

PES UNIVERSITY, BANGALORE

Department of Computer Science and Engineering B. Tech (CSE) – 5th Semester – Aug-Dec 2024

UE22CS303 - Software Engineering DESIGN DOCUMENT

Project Title: Cricket Metrics: Advanced Dashboard for Performance Analysis Team #23

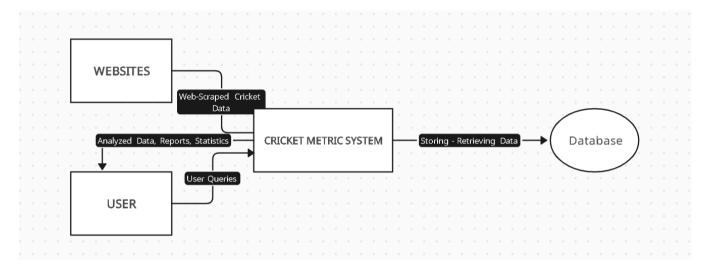
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Design Diagrams

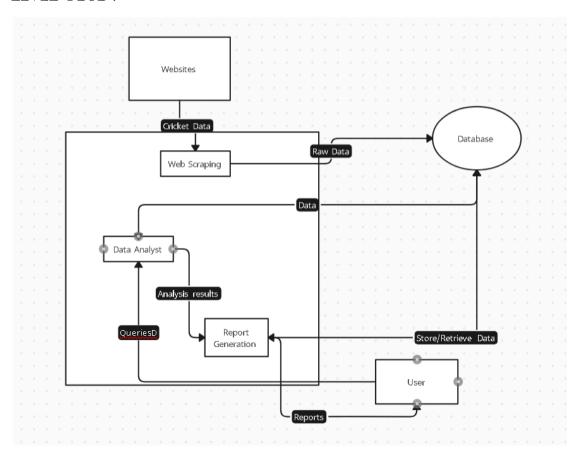
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Diagrams of Levels of DFD

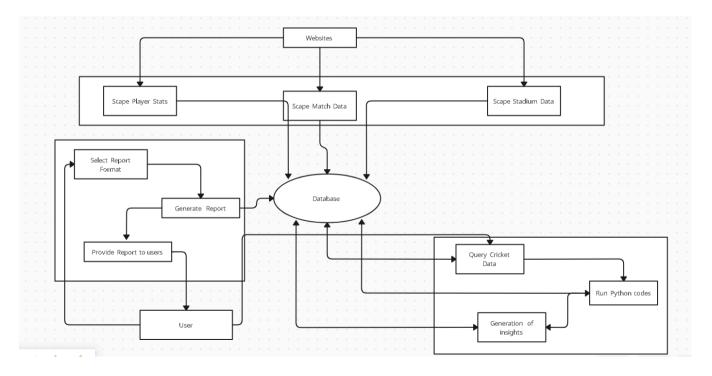
LEVEL -0 DFD:



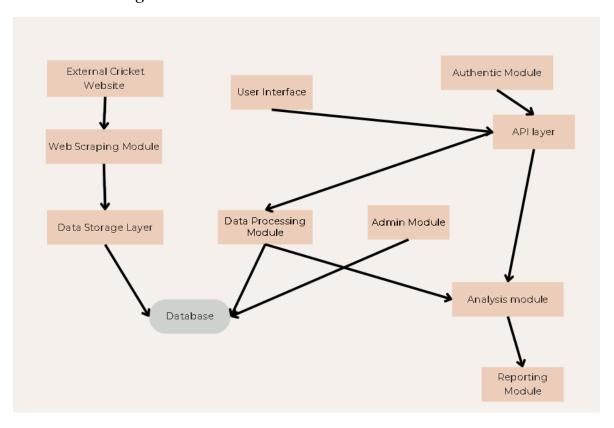
LEVEL -1 DFD:



LEVEL -2 DFD:

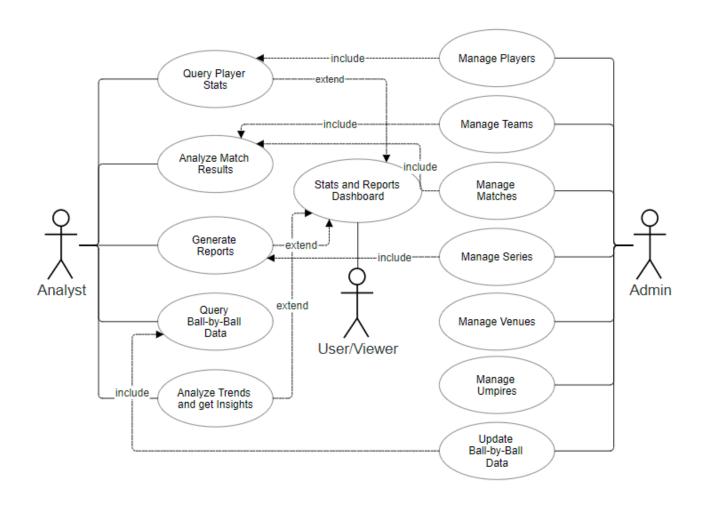


Architectural Design



UML

Use Case Diagram:



Class Diagram:

Players

id int [primary key]
name varchar
date_of_birth date
age int
nationality varchar
role varchar
bowling_style varchar
bowling_style varchar
total_runs int
50s int
100s int
total_wickets int
5W int
debut_date date
last_updated timestamp

+add() +update() +delete()

Teams

id int [primary key] name varchar nation char coach varchar captain_id int squad_size int founded_year int last_updated timestamp

+add() +update() +delete()

Venues

id int [primary key] name varchar city varchar country varchar capacity int established_year int hosts_id int

+add() +update() +delete()

Series

id int [primary key]
name varchar
host_country varchar
host_id int
start_date date
end_date date
format_name int
number_of_matches int
winner_id int
matches_won int
matches_lost int
POTT int
winning_capt int
sponsor varchar

+add() +update() +delete()

Umpires

Overs

id int [primary key]

over_number int

runs_scored int

wickets_taken int

inning_id int

extras int

+update()

+delete()

+add()

id int [primary key] name varchar nationality varchar

+add() +update() +delete()

Matches

id int [primary key]
date_of_match date
venue_id int
team1_id int
capt1_id int
team2_id int
capt2_id int
winner_id int
match_type varchar
series_id int
format_name int
toss_winner_id int
toss_decision varchar
result varchar
POTM int
winning_capt int

+add() +update() +delete()

Innings

id int [primary key]
match_id int
team_id int
inning_number int
innings_type varchar
runs_scored int
wickets_lost int
overs int

+add() +update() +delete()

Formats

format_name varchar [primary key] overs_limit int

+add() +update() +delete()

Player_stats

inning_id int [primary key] player_id int [primary key] team id int place varchar runs_scored int ball_by_ball_faced int fours int sixes int strike_rate float wickets_taken int overs_bowled float maidens int runs_conceded int economy float catches int run_outs int stumpings int

+add() +update() +delete()

Ball_by_ball

over_id int [primary key]
ball_number int [primary key]
batsman_id int
bowler_id int
runs_scored int
is_wicket boolean
dismissal_type varchar
fielder_id int
is_boundary boolean
boundary_type varchar
is_overthrow boolean
overthrow_runs int
extra_type varchar
extra_runs int

+add() +update() +delete()

Match_umpires

match_id int [primary key] umpire_id int [primary key] role varchar

+add() +update() +delete()

Player_teams

player_id int [primary key] team_id int [primary key] from_date date to_date date

+add() +update() +delete()

