Digital Solutions

IA 1- Technical proposal; Student response

Paddy Maher

Technical Proposal

Bundaberg eSports

A web application

Introduction

Bundaberg eSports Web app

- No Shalom eSports team
- No Bundaberg eSports team/ league

Prescribed Criteria

- Recognise and describe data sources, programming elements, user interface, components and useability principles
- Symbolise algorithms and user interfaces, and explain ideas and interrelationships between proposed data structures and user experiences of the identified problem
- Analyse the problem and information related to the selected technology context
- Determine programming and user experience requirements of the identified problem and prescribed and self-determined criteria
- Synthesise information and ideas to determine possible data elements, user interface and algorithm components for digital solutions
- Generate a technical proposal for user interfaces and algorithm components of the low-fidelity prototype digital solution
- Evaluate impacts, components and a low-fidelity prototype against prescribed and self-determined criteria to make refinements and justified recommendations
- Make decisions about and use mode-appropriate features, language and conventions for written and spoken communication for a technical audience

Self-determined Criteria

- Formulate a UI that is learnable and accessible using usability and visual communication elements and features
- Consider target audience and existing solutions when developing prototypes
- Understand the algorithms and processes that will need to be used within an eSports web app


LEAGUE
FIFA19
GLOBAL SERIES
Qualifiers
LEAGUE
LICENSED QUALIFIER
SEBAS ORTIZ
ROMA GAMIE
LEAGUE
FUT 20
CHAMPIONS CUP
STAGE IV

Team Liquid welcomes you to the esports wiki

liquipedia

Made by the esports community for the esports community.

Dota 2 | Search... | Search

Dota 2

- OG
- Saksa
- MidOne
- ESL One Los Angeles 2020
- DreamLeague Season 13: The Leipzig Major

Counter-Strike

- BLAST Premier: Spring 2020 Regular Season
- OG
- ICE Challenge 2020
- S-Tier Tournaments
- Dignitas

StarCraft II

- IEM Katowice 2020
- WardiTV 2020
- 2020 AfreecaTV GSL Super Tournament 1
- 2020 AfreecaTV GSL Super Tournament 1: Qu...
- IEM Katowice 2020: Offline Qualifier

PUBG

- PGS: Berlin - Europe East Closed Qualifier
- Team Liquid
- PGS: Berlin - Europe Finals
- PUBG Global Series: Berlin

Overwatch

- Overwatch League - 2020 Regular Season
- Dallas Fuel
- Player Transfers
- Overwatch League - 2020

Rocket League

- RLCS S9 - North America
- RLCS S9 - Europe
- Player Transfers: Latest
- SquishyMuffinz

Constraints

- Time; 4 Weeks
- Legal; Legality issues with aspects within the document
- Outside Disruption; Negative impact on productivity
- Data; Restrictions on magnitude of data

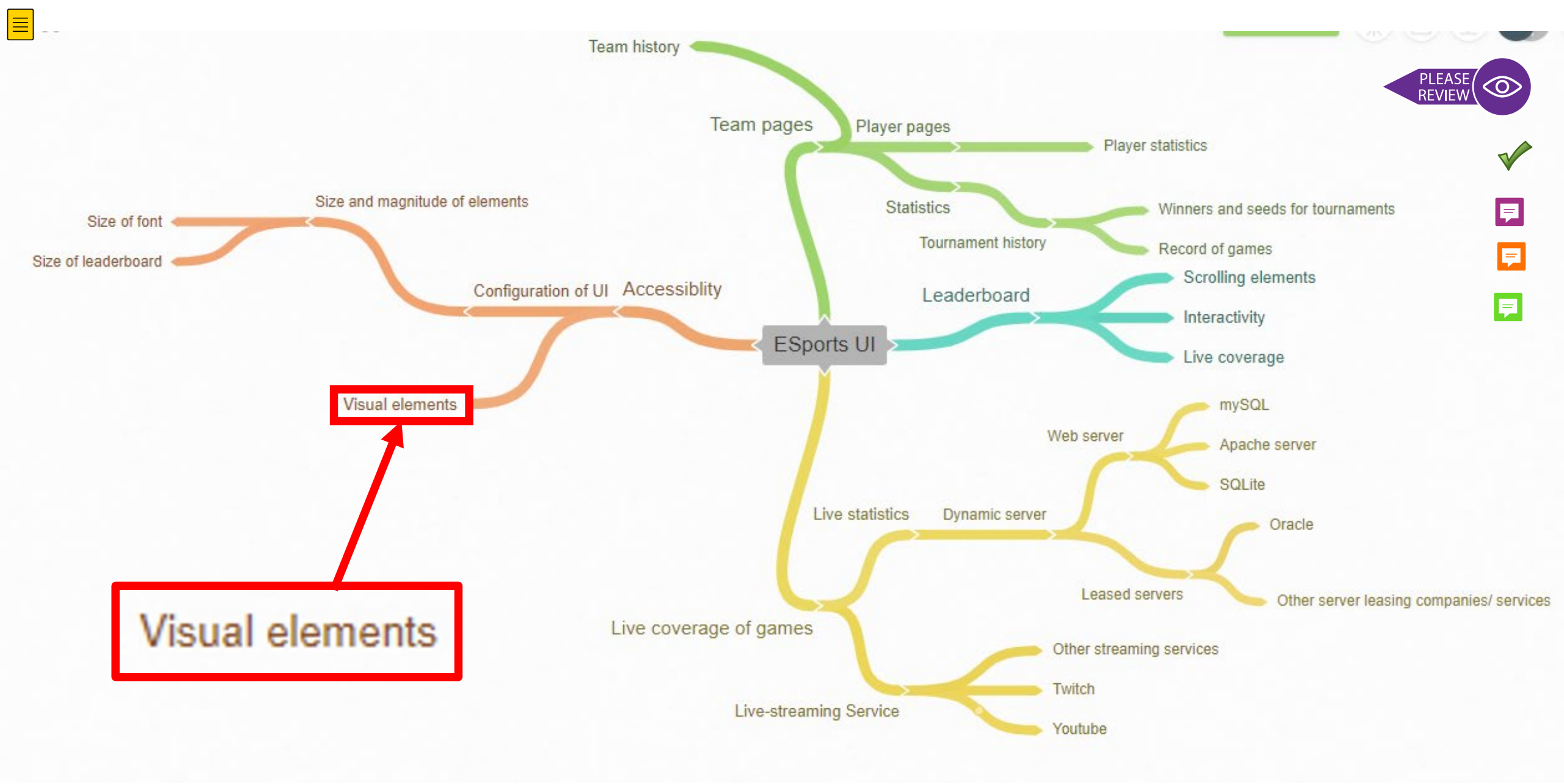
Target audience

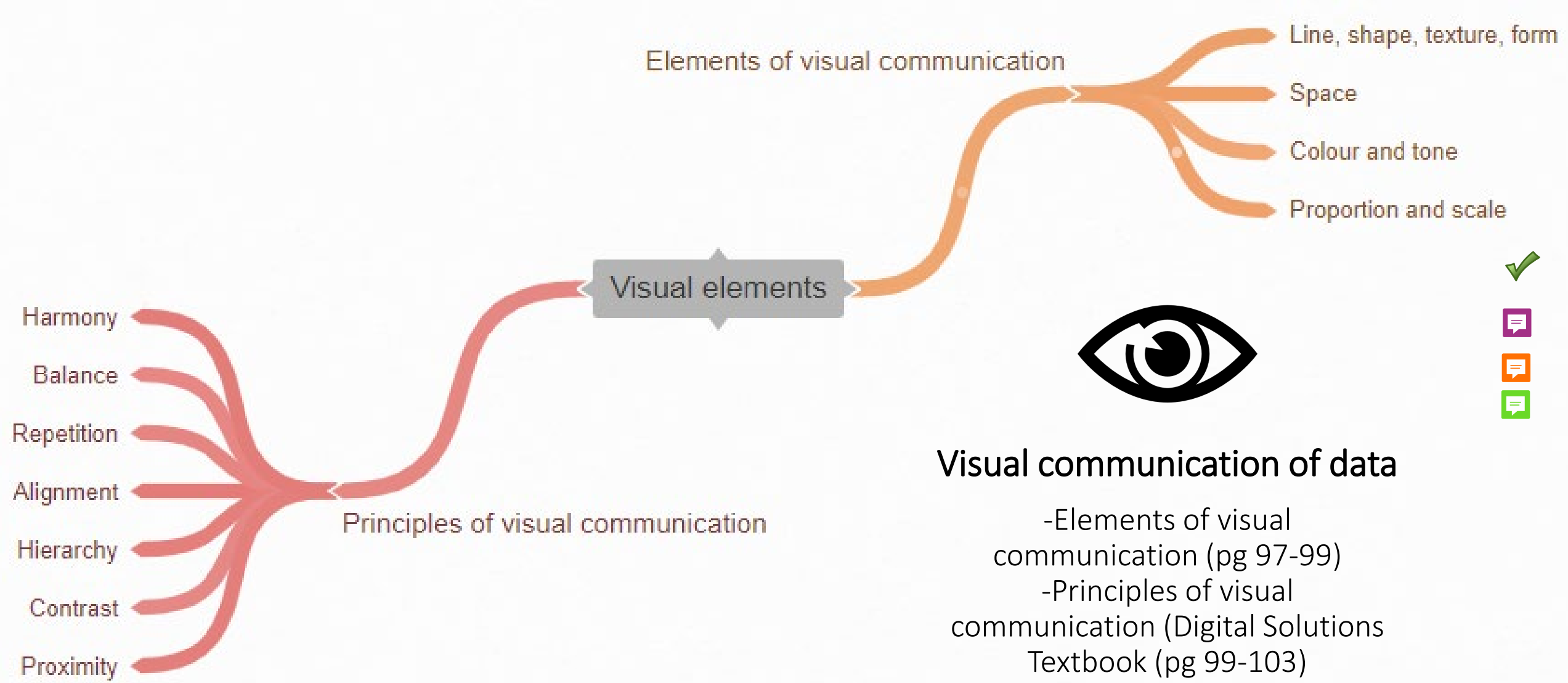
- Students aged 13-19
- Attending high school or universities
- Schools with provided hardware and software appropriate for the game such as a laptop, console or the game.
- Student agreement to integrity and sportsmanship within the game.

Useability and Accessibility

- Visual communication elements- Proximity, contrast
- Large icons
- Easy navigation and clear site map
- Simple and learnable UI

User story

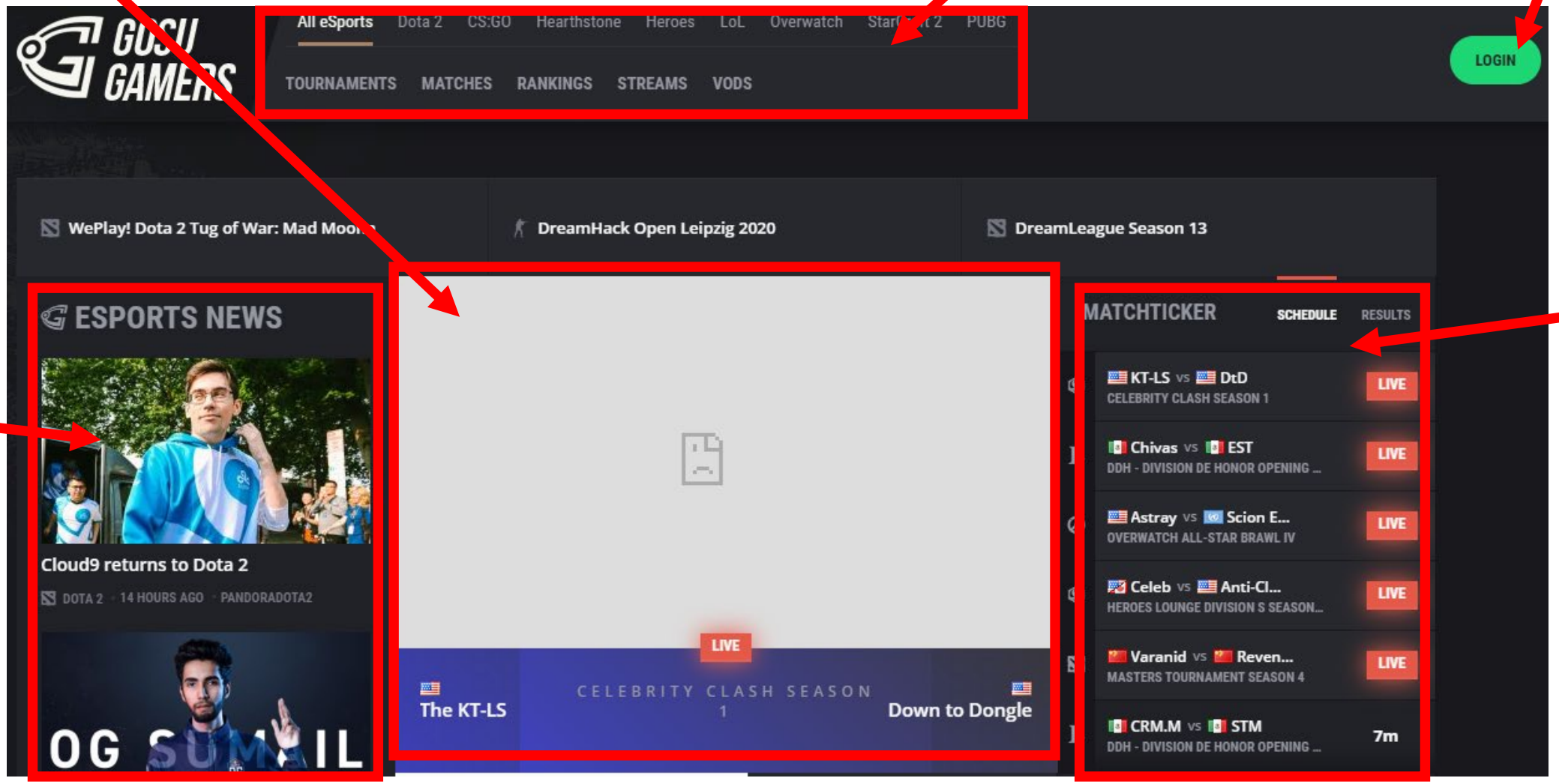

Team history
Team pages
Player pages
Player statistics
Statistics
Winners and seeds for tournaments
Tournament history
Record of games
Size and magnitude of elements
Size of font
Size of leaderboard
Configuration of UI
Accessiblity
Leaderboard
Scrolling elements
Interactivity
Live coverage
ESports UI
Visual elements
mySQL
Web server
Apache server
SQLite
Live statistics
Dynamic server
Oracle
Leased servers
Other server leasing companies/ services
Live coverage of games
Other streaming services
Twitch
Live-streaming Service
Youtube
PLEASE REVIEW
Visual elements



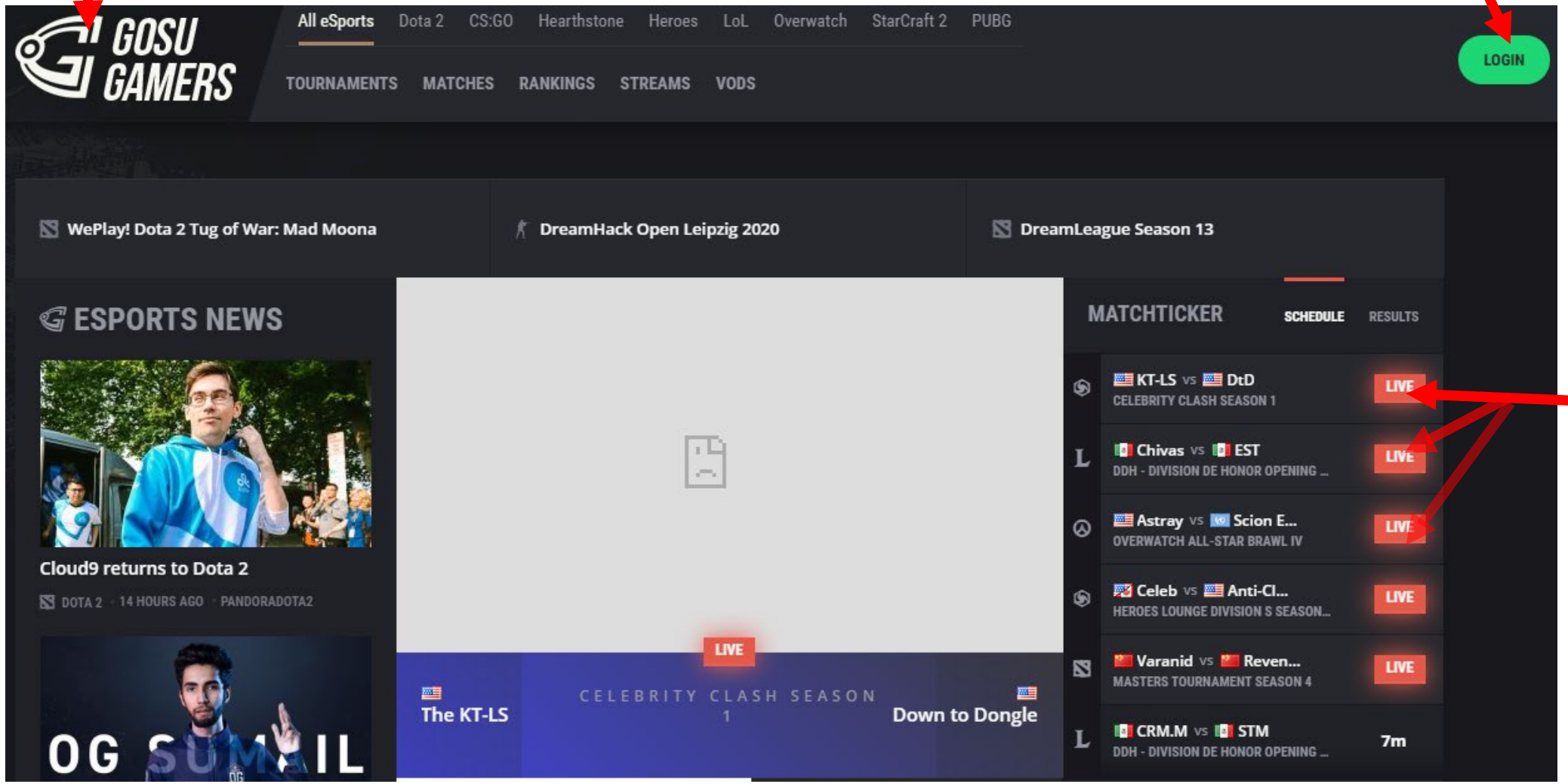
Visual communication of data

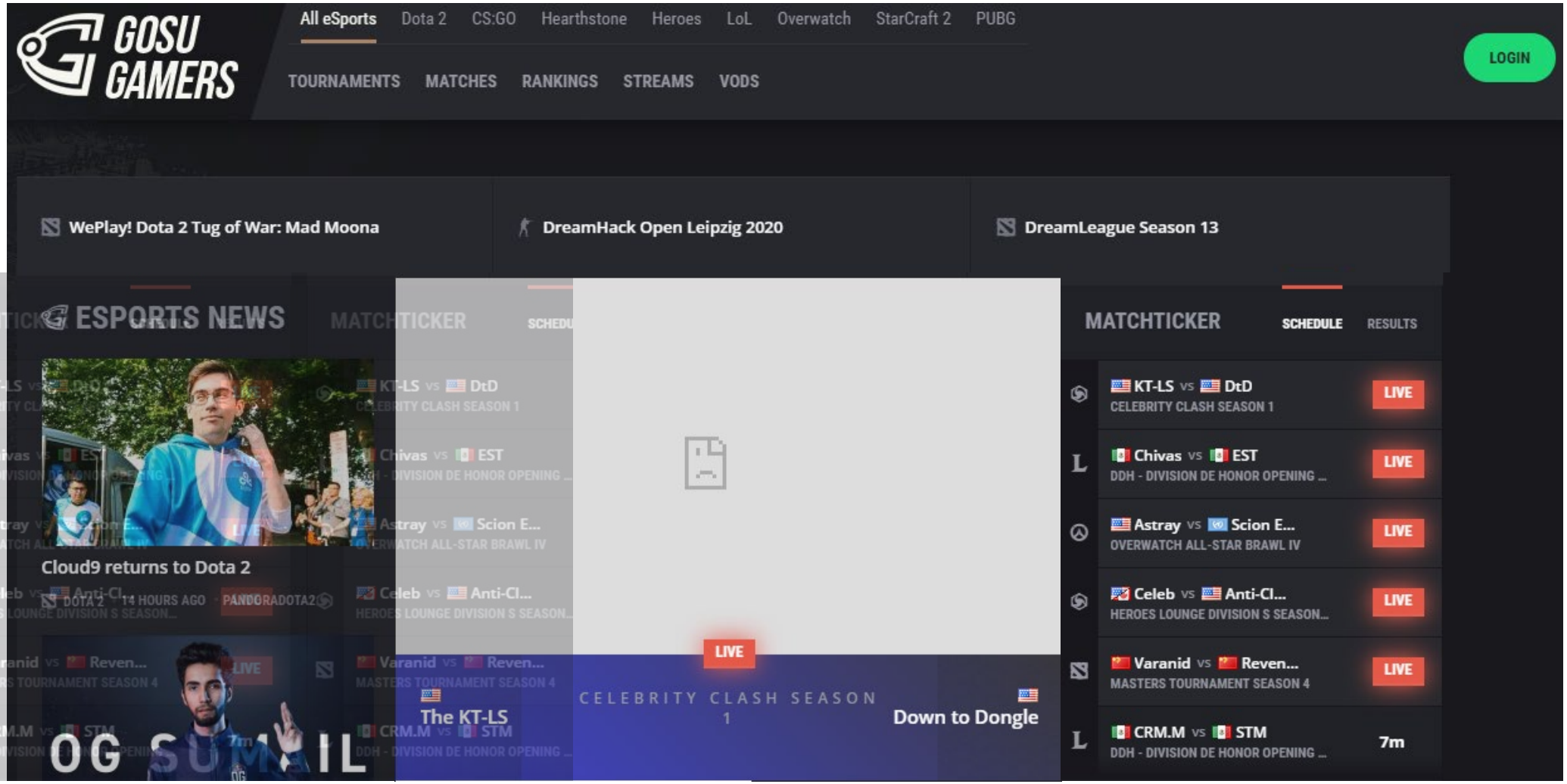
-Elements of visual communication (pg 97-99)
-Principles of visual communication (Digital Solutions Textbook (pg 99-103)

Existing solutions



Contrast
Colour and tone




GOSU GAMERS
All eSports
Dota 2
CS:GO
Hearthstone
Heroes
LoL
Overwatch
StarCraft 2
PUBG
TOURNAMENTS
MATCHES
RANKINGS
STREAMS
VODS
LOGIN
WePlay! Dota 2 Tug of War: Mad Moona
DreamHack Open Leipzig 2020
DreamLeague Season 13
ESPORTS NEWS
Cloud9 returns to Dota 2
DOTA 2
14 HOURS AGO
PANDORADOTA2
MATCHTICKER
SCHEDULE
RESULTS
KT-LS vs DtD
CELEBRITY CLASH SEASON 1
LIVE
Chivas vs EST
DDH - DIVISION DE HONOR OPENING ...
LIVE
Astray vs Scion E...
OVERWATCH ALL-STAR BRAWL IV
LIVE
Celeb vs Anti-Cl...
HEROES LOUNGE DIVISION S SEASON...
LIVE
Varanid vs Reven...
MASTERS TOURNAMENT SEASON 4
LIVE
CRM.M vs STM
DDH - DIVISION DE HONOR OPENING ...
7m
LIVE
The KT-LS
CELEBRITY CLASH SEASON 1
Down to Dongle
OG SUMAIL

liquipedia

Selection of topical tabs

Search/ Navigation Bar

liquipedia StarCraft II | Trending | Tournaments | Contribute | Search | Login

Winnings | Winnings during Beta

Top 10 player per prize money winnings

Leaderboard

Global [edit]

		ID	Money won
1		Serral	$795,383
2		Maru	$773,342
3		Dark	$731,048
4		Rogue	$665,843
5		INnoVation	$648,149
6		sOs	$579,304
7		TY	$571,578
8		soO	$555,272
9		Stats	$526,280
10		MC	$498,059

Korean players [edit]

		ID	Money won
1		Maru	$773,342
2		Dark	$731,048
3		Rogue	$665,843
4		INnoVation	$648,149
5		sOs	$579,304
6		TY	$571,578
7		soO	$555,272
8		Stats	$526,280
9		MC	$498,059
10		Life	$470,559

Foreigners [edit]

		ID	Money won
1		Serral	$795,383
2		Neeb	$482,329
3		Snute	$379,605
4		Nerchio	$376,591
5		Scarlett	$335,499
6		SpeCial	$330,147
7		Stephano	$294,639
8		ShoWTimE	$260,792
9		Elazer	$245,163
10		Reynor	$221,770

Considering user ideas

Survey monkey

Google forms

Fields

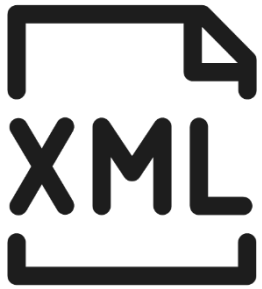
		ID	Money won
1		Serral	$795,383
2		Maru	$773,342
3		Dark	$731,048
4		Rogue	$665,843
5		INnoVation	$648,149
6		sOs	$579,304
7		TY	$571,578
8		soO	$555,272
9		Stats	$526,280
10		MC	$498,059

Keys

Data

Data story

PandaScore



	A	B	C	D	E	F	G	H	I	J
1	sofifa_id	player_url	short_nan	long_nam	age	dob	height_cm	weight_kg	nationalit	club
2	158023	https://so	L. Messi	Lionel And	32	########	170	72	Argentina	FC Barc
3	20801	https://so	Cristiano F	Cristiano F	34	########	187	83	Portugal	Juventu
4	190871	https://so	Neymar Jr	Neymar d	27	########	175	68	Brazil	Paris Sa
5	200389	https://so	J. Oblak	Jan Oblak	26	########	188	87	Slovenia	AtlÃ©t
6	183277	https://so	E. Hazard	Eden Haza	28	########	175	74	Belgium	Real M
7	192985	https://so	K. De Bruy	Kevin De B	28	########	181	70	Belgium	Manche
8	192448	https://so	M. ter Ste	Marc-And	27	########	187	85	Germany	FC Barc
9	203376	https://so	V. van Dijk	Virgil van	27	########	193	92	Netherlan	Liverpc
10	177003	https://so	L. ModriÄ	Luka Modr	33	########	172	66	Croatia	Real M
11	209331	https://so	M. Salah	Mohamed	27	########	175	71	Egypt	Liverpc
12	231747	https://so	K. Mbappé	Kylian Mb	20	########	178	73	France	Paris Sa
13	201024	https://so	K. Kouliba	Kalidou Ko	28	########	187	89	Senegal	Napoli
14	202126	https://so	H. Kane	Harry Kan	25	########	188	89	England	Tottenl
15	212831	https://so	Alisson	Alisson Ra	26	########	191	91	Brazil	Liverpc

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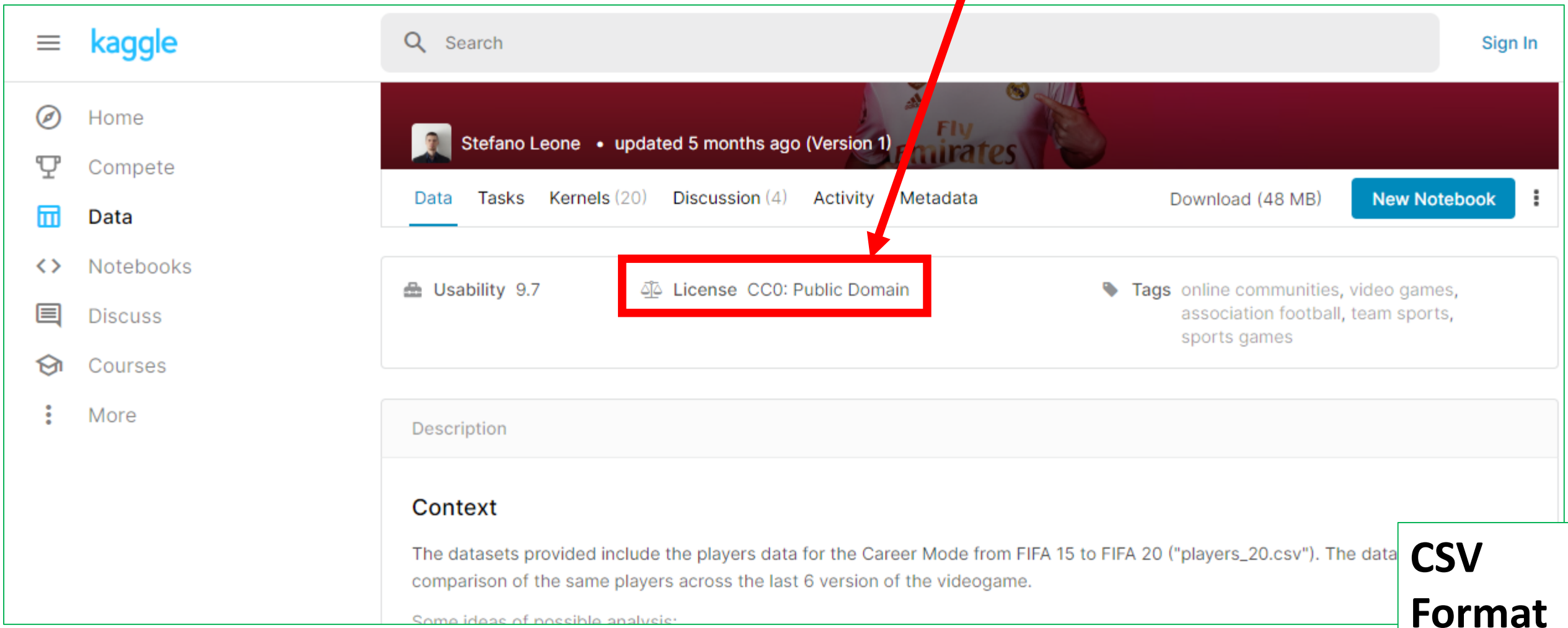


CSV Format

Dataset 1- FIFA Players statistics

- 18279 rows (‘keys’)
- 84 columns (‘fields’)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	sofifa_id	player_url	short_nan	long_nam	age	dob	height_cn	weight_kg	nationalit	club	overall	potential	value_eur	wage_eur	player_po	preferred	internatio	weak_foo	skill_mov	work_rate	body_
2	158023	https://so	L. Messi	Lionel And	32	########	170	72	Argentina	FC Barcelc	94	94	95500000	565000	RW, CF, ST	Left	5	4	4	Medium/I	Messi
3	20801	https://so	Cristiano I	Cristiano I	34	########	187	83	Portugal	Juventus	93	93	58500000	405000	ST, LW	Right	5	4	5	High/Low	C. Ror
4	190871	https://so	Neymar Jr	Neymar d	27	########	175	68	Brazil	Paris Saint	92	92	1.06E+08	290000	LW, CAM	Right	5	5	5	High/Med	Neym
5	200389	https://so	J. Oblak	Jan Oblak	26	########	188	87	Slovenia	AtlÃ©tic	91	93	77500000	125000	GK	Right	3	3	1	Medium/I	Norm
6	183277	https://so	E. Hazard	Eden Haza	28	########	175	74	Belgium	Real Madr	91	91	90000000	470000	LW, CF	Right	4	4	4	High/Med	Norm
7	192985	https://so	K. De Bruy	Kevin De I	28	########	181	70	Belgium	Manchest	91	91	90000000	370000	CAM, CM	Right	4	5	4	High/High	Norm
8	192448	https://so	M. ter Ste	Marc-And	27	########	187	85	Germany	FC Barcelc	90	93	67500000	250000	GK	Right	3	4	1	Medium/I	Norm
9	203376	https://so	V. van Dijl	Virgil van	27	########	193	92	Netherlar	Liverpool	90	91	78000000	200000	CB	Right	3	3	2	Medium/I	Norm
10	177003	https://so	L. ModriÄ	Luka Modı	33	########	172	66	Croatia	Real Madr	90	90	45000000	340000	CM	Right	4	4	4	High/High	Lean
11	209331	https://so	M. Salah	Mohamed	27	########	175	71	Egypt	Liverpool	90	90	80500000	240000	RW, ST	Left	3	3	4	High/Med	PLAYE
12	231747	https://so	K. Mbapp/	Kylian Mb	20	########	178	73	France	Paris Saint	89	95	93500000	155000	ST, RW	Right	3	4	5	High/Low	Norm
13	201024	https://so	K. Kouliba	Kalidou Kı	28	########	187	89	Senegal	Napoli	89	91	67500000	150000	CB	Right	3	3	2	Medium/I	Norm
14	202126	https://so	H. Kane	Harry Kan	25	########	188	89	England	Tottenhar	89	91	83000000	220000	ST	Right	3	4	3	High/High	Norm
15	212831	https://so	Alisson	Alisson Ra	26	########	191	91	Brazil	Liverpool	89	91	58000000	155000	GK	Right	3	3	1	Medium/I	Norm
16	193080	https://so	De Gea	David De (	28	########	192	82	Spain	Manchest	89	90	56000000	205000	GK	Right	4	3	1	Medium/I	Lean
17	215914	https://so	N. KantÃ©	N'Golo Ka	28	########	168	72	France	Chelsea	89	90	66000000	235000	CDM, CM	Right	3	3	2	Medium/I	Norm
18	138956	https://so	G. Chiellir	Giorgio Ch	34	########	187	85	Italy	Juventus	89	89	24500000	215000	CB	Left	4	3	2	Medium/I	Norm
19	153079	https://so	S. AgÃ¼er	Sergio Lec	31	########	173	70	Argentina	Manchest	89	89	60000000	300000	ST	Right	4	4	4	High/Med	Stocky
20	155862	https://so	Sergio Rar	Sergio Rar	33	########	184	82	Spain	Real Madr	89	89	31500000	300000	CB	Right	4	3	3	High/Med	Norm
21	176580	https://so	L. SuÃ¡rez	Luis Alber	32	########	182	86	Uruguay	FC Barcelc	89	89	53000000	355000	ST	Right	5	4	3	High/Med	Norm
22	188545	https://so	R. Lewand	Robert Le	30	########	184	80	Poland	FC Bayern	89	89	64500000	235000	ST	Right	4	4	4	High/Med	Norm
23	189511	https://so	Sergio Bus	Sergio Bus	30	########	189	76	Spain	FC Barcelc	89	89	55000000	300000	CDM, CM	Right	4	3	3	Medium/I	Lean

players

Ready

100%

Dataset 2- FIFA Ultimate team statistics

	A	B	C	D	E	F	G	H	I	J	K	L
1	#	W/L	ET	Pens	Quit	Stadium	Gls F	Gls A	Sht F	Sht A	Sht T F	Sht T A
2	1	L	N	N	N	H	1	3	4	10	2	6
3	1	W	N	N	N	A	3	1	6	1	5	1
4	1	W	Y	N	N	H	2	1	7	2	5	1
5	2	L	Y	Y	N	A	3	3	3	6	3	4
6	1	W	N	N	N	A	5	3	6	4	6	4
7	1	W	N	N	N	A	6	1	13	2	9	1
8	4	W	N	N	Y	H	3	0	6	0	3	0
9	1	W	N	N	Y	A	2	1	5	2	3	1
10	1	W	N	N	N	H	1	0	2	1	1	0
11	6	W	N	N	N	H	2	1	3	2	2	2
12	1	L	N	N	N	H	0	5	2	12	1	7
13	1	L	Y	N	N	H	2	3	4	7	3	4
14	1	W	N	N	Y	A	2	0	4	2	3	1
15	12	L	N	N	N	H	0	3	4	5	1	4
16	1	L	N	N	N	A	1	2	5	2	2	2
17	3	L	N	N	N	A	0	5	0	7	0	6
18	2	L	Y	N	N	A	3	5	4	6	3	6
19	4	W	N	N	N	H	3	0	3	1	3	1
20	6	L	N	N	N	A	1	2	2	4	2	2
21	1	L	N	N	N	H	2	4	3	4	3	4
22	1	W	Y	Y	N	A	2	2	6	5	3	5
23	1	W	Y	N	Y	A	3	2	4	8	3	2
24	3	L	N	N	N	H	0	8	2	15	1	11
25	1	L	Y	Y	N	H	1	1	2	2	1	2

Fields;

- # (id, integer)
- W/L (Win or Loss)
- ET (Extra Time, Boolean)
- Pens (Penalties in game, Boolean)
- Quit (Did player quit? Boolean)
- Stadium (Home or Away?)
- Gls F (Goals for, integer)
- Gls A (Goals against, integer)
- Sht F (Shots for, integer)
- Sht A (Shots against, integer)
- Sht T F (Shots on target for, integer)
- Sht T A (Shots on target against, integer

Name	Type	Schema
Tables (14)		
auth_group		CREATE TABLE "auth_group" ("id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "
auth_group_permissions		CREATE TABLE "auth_group_permissions" ("id" integer NOT NULL PRIMARY KEY AUTOIN
auth_permission		CREATE TABLE "auth_permission" ("id" integer NOT NULL PRIMARY KEY AUTOINCREME
auth_user		CREATE TABLE "auth_user" ("id" integer NOT NULL PRI ARY KEY AUTOINCREMENT, "pa
id	integer	"id" integer NOT NULL PRIMARY KEY AUTOINCREMENT
password	varchar(128)	"password" varchar(128) NOT NULL
last_login	datetime	"last_login" datetime
is_superuser	bool	"is_superuser" bool NOT NULL
username	varchar(150)	"username" varchar(150) NOT NULL UNIQUE
first_name	varchar(30)	"first_name" varchar(30) NOT NULL
email	varchar(254)	"email" varchar(254) NOT NULL
is_staff	bool	"is_staff" bool NOT NULL
is_active	bool	"is_active" bool NOT NULL
date_joined	datetime	"date_joined" datetime NOT NULL
last_name	varchar(150)	"last_name" varchar(150) NOT NULL
auth_user_groups		CREATE TABLE "auth_user_groups" ("id" integer NOT NULL PRIMARY KEY AUTOINCREME
auth_user_user_permissions		CREATE TABLE "auth_user_user_permissions" ("id" integer NOT NULL PRIMARY KEY AUT
django_admin_log		CREATE TABLE "django_admin_log" ("id" integer NOT NULL PRIMARY KEY AUTOINCREM
django_content_type		CREATE TABLE "django_content_type" ("id" integer NOT NULL PRIMARY KEY AUTOINCR
django_migrations		CREATE TABLE "django_migrations" ("id" integer NOT NULL PRIMARY KEY AUTOINCREM
django_session		CREATE TABLE "django_session" ("session_key" varchar(40) NOT NULL PRIMARY KEY, "se
main_additionaluserinfo		CREATE TABLE "main_additionaluserinfo" ("id" integer NOT NULL PRIMARY KEY AUTOIN
main_comment		CREATE TABLE "main_comment" ("id" integer NOT NULL PRIMARY KEY AUTOINCREMEN
main_thread		CREATE TABLE "main_thread" ("id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "
sqlite_sequence		CREATE TABLE sqlite_sequence(name,seq)

```
CREATE TABLE ‘auth_user’ (
        id INTEGER NOT NULL,
        password VARCHAR(128) NOT NULL,
        last_login DATETIME,
        is_superuser BOOL NOT NULL,
        username VARCHAR(150) NOT NULL UNIQUE,
        first_name VARCHAR(30) NOT NULL,
        email VARCHAR(254) NOT NULL,
        is_staff BOOL NOT NULL,
        is_active BOOL NOT NULL,
        date_joined DATETIME NOT NULL,
        last_name VARCHAR(150) NOT NULL
);
```

	id	password	last_login	is_superuser	username	first_name	email	is_staff	is_active	date_joined	last_name
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1	pbkdf2_sha25...	2019-08-06 0...	1	paddy	Patrick	maherp1@sh...	1	1	2019-07-29 0...	Maher
2	2	pbkdf2_sha25...	2019-08-25 0...	0	paddy2			0	1	2019-08-04 0...	
3	3	pbkdf2_sha25...	2019-08-04 1...	0	paddy3			0	1	2019-08-04 1...	
4	4	pbkdf2_sha25...	2019-08-24 0...	0	paddy4			0	1	2019-08-05 1...	
5	5	pbkdf2_sha25...	2019-08-29 1...	0	test	test	testaccount@...	0	1	2019-08-06 0...	account
6	6	pbkdf2_sha25...	2019-08-31 0...	1	admin		maherp1@sh...	1	1	2019-08-11 1...	
7	7	pbkdf2_sha25...	2019-08-18 0...	0	test2	test2	test2@outlook...	0	1	2019-08-18 0...	test2
8	8	pbkdf2_sha25...	2019-08-29 1...	0	test3	third	test3@outlook...	0	1	2019-08-18 0...	test

SELECT * FROM TABLE ‘auth_user’
WHERE ‘id’ = 1;

	id	password	last_login	is_superuser	username	first_name	email	is_staff	is_active	date_joined	last_name
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1	pbkdf2_sha25...	2019-08-06 0...	1	paddy	Patrick	maherp1@sh...	1	1	2019-07-29 0...	Maher

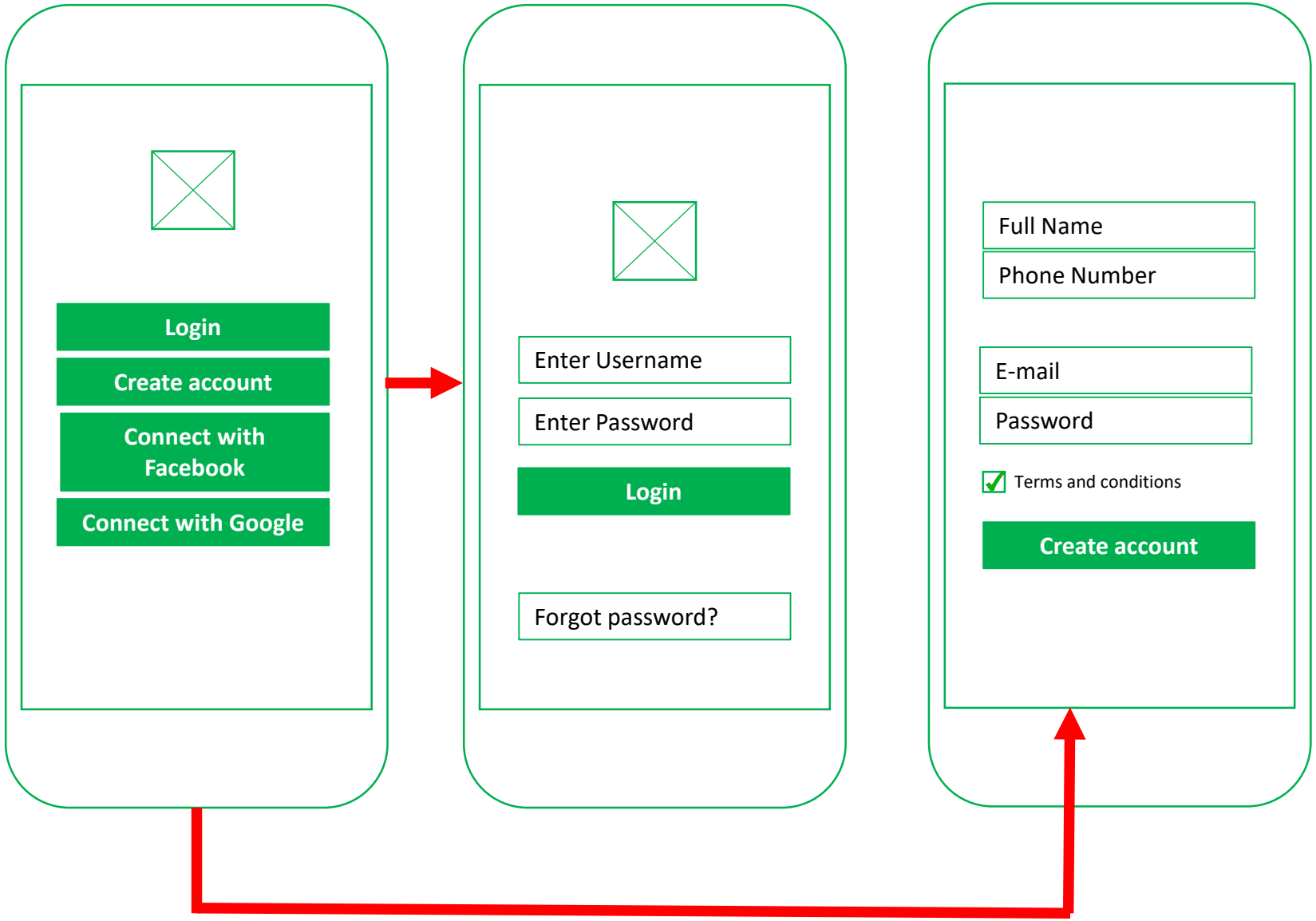
Data dictionary

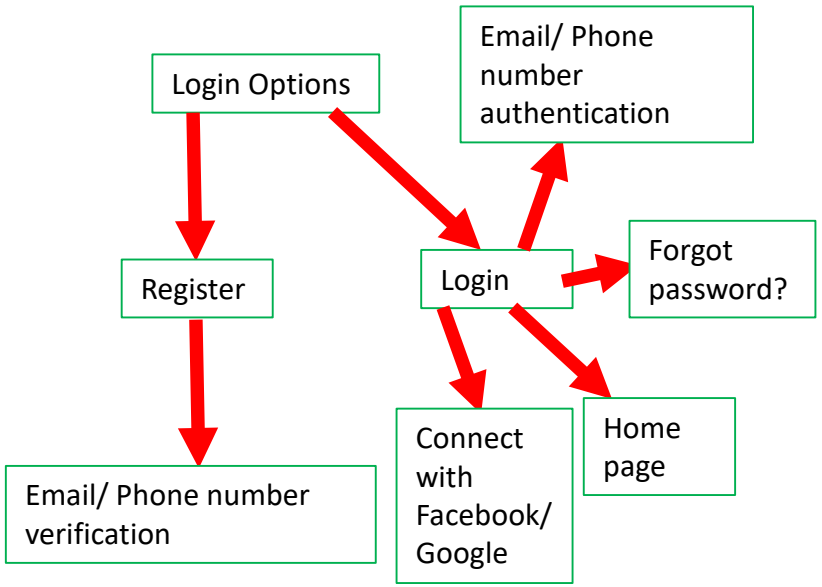
	id	password	last_login	is_superuser	username	first_name	email	is_staff	is_active	date_joined	last_name
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1	pbkdf2_sha25...	2019-08-06 0...	1	paddy	Patrick	maherp1@sh...	1	1	2019-07-29 0...	Maher

Field Name	Data Type	Size	Primary
ID	Integer	3	Yes
Password	Text	50	No
Last Login	Datetime	20	No
Is_superuser	Boolean	1	No
Username	Text	15	Yes
First_name	Text	20	No
Email	Text	25	No
Is_staff	Boolean	1	No

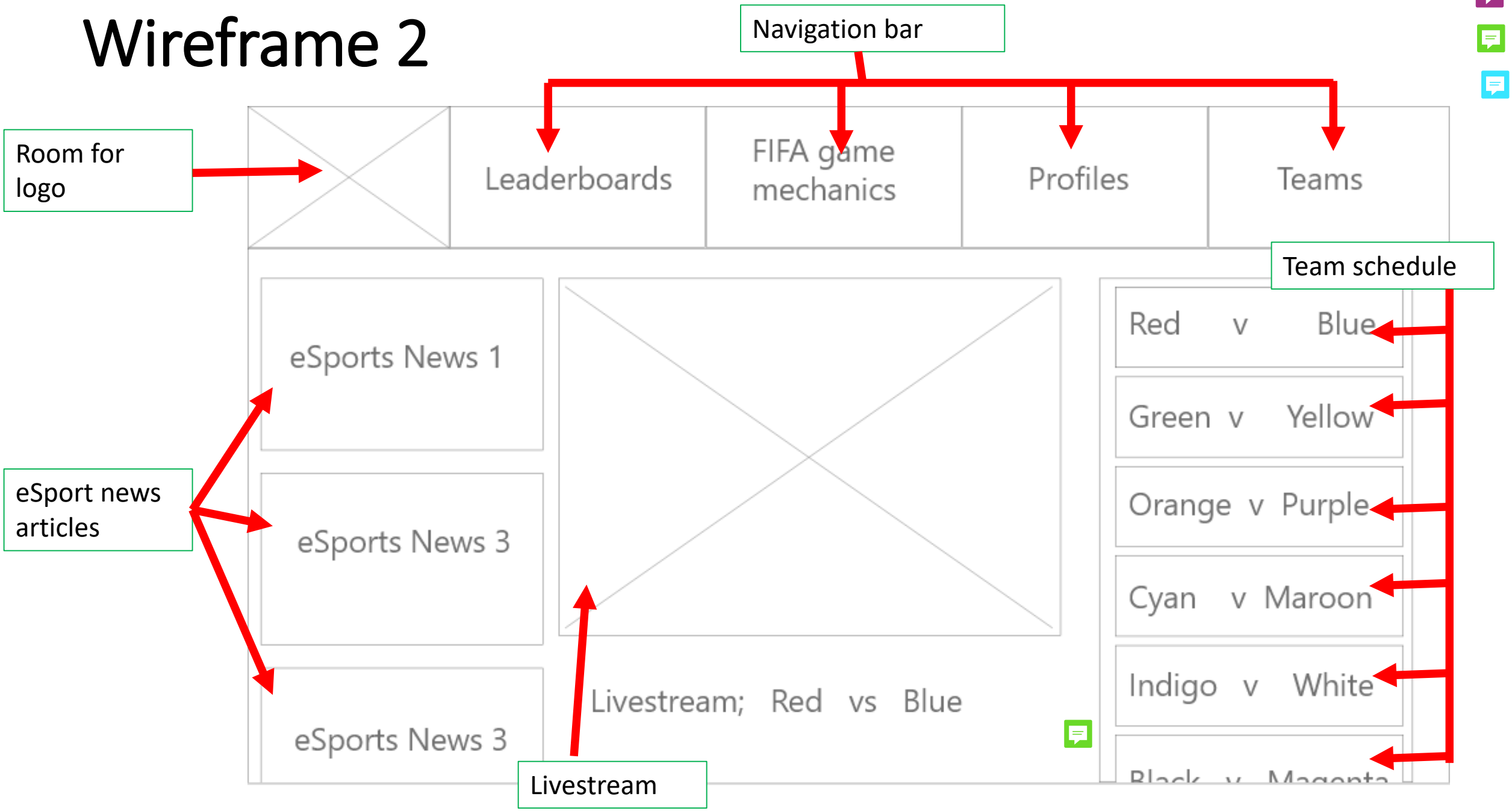
Proposed solution

Wireframe 1

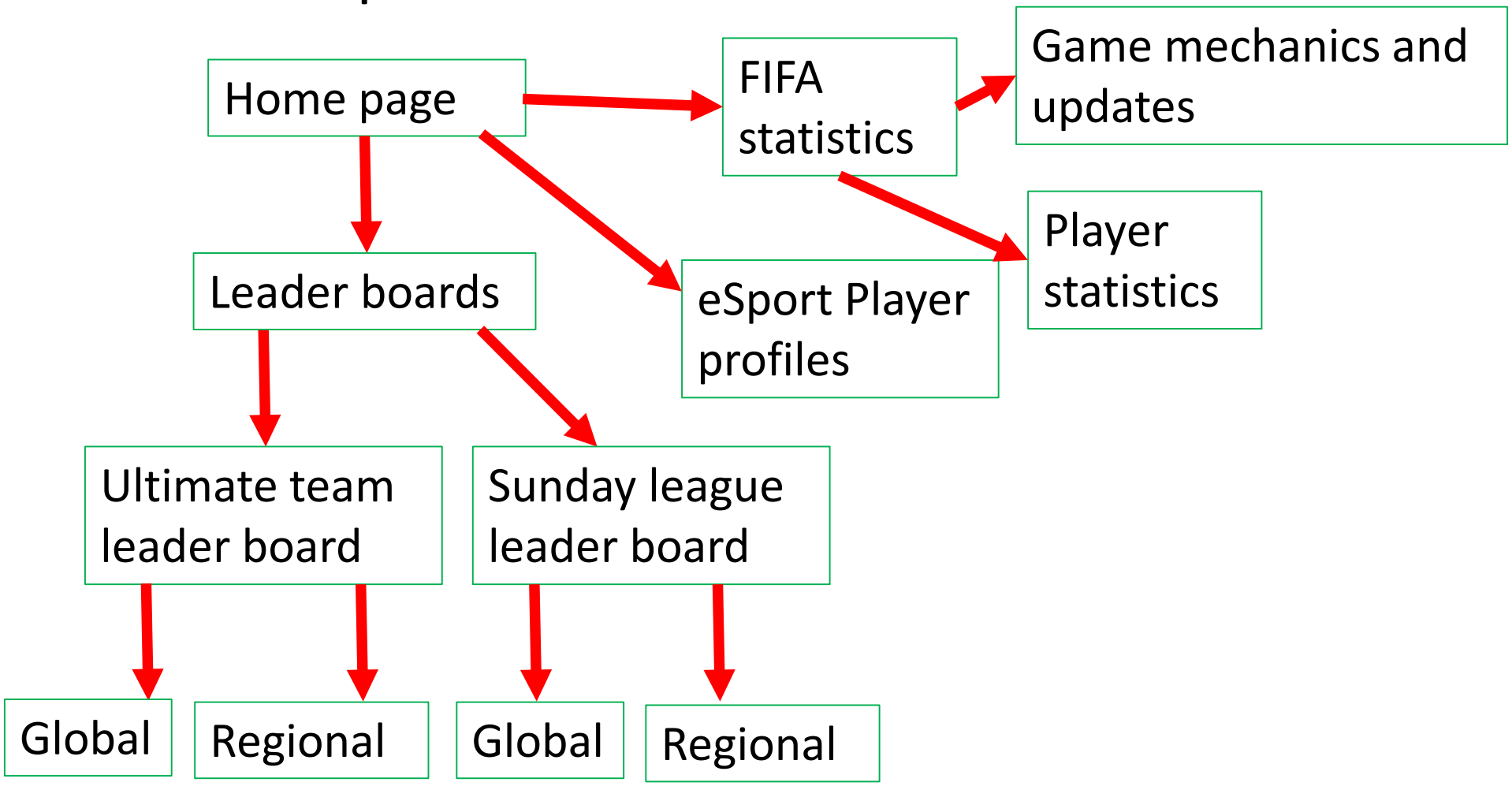

Login
Create account
Connect with Facebook
Connect with Google
Enter Username
Enter Password
Login
Forgot password?
Full Name
Phone Number
E-mail
Password
Terms and conditions
Create account


Login Options
Email/ Phone number authentication
Register
Login
Forgot password?
Email/ Phone number verification
Connect with Facebook/ Google
Home page

Wireframe 2


Navigation bar
Room for logo
Leaderboards
FIFA game mechanics
Profiles
Teams
Team schedule
eSport news articles
eSports News 1
eSports News 3
eSports News 3
Livestream; Red vs Blue
Red v Blue
Green v Yellow
Orange v Purple
Cyan v Maroon
Indigo v White
Livestream

Site map


Home page
FIFA statistics
Game mechanics and updates
Player statistics
eSport Player profiles
Leader boards
Ultimate team leader board
Sunday league leader board
Global
Regional
Global
Regional

```
71  def register(request):
72      form = RegistrationForm(request.POST)
73      pc_form = AdditionalUserInfoForm(request.POST)
74      if form.is_valid() and pc_form.is_valid():
75          user = form.save()
76
77          pc = pc_form.save(commit=False)
78          pc.user = user
79          pc.save()
80
81          username = form.cleaned_data.get('username')
82          messages.success(request, f"New account created: {username}")
83          login(request, user)
84          return redirect('/')
85      else:
86          form = RegistrationForm()
87          pc_form = AdditionalUserInfoForm()
88      context = {
89      'form':form,
90      'pc_form': pc_form,
91      }
92      return render(request, "main/register.html", context)
```

Importing models with links to request, such as 'POST' request

Logic statement checking if form is valid and then initialising the user and form

The username is initialised with 'cleaned_data', outputs a message and logins the user

If the login requirements are not met, the user is redirected to the registration form/page again

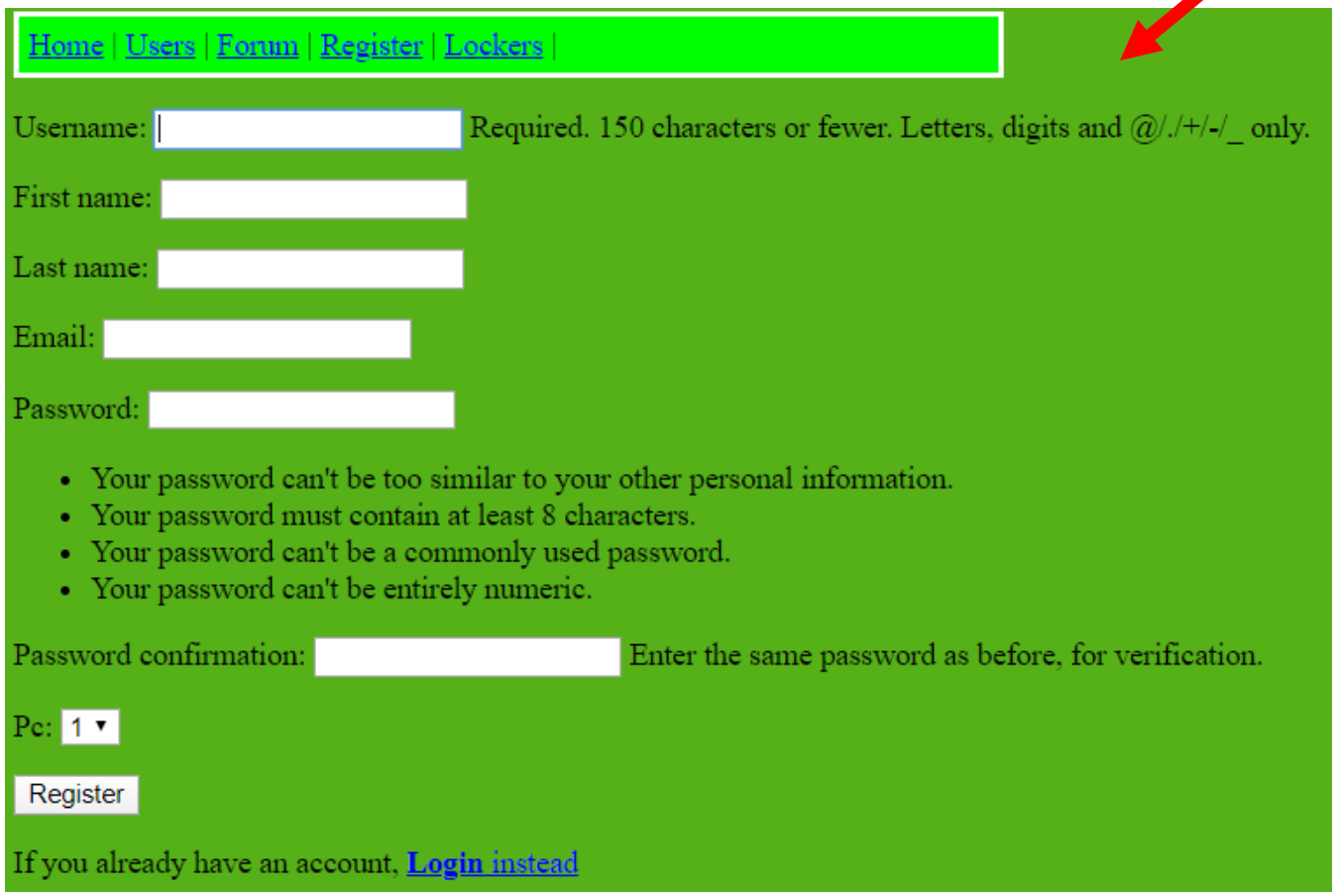
The context is initialised for the web page to be loaded through a 'html' file

Inputs	Process	Outputs
Username, password, password confirmation, PC, Date of birth, Year level,	The username and password is saved, checked and corroborated. This data is cleaned using Django's in-built function 'cleaned_data', a message is sent with username saved redirecting to '/'	User created and logged in, message outputted saying 'New account created:' with the user's username sent to the home page.

```python
def register(request):
    form = RegistrationForm(request.POST)
    pc_form = AdditionalUserInfoForm(request.POST)
    if form.is_valid() and pc_form.is_valid():
        user = form.save()

        pc = pc_form.save(commit=False)
        pc.user = user
        pc.save()

        username = form.cleaned_data.get('username')
        messages.success(request, f"New account created: {username}")
        login(request, user)
        return redirect('/')
    else:
        form = RegistrationForm()
        pc_form = AdditionalUserInfoForm()
    context = {
    'form':form,
    'pc_form': pc_form,
    }
    return render(request, "main/register.html", context)
```



In movie

Prototype

Conclusion

Prescribed Criteria Part 1	Evaluation	Recommendations
Recognise and describe data sources, programming elements, user interface, components and useability principles	- Data source 1 and 2 within app - Python identification within algorithms and potential usage within solution - User interface considerations and various elements used within - Useability principles considered within user interface to account for all people	- Automated system for data to be interpreted - Full system readily able to identify requirements
Symbolise algorithms and user interfaces, and explain ideas and interrelationships between proposed data structures and user experiences of the identified problem	- The consistency of the login example showed the interconnectivity of these aspects - Relation to eSports within prototype - Demonstration of all aspects and how they are related	- A full product as a prototype - Physical example of the data sources within the SQL examples
Analyse the problem and information related to the selected technology context	- Contextual information on eSports - Description of technology, software requirements and potential uses	- More detailed explanation on organisation of eSport committee in regard to competition structure and hardware
Determine programming and user experience requirements of the identified problem and prescribed and self-determined criteria	- Clear identification of the prescribed and self-determined criteria - User experience and programming aspects were based on the goals within the prescribed and self-determined criteria	- More elaborate explanation on how the user experiences used aspects described in prescribed and self-determined criteria

Prescribed Criteria Part 2	Evaluation	Recommendations
Synthesise information and ideas to determine possible data elements, user interface and algorithm components for digital solutions	- How data is established and visually demonstrated - Querying and algorithmic connections to data	
Generate a technical proposal for user interfaces and algorithm components of the low-fidelity prototype digital solution	- Demonstration of the user experience - Detailed wireframes using visual communication elements - Detailed explanation of wireframes	- A full solution - More pages within the prototype may elaborate on the points already given
Evaluate impacts, components and a low-fidelity prototype against prescribed and self-determined criteria to make refinements and justified recommendations	- Consideration of both the prescribed and self-determined criteria to evaluate upon	
Make decisions about and use mode-appropriate features, language and conventions for written and spoken communication for a technical audience	- Smooth PowerPoint with contrasting colours - Simple to highlight key aspects	- More text within the screen for easier communication

Self-determined Criteria	Evaluation	Recommendations
Formulate a UI that is learnable and accessible using usability and visual communication elements and features	- Consideration within development with visual communication elements and clear demonstration of the application within drafting a solution	- More clear examples of application, explicit statements
Consider target audience and existing solutions when developing prototypes	- Development evaluated and corroborated from eSport solutions that consider this target audience - Mobile wireframe remembering that Mobile is choice for target audience	- More explicit statements on how this was considered within the prototype
Understand the algorithms and processes that will need to be used within an eSports web app	- Login analysis, IPO chart - Description of the interconnectivity with data and algorithms - Briefing on what code and SQL must be used to process data and requests.	

Acknowledgements

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Script

INTRODUCTION

Slide 4;

- With the prevalent uprise of the sporting competitions involving gaming, it becomes apparent the vacuum of establishment Bundaberg has within this regard. With No Shalom eSports team and No Bundaberg eSports/League, there is much room for capitalisation within this young and dynamic paradigm.

Slide 5;

- The prescribed criteria was that as given by the QCAA, understanding these requirements are key in identifying the process of developing the eSports task correctly

Slide 6;

- The self-determined criteria are personal goals that help interpret the needs of the QCAA into more tangible and related topics

Slide 7;

- In an age where the youth have access to computers all their life, video games have become increasingly prevalent with 'E-sports' being high order competition of these games with it's popularity increasing. 'Fifa 20' is one of these popular games with an E-sport competition of it's own, with companies such as 'E-league' with the 'Fifa World Cup'.

Slide 8;

- Liquipedia homes one of the largest eSport sites including such games as DOTA, Rocket league and FIFA 20. Taking this an example, it can be seen considerations within an web app such as data transfer and user experience.

Slide 9;

- The constraints within the task define the limitations an assessment must abide by.
- Time is one of these; having only 4 weeks for an assignment.
- Legality is another aspect that must be considered; considering copyrights within content.
- Outside disruption can also impact the productivity of a worker and thus have a negative outcome in regard to the task.
- Restrictions on data can also negatively impact the assignment, with data giving access and insight on how it may be used within a real-life example. The lack of this privilege makes the process of developing an app more difficult

Slide 10;

- Within developing an app, it is important to consider the target audience of a given product, in order to optimise the site for this audience
- The age range will be 13-19 and for students
- These students are likely to be attending high school or even universities
- These schools will have provided hardware and software appropriate for the game such as a laptop, console and the game itself.

- Students must agree to retaining integrity and an element of sportsmanship within the game and competition

Slide 11;

- Useability and Accessibility in being one of the criterion is integral within this task. Elements of the UI such as Proximity and contrast, Large icons, Easy navigation and clear site maps as well as a Simple and learnable UI can marginally improve the user experience

USER STORY

Slide 13;

- Mind maps are a very useful way to explore ideas and decipher elements that may be needed in a given solution. This mind map describes many ideas for visual communication and the navigation, environment and elements within the site such as the team pages and the leader board.

Slide 14;

- Taking a closer look at one of the aspects in this mind map, it can be seen the visual elements and how they are connected via the textbook and the continuous depth a mind map can go

Slide 15;

- Gosugamers boast one of the largest eSport sites equipped with one of the best UI designs for their website. It can seen here such elements as a Navigation Bar, Livestreams, News and a Login/Sign in, that make the site learnable and simple to use.

Slide 16; Contrast

- Within the Gosugamers home webpage, contrast in colours can be seen all throughout the webpage, with bright colours of red, green and white being contrasted to the grey and black background.

Slide 17; Proximity

- Looking at different elements of this page being the stream and the links to separate streams, the contrast in size can already be seen. Using proximity, the user is already presented with the livestream, immersing the user already upon the home page.

Slide 18;

- Liquipedia, the example shown earlier, also conveys a page that shares similar elements as GosuGamers.
- This particular page describes the Winnings earned by e-Sport players, it can be seen as well as having fundamental elements of a webpage such as Selection of topical tabs, Search/Navigation bars and a Login, it also centralises the leaderboard
- This leaderboard is split into different categories and the players are ranked

Slide 19;

- Instead of insinuating what users may like, it is a good idea to ask them directly. This user feedback data can be found through surveys. Surveys can be made and distributed simply using sites such as SurveyMonkey and Google Forms

Slide 20;

- Taking a closer look at Liquipedia's leaderboard, it can be seen how data is conveyed within tables through fields and keys. This leads to the next major topic of the task

DATA STORY

Slide 22;

- Within finding data samples to evaluate a solution around, sites such as PandaScore and Kaggle were used to find Fifa 20 data in .csv and .xml files for viewing of data through sources such as Excel.

Slide 23;

- The first dataset, Fifa 20 data was found on Kaggle. Within the description for the data, it can be seen that the license for this data is creative commons 0: Public domains. And as stated by the definition of this license, there is no copyright and free right to anyone to use this data, therefore this can be used as sample data for the task.

Slide 24;

- Dataset 1 contains FIFA Player statistics, complied into a large .csv file, it contains 18,279 keys and 84 fields. With this magnitude of data, statistics for FIFA players on the gameplay and mechanics becomes marginally more complex and intricate.

Slide 25;

- Dataset 2 contains FIFA Ultimate team statistics. FIFA Ultimate team is an online league for FIFA, and contains data from within a given FIFA match. These includes integer statistics such as shots, shots and targets, Booleans such as extra time or penalties, and primary keys such as ID.

Slide 26;

- SQLite is one of the many variants of SQL. SQL, Standard Query Language, is the language used to interpolate and sort data. SQLite is a variant of SQL that is light-weight and can support a small server. This apparent lack in aptitude is made up for in versatility and the viscosity of the base language.
- Here can be seen data sets in the form of tables. Using the SQL command as seen here, the name of the table is initialised after CREATE TABLE and all the fields are named and set for their data type

Slide 27;

- Oftentimes with data, it is not only wanted to be left within the table, but queried and viewed from a front-end perspective. Using SQL's most common command 'SELECT', data from a table and field can be used with the WHERE command specifying a condition for this data to include. In this case, the first key of data was selected with 'ID' 1.

Slide 28;

- A data dictionary can be important in identifying and evaluating the data collected and needed within a given digital solution. Evaluating from the user table as initialised earlier, Each field can be expressed in a table as their data types, sizes and whether they are primary or not.

PROPOSED SOLUTION

Slide 30;

- Wireframe 1 includes a mobile wireframe of a login page. Being one of the most popular choices for the target audience, a mobile adaption or implementation of the app would be logical. Within this wireframe, there are three pages.
- It can be seen how they are linked to each other through a small site map and how the pages are connected.

Slide 31;

- Wireframe 2 shows the home page, and how it may be viewed within a monitor view. This monitor view of 1920x1080 pixels, has much more room than a mobile view, thus there will be differences in the interpretation of the app.
- Within this wireframe, similar concepts and elements of an e-Sports web app can be seen, such as News articles, a Navigation bar, a Logo (or room for it), a Livestream and a schedule for matches yet to come.

Slide 32;

- A site map is a useful and systematic way of laying out the navigation and pages within a site and how they are interconnected. Following from the login site map as seen in Wireframe 1, this site map describes the interconnectivity from the Home page.
- From the home page, pages are branched off into categories and then subcategories, such as the leaderboards, ultimate team leaderboard and the global ultimate team leaderboard

Slide 33;

- This python algorithm is an example of an application of algorithms within the context of a login system. This particular python interpretation uses Django, a web-building python base.
- The function is defined with it's parameter as the HTTP request, it begins by importing previous made models with their parameters being the HTTP request POST
- A logic statement is then used checking if the form inputted was valid, if so, the user is initialised and an extra variable, 'pc' is also initialised
- The username is called from clean_data, a message is made stating to the user that the login has been made and the user is logged in and returned to the home page.
- If the form was not valid, the page reloads with the forms reinitialised
- The context is given for the reload and the page is re-rendered

Slide 34;

- An IPO chart or more formally known as an Input, Process, Output chart is useful in analysing the function of a given algorithm. Using the example of the login python algorithm, it can be seen more clearly through an IPO chart what is being inputted, how this data is being processed and what is returned to the end user.
- These fields and input could be used through a UI such as this one.

PROTOTYPE

- Here can be seen a more complete version of Wireframe 1
- The Bundaberg eSports logo is presented with four buttons as a front page for this app
- Clicking on Create account, the user is taken to registration where all fields necessary shall be posted and go through algorithms.
- Going back and choosing login account, it is the username and password basic requirements. Upon completion of this login, users will be directed towards the home page.

CONCLUSION

Slide 37;

- This table evaluates the project and the task against the prescribed criteria. Within this, the task is evaluated and extensions to the task in the form of recommendations are given

Slide 38;

Slide 39;

- This has also been done with the self-determined criteria, in that it is evaluated against the project.

ACKNOWLEDGMENTS

- Here are the sources of the information found within the task.

Responding and comprehending	Analysing	Synthesising and evaluating	Communicating

Teacher feedback: It is evident you have invested many hours to generate a high quality multi-modal for your technical proposal. A number of objectives are well covered with good evidence of various elements. You did demonstrate and explain your data sets, data story and database systems well. It is evident your knowledge of algorithms and programming components for your prototype are insightful and discerning.

It was good to see your programming skills demonstrated throughout your presentation. Your user interface was well thought out and made use of various CARP principles. You will need to practice getting your audio levels consistent for future projects. Your voice was clear, however the volume changed during the presentation.

On balance you have provided consistent evidence to justify the levels for each objective.

Overall this was a very good first attempt at a year 12 assessment item.