure 4.3: POINTS_AND_TIME

Points_and_Time Report

	Stage Number	Rider No	Time In Seconds	Stage Type	Hill Point	Flat Point
✎	STAGE 11	13	14451	FLAT	20	15
✎	STAGE 11	16	144387	FLAT	10	14
✎	STAGE 11	21	14445	FLAT	13	13
✎	STAGE 11	6	14451	FLAT	17	5
✎	STAGE 11	1	14455	FLAT	9	6
✎	STAGE 11	41	14461	FLAT	2	7
✎	STAGE 11	2	14401	FLAT	1	9
✎	STAGE 7	21	12705	FLAT	15	10
✎	STAGE 7	13	12743	FLAT	1	8
✎	STAGE 7	56	12783	FLAT	2	2
✎	STAGE 7	52	12722	FLAT	17	11
✎	STAGE 7	51	12734	FLAT	10	6

Figure 4.4: POINTS_AND_TIME

Withdraw Report \
Withdraw form

Withdraw form

Rider Rider No

Stages Stage No

Withdraw

Cancel

Create

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Figure 4.5: RIDER_STAGES

Withdraw Report

	Rider Rider No	Stages Stage No	Withdraw
✎	157	STAGE 2	DNS
✎	126	STAGE 3	withdrawal
✎	22	STAGE 11	DNS
✎	14	STAGE 17	outside the time limit
✎	52	STAGE 15	withdrawal
✎	68	STAGE 2	DNS
✎	155	STAGE 1	outside the time limit

1 - 7

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Figure 4.6: RIDER_STAGES

Figure 4.7: TEAMS

Figure 4.8: TEAMS

5. Master-Detail Form

Page Number and Name	Master Table (Parent)	Detail Table (Child)
17-TEAMS	TEAMS	RIDER

Figure 5.1: Team wise Rider Information

6. Reports based on Multi-Table and Aggregate Queries

Page Number and Name	Query Type	Report description
6- Tour de France Informations	Aggregate	this report shows the total number dropped out rider per stage, the total number of rider per country code, total number of team per country and also shows total number of stage per stage type.
8- ROUTE	Single table	This report shows information of all the stages.
24- Young Rider	Multi-Table	This report shows the champion among the younger riders.

ROUTE

Report 1

Stage No	Race Date	Distance	Start To End Place	Stage Type
STAGE 1	8/29/2020	156 KM	NICE MOYEN PAYS>NICE	FLAT
STAGE 2	8/30/2020	186 KM	NICE HAUT PAYS > NICE	MOUNTAIN
STAGE 3	8/31/2020	198 KM	NICE > SISTERON	FLAT
STAGE 4	9/1/2020	160.5 KM	SISTERON > ORCIÈRES-MERLETTE	HILLY
STAGE 5	9/2/2020	183 KM	GAP > PRIVAS	FLAT
STAGE 6	9/3/2020	191 KM	LE TEIL > MONT AIGOUAL	HILLY
STAGE 8	9/3/2020	141 KM	CAZÈRES-SUR-GARONNE > LOUDENVIELLE	MOUNTAIN
STAGE 9	9/6/2020	153 KM	PAU > LARUNS	MOUNTAIN
STAGE 10	9/8/2020	168.5 KM	CHÂTEAU-D OLÉRON >SAINT-MARTIN-DE-RÉ	FLAT
STAGE 11	9/9/2020	166.5 KM	CHÂTELAILLON-PLAGE > POITIERS	FLAT
STAGE 12	9/10/2020	218 KM	CHAUVIGNY > SARRAN CORRÈZE	HILLY
STAGE 13	9/11/2020	191.5 KM	CHÂTEL-GUYON > PUY MARY CANTAL	MOUNTAIN
STAGE 13	9/11/2020	191.5 KM	CHATEL-GUYON > PUY MARY CANTAL	MOUNTAIN
STAGE 14	9/12/2020	194 KM	CLERMONT-FERRAND > LYON	FLAT
STAGE 15	9/13/2020	174.5 KM	LYON > GRAND COLOMBIER	MOUNTAIN

Download

1 - 15   Next ▶

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Figure 6.1: Stage Information
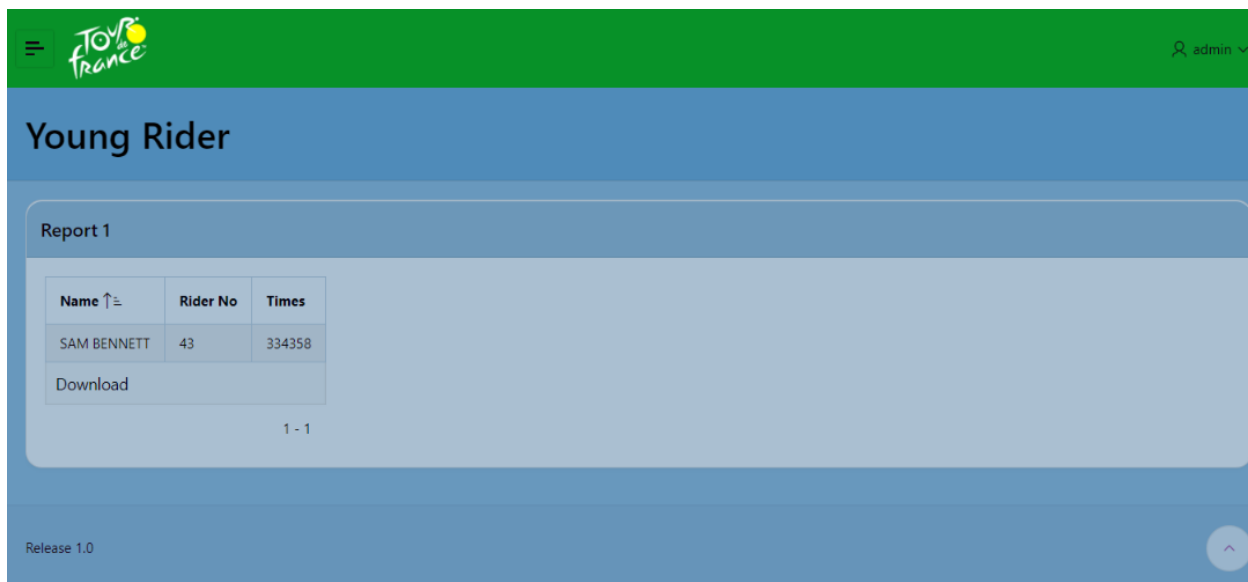
Figure 6.2: Tour de France Information

Figure 6.3: Young Rider

7. Parameterized Reports

Page Number and Name	Given Input	Report description
5-Withdrawal Riders Per Stage	Stage_No	this report shows the rider's information who dropped out in a particular stage.
32- Points Ranking S	Stage_No	This report shows points ranking in a particular stage.
11-Youth Ranking	Stage_No	This report shows youth ranking in a particular stage.
30-Climber Ranking S	Stage_No	This report shows climber ranking in a particular stage.
25-Individual Ranking	Stage_No	This report shows the ranking from the starting to the current stage using time.
7-Points Ranking G	Stage_No	This report shows the ranking from the starting to the current stage using points.
33-Youth Ranking G	Stage_No	This report shows the ranking from the starting to the current stage using time among the younger riders.
29-Climber Ranking G	Stage_No	This report shows the ranking from the starting to the current stage using points for mountain type stage.
28-Individual Ranking G	Stage_No	This report shows the ranking from the starting to the current stage using time.
34-FIRST THREE RIDERS	Stage_No	This report shows the first three riders for a particular stage depending on finishing time.

Figure 7.1: Stage Wise Withdrawal Rider Information

Points Ranking S

New

New
STAGE 6

Submit

New

Name	Rider No	Flat Point
WILLIAM BONNET	53	15
GEORGE BENNETT	12	13
KASPER ASGREEN	42	12
VALENTIN MADOUAS	56	11
EMANUEL BUCHMANN	22	10
LENNARD KÄMNA	24	9
SÉBASTIEN REICHENBACH	58	8
GREGOR MÜHLBERGER	25	7
PRIMOŽ ROGLIC	11	6
FELIX GROSSSCHARTNER	23	5
RÉMI CAVAGNA	44	4
JONATHAN CASTROVIEJO	4	3
LUKE ROWE	6	3
RUDY MOLARD	57	3

1 - 15   Next ▶

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Figure 7.2: Points Ranking for Stage Ranking

Youth Ranking

New

Stage
STAGE 10

Submit

New

Name	Rider No	Time In Seconds
ANDREY AMADOR	22	14880
AMUND GRØNDAHL JANSEN	13	14801
LUKE ROWE	6	14591
ROBERT GESINK	15	14399
SÉBASTIEN REICHENBACH	58	14397
GREGOR MÜHLBERGER	25	14355
RUDY MOLARD	57	14338
RICHARD CARAPAZ	3	14321
FELIX GROSSSCHARTNER	23	14312
DRIES DEVENYNS	46	14312
TIM DECLERCQ	45	14299
PRIMOŽ ROGLIC	11	14255
SEPP KUSS	16	14232
PETER SAGAN	21	14223

1 - 15   Next ▶

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Figure 7.3: Youth Ranking for Stage Ranking

Climber Ranking S

New

New
STAGE 5

Submit

New

Name	Rider No	Hill Point
DRIES DEVENYNS	45	20
ANDREY AMADOR	2	15
EMANUEL BUCHMANN	22	13
EGAN BERNAL	1	11
KASPER ASGREEN	42	10
RUDY MOLARD	57	10
ROBERT GESINK	15	9
JONATHAN CASTROVIEJO	4	8
FELIX GROSSSCHARTNER	23	7
RÉMI CAVAGNA	44	6
VALENTIN MADOUAS	56	5
VALENTIN MADOUAS	56	5
GEORGE BENNETT	12	3
TIM DECLERCQ	45	2
MATTHIEU LADAGNOUS	55	1

1 - 15   Next ▶

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Figure 7.4: Climber Ranking for Stage Ranking

Individual Ranking

New

New
STAGE 4

[Submit]

New

Name	Rider No	Time In Seconds
SERP KUSS / FERNANDO GAVIRIA	26 / 16	14867 / 14863
RÉMI CAVAGNA	44	14873
RUDY MOLARD	57	14874
FELIX GROSSSCHARTNER	23	14875
PRIMOŽ ROGLIC	11	14876
MICHAL KWIATKOWSKI	5	14877
WILLIAM BONNET	52	14878
MATTHIEU LADAGNOUS	55	14879
ANDREY AMADOR	2	14880
JULIAN ALAPHILIPPE	41	14881
KASPER ASGREEN	42	14882
KASPER ASGREEN	42	14882
GEORGE BENNETT	12	14883
TIM DECLERCQ	45	14884
PETER SAGAN	21	14885

1 - 15   Next ▶

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Figure 7.5: Individual Ranking for Stage Ranking

Points Ranking

New

New
STAGE 2

[Submit]

New

Name	Rider No	Point
DRIES DEVENYNS LENBACH	46	23
PRIMOŽ ROGLIC	11	19
TOM DUMOULIN	14	17
JULIAN ALAPHILIPPE	41	17
TIM DECLERCQ	45	17
ROBERT GESINK	15	16
VALENTIN MADOUAS	56	15
PETER SAGAN	21	14
MATTHIEU LADAGNOUS	55	13
GREGOR MÜHLBERGER	25	11
LENNARD KÄMNA	24	10
LENNARD KÄMNA	24	10
KASPER ASGREEN	42	9
JONATHAN CASTROVIEJO	4	8
RÉMI CAVAGNA	44	6

1 - 15   Next ▶

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Figure 7.6: Point Ranking for General Ranking

Youth Ranking G

admin

New

New
STAGE 6

Submit

New

Name	Rider No	Times
RICHARD CARAPAZ	31	97993
PETER SAGAN	21	97996
GREGOR MÜHLBERGER	25	97996
MICHAL KWIATKOWSKI	5	98002
RÉMI CAVAGNA	44	98017
SEPP KUSS	16	98020
AMUND GRØNDAHL JANSEN	13	98024
JULIAN ALAPHILIPPE	41	98025
DRIES DEVENYNS	46	98025
DANIEL OSS	26	98026
LUKE ROWE	6	98033
LUKE ROWE	6	98033
MATTHIEU LADAGNOUS	55	98033
ANDREY AMADOR	2	98037
EMANUEL BUCHMANN	22	98045

1 - 15   Next ▶

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Figure 7.7: Youth Ranking for General Ranking

Figure 7.8: Climber Ranking for General Ranking

Individual Ranking G

New

New
STAGE 1 ⌄

Submit

New

Name	Rider No	Times
ALMINDA GRØNDAHL JANSEN	13	13580
RICHARD CARAPAZ	3	13585
PRIMOŽ ROGLIC	11	13586
EGAN BERNAL	1	13587
SEPP KUSS	16	13590
TOM DUMOULIN	14	13592
MICHAL KWIATKOWSKI	5	13593
GREGOR MÜHLBERGER	25	13594
DANIEL OSS	26	13596
JULIAN ALAPHILIPPE	41	13597
SAM BENNETT	43	13598
SAM BENNETT	43	13598
PETER SAGAN	21	13601
GEORGE BENNETT	12	13606
EMANUEL BUCHMANN	22	13607

1 - 15   Next ▶

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Figure 7.9: Individual Ranking for General Ranking

FIRST THREE RIDERS

New

New
STAGE 3

Submit

New

Name	Rider No	Min
RUDY MOLARD	57	19125
GEORGE BENNETT	12	19129
SÉBASTIEN REICHENBACH	58	19131
		1 - 3

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Figure 7.10: First Three Riders for Each Stage

8. Charts

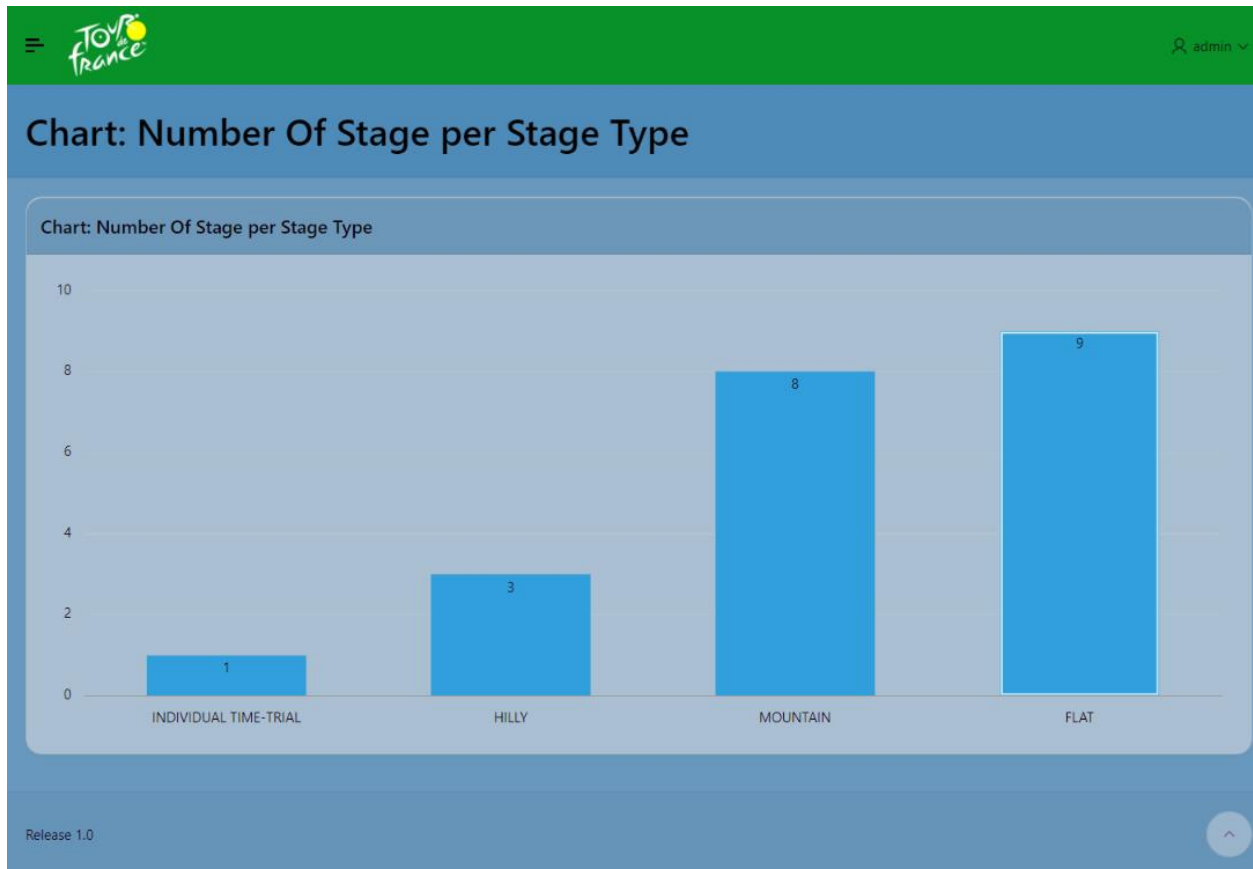| Page Number and Name	Chart description
14-Chart: Number Of Stage per Stage Type	This bar chart shows the number of stages per stage type.

Figure 8.1: Number of Stage per Stage-Type

9. Authorization and User Role Assignment

User Role Assignment

User name	Password	Role
admin	123456	Administrator
user1	user123	Contributor
user2	user2123	Reader
user3	user3123	Reader

Page-wise Authorization Information

Page number and name	Authorization Level
10-RIDER Form	Contribution Rights
16-TEAMS Form	Contribution Rights
13- Points_and_Time Form	Contribution Rights
27- Withdraw Form	Contribution Rights

10.   Concluding Remarks

During the time of project development, we have faced various difficulties, especially in image uploading. Working, in the same way, some of the images were not displaying it shows "alter text". Another issue was time type data insertion that we have inserted in seconds using number type data. Besides this, we are enjoying our work. Now we are a little bit able to understand how a webpage works.