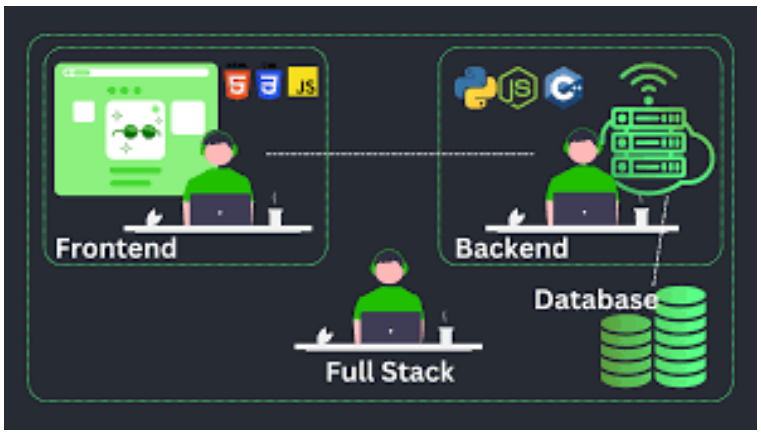
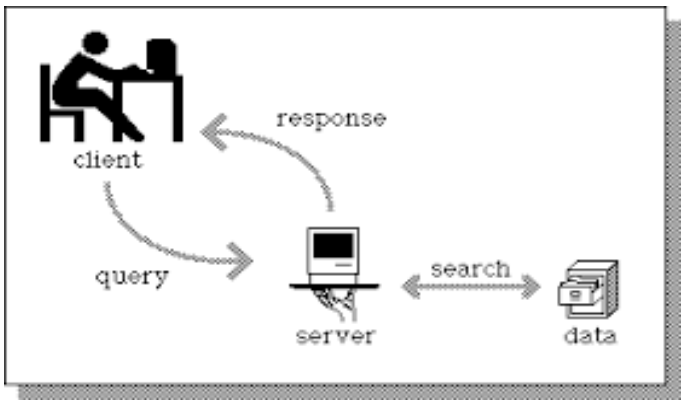
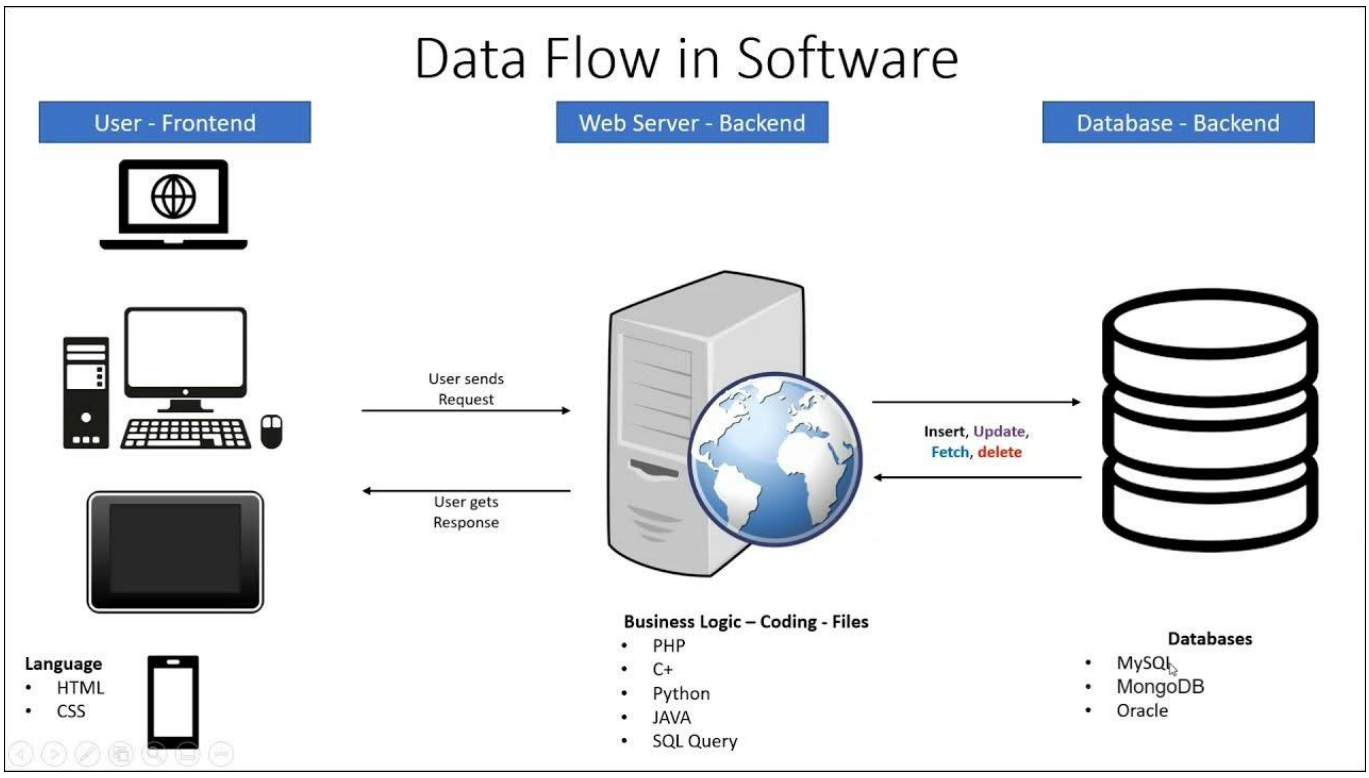
Problem Statement: To develop a statistical cricket website with Front End, Back End and Database connectivity so as to display statistics of various cricket players and their cricket records.

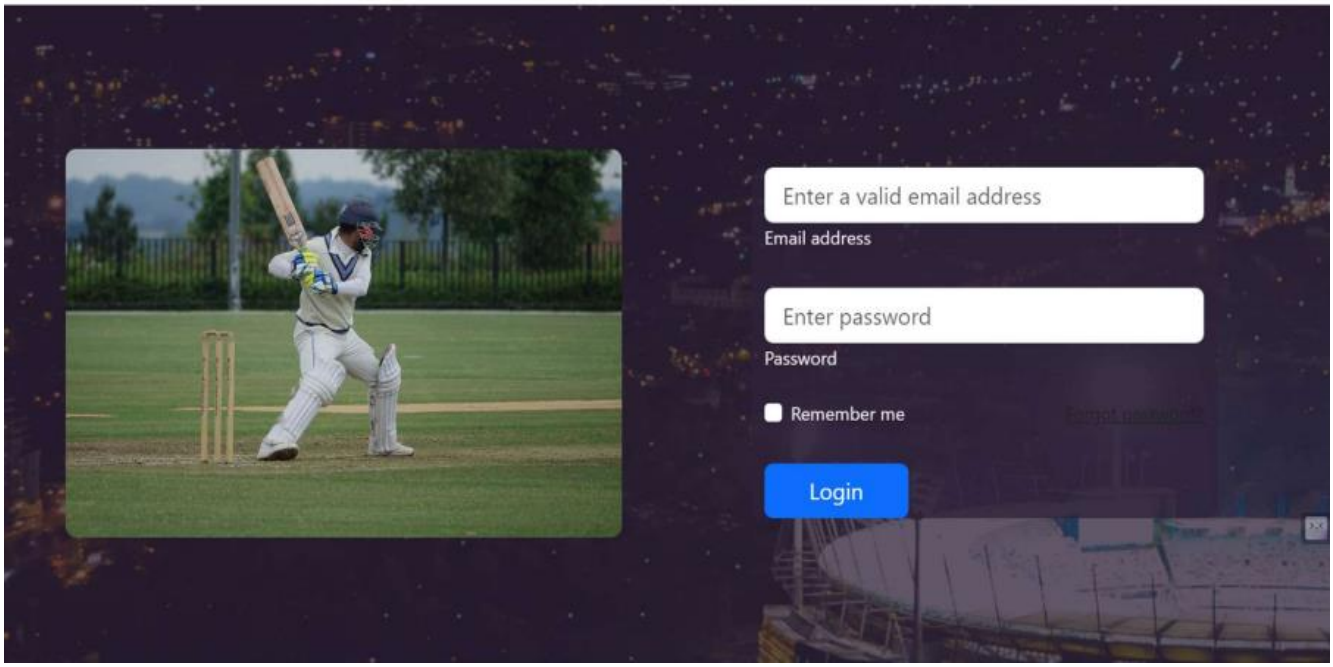
System Diagram/System Architecture/Data flow diagram:



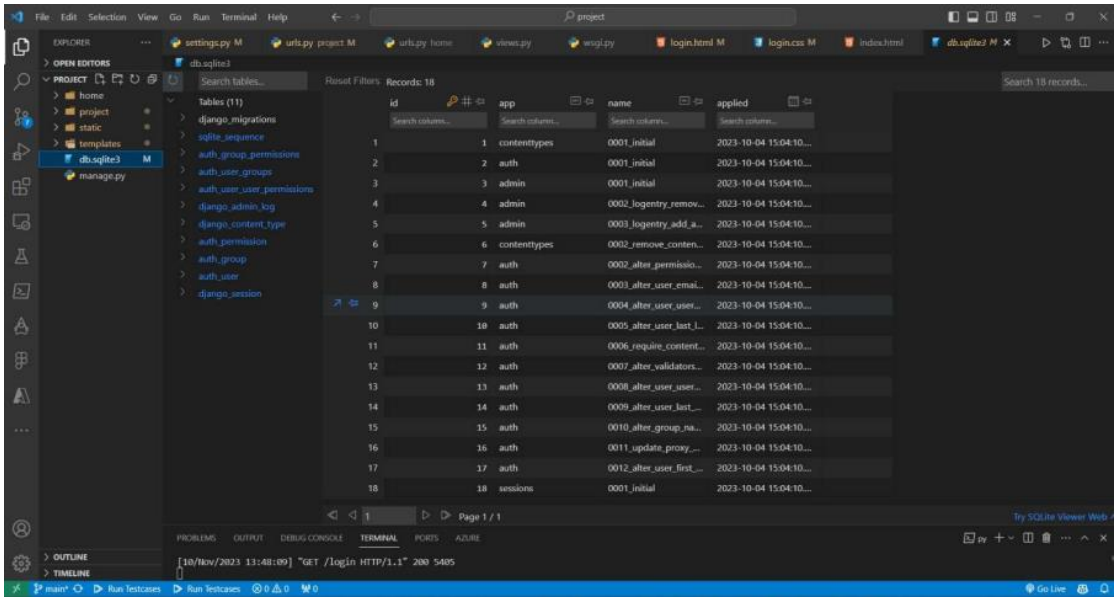


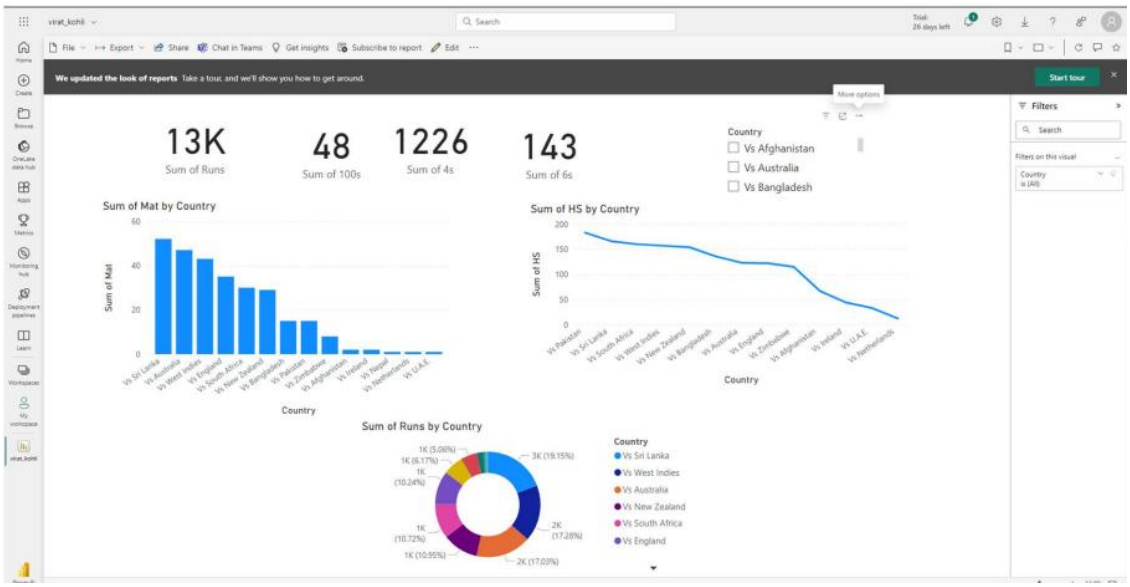


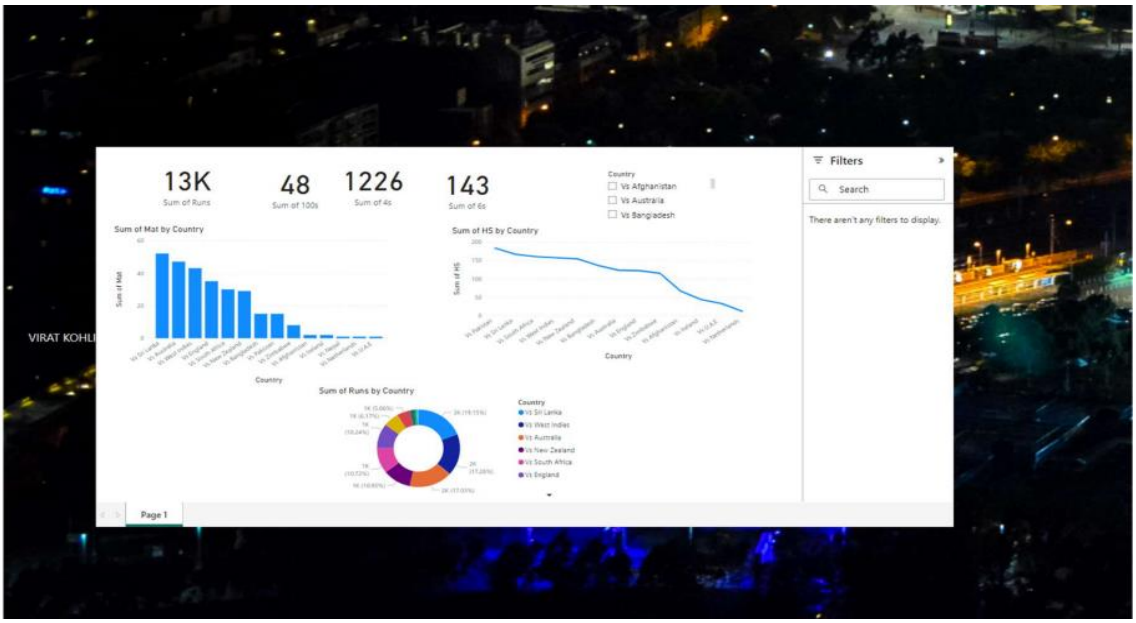
Project UI


Enter a valid email address
Email address
Enter password
Password
Remember me
Login


Welcome Cricket Lovers!
Cric stat provides Statistics about various cricket players. Enjoy the latest stats and records of your favourite player and dive deep into Cricket. Get valuable insights and performance indicators. In the intricate tapestry of cricket, statistics emerge as the vibrant threads that weave together the narrative of every match and player's journey. Beyond the boundaries and breathtaking moments, statistics provide the intricate details that define the essence of the game. They not only narrate the story of runs scored and wickets taken but also unveil the nuances of player performance, strategy effectiveness, and team dynamics. Statistics in cricket are the silent historians, chronicling the evolution of players into legends and teams into powerhouses.
Beauty of Cricket
"Cricket, a symphony of willows and leather, where each stroke is a poetic note in the grand composition of competition."
"In the tapestry of sports, cricket is the intricately woven masterpiece, where elegance meets strategy, and the heartbeat of the game echoes in the roar of the crowd."
"Cricket is not just a sport; it's a canvas where players paint their dreams with the strokes of determination, and the stadium becomes an art gallery of resilience and triumph."


File Edit Selection View Go Run Terminal Help
project
EXPLORER
OPEN EDITORS
PROJECT
home
project
static
templates
db.sqlite3
manage.py
settings.py M
urls.py project M
urls.py home
views.py
wsgi.py
login.html M
login.css M
index.html
db.sqlite3 M
db.sqlite3
Search tables...
Reset Filters
Records: 18
Search 18 records...
Tables (11)
django_migrations
sqlite_sequence
auth_group_permissions
auth_user_groups
auth_user_user_permissions
django_admin_log
django_content_type
auth_permission
auth_group
auth_user
django_session
id
app
name
applied
1 1 contenttypes 0001_initial 2023-10-04 15:04:10....
2 2 auth 0001_initial 2023-10-04 15:04:10....
3 3 admin 0001_initial 2023-10-04 15:04:10....
4 4 admin 0002_logentry_remov... 2023-10-04 15:04:10....
5 5 admin 0003_logentry_add_a... 2023-10-04 15:04:10....
6 6 contenttypes 0002_remove_conten... 2023-10-04 15:04:10....
7 7 auth 0002_alter_permissio... 2023-10-04 15:04:10....
8 8 auth 0003_alter_user_emai... 2023-10-04 15:04:10....
9 9 auth 0004_alter_user_user... 2023-10-04 15:04:10....
10 10 auth 0005_alter_user_last_l... 2023-10-04 15:04:10....
11 11 auth 0006_require_content... 2023-10-04 15:04:10....
12 12 auth 0007_alter_validators... 2023-10-04 15:04:10....
13 13 auth 0008_alter_user_user... 2023-10-04 15:04:10....
14 14 auth 0009_alter_user_last_... 2023-10-04 15:04:10....
15 15 auth 0010_alter_group_na... 2023-10-04 15:04:10....
16 16 auth 0011_update_proxy_... 2023-10-04 15:04:10....
17 17 auth 0012_alter_user_first_... 2023-10-04 15:04:10....
18 18 sessions 0001_initial 2023-10-04 15:04:10....
Page 1 / 1
Try SQLite Viewer Web
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS AZURE
[10/Nov/2023 13:48:09] "GET /login HTTP/1.1" 200 5405
OUTLINE
TIMELINE
main*
Run Testcases
Go Live


virat_kohli
We updated the look of reports Take a tour, and we'll show you how to get around.
Start tour
13K
Sum of Runs
48
Sum of 100s
1226
Sum of 4s
143
Sum of 6s
Country
Vs Afghanistan
Vs Australia
Vs Bangladesh
Sum of Mat by Country
Sum of Mat
Country
Sum of HS by Country
Sum of HS
Country
Sum of Runs by Country
Country
Vs Sri Lanka
Vs West Indies
Vs Australia
Vs New Zealand
Vs South Africa
Vs England
Filters
Search


VIRAT KOHLI
13K
Sum of Runs
48
Sum of 100s
1226
Sum of 4s
143
Sum of 6s
Country
Vs Afghanistan
Vs Australia
Vs Bangladesh
Sum of Mat by Country
Sum of HS by Country
Sum of Runs by Country
Filters
Search
There aren't any filters to display.
Page 1

Project Description:

This report outlines the functionality and features of our "***CricStat***" website, which serves as a statistical visual for the records and achievements of various cricket players. Our project's main aim is to provide key valuable insights about the strengths and weakness of each individual player by providing the statistics of their games. Our features include in depth statistical reporting, key indicators for a great performance analysis along with a dashboard that throws beautiful visuals about the performance of various batsman and bowlers.

Website Features and Functionalities:

1. **Log In**: This functionality allows you to access the database by authentication through a username and a password. Using this, we get the access to the statistics and records of various players.

2. **User Interface:** A smooth and attractive UI has the power to fetch web traffic and contribute to the growth of users. The UI is built using HTML, CSS, JAVASCRIPT thereby crafting a visually appealing and stylized Front End.

3. **View Stats**: This functionality has the following parameters involved:

    i) ***Batting Stats:-*** This option shows the statistics of the player in batting.
    ii) ***Bowling Stats***:- This option shows the statistics of the player during Bowling.
    iii) ***Fielding Stats:-*** This option displays the total no. of catches taken during matches which can be filtered by ODI, WORLD CUP, T-20, etc.

4. **Dashboard**: This functionality displays the overall performance statistics of players. Appealing visualizations contribute to one glance knowledge and valuable insights that delve deeper into the game tactics and player strategy.

Technology used in the Project:

1. HTML:-

i) **Structure:** HTML provides the basic structure for a web page, defining the different elements of the page such as headings, paragraphs, lists, images, and links.
ii) **Content**: HTML is used to add content to a web page, such as text, images, and videos.
iii) **Semantics**: HTML elements can be used to add semantic meaning to the content of a web page, which can help search engines and other tools better understand the content of the page.
iv) **Accessibility**: HTML elements can be used to make web pages more accessible to users with disabilities.

USECASE: In our project, HTML has been used to develop the frontend.

2. CSS:

i) **Control the appearance of web page**: CSS can be used to control the appearance of web pages in a variety of ways, such as the font, color, size, and spacing of text, the background color and image of a page, and the layout of elements on a page.
ii) **Separate content from presentation**: CSS allows to separate the content of a web page from its presentation, which makes it easier to maintain and update the page.
iii) **Create reusable styles**: CSS can be used to create reusable styles that can be applied to multiple elements on a page or even to multiple pages on a website. This can save time and effort when designing and developing a website.
iv) **Create responsive designs**: CSS can be used to create responsive designs that look good and function well on all devices, regardless of screen size or resolution.

USECASE: Interactive styling for navbar, footer, web content has been done by creating a file called as styles.css and adding component styles to it.

3. Javascript

i) **Interactive forms**: JavaScript can be used to validate form input, display error messages, and submit forms without reloading the page.

ii) **Dynamic menus**: JavaScript can be used to create dynamic menus that respond to user input, such as drop-down menus and navigation bars.

iii) **Image galleries**: JavaScript can be used to create image galleries that allow users to scroll through images, zoom in and out, and view captions.

iv) **Animated effects**: JavaScript can be used to create animated effects on web pages, such as fading images, sliding menus, and rotating text.

USECASE: User Interactive functionalities and animated affects are created by the use of Java script in our project. All the Java script functionalities have been incorporated either under the script tag or inside the file script.js

4. PowerBI:

i) **Ease of use**: Power BI is relatively easy to use, even for users with no prior experience with data visualization tools.

ii) **Range of features**: Power BI provides a wide range of features for dashboard designing, including data integration, data transformation and cleaning, data visualization, interactivity, collaboration, and sharing. This allows users to create dashboards that are visually appealing, informative, and interactive.

iii) **Affordability**: Power BI is a relatively affordable data visualization tool, making it a good value for businesses of all sizes.

iv) **Integration with a variety of data sources**: Power BI can integrate with a variety of data sources, including on-premises databases, cloud-based data services, and Excel spreadsheets. This allows users to create dashboards that combine data from multiple sources into a single view.

v) **Rich library of data visualizations:** Power BI provides a rich library of data visualizations, including charts, graphs, and maps. This allows users to create dashboards that visually appealing and easy to understand.

vi) **Interactive dashboards**: Power BI dashboards can be interactive, allowing users to drill down into data, filter data, and change visualizations on the fly. This allows users to explore data and identify insights more easily.

USECASE:- In our project, PowerBI has been integrated to create visually appealing dashboards and provide at a glance insights to clients about the statistics of players.

5. Django:

Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. It provides a number of functionalities that make it a popular choice for web development, including:

i) **Object-relational mapper (ORM):** Django provides an ORM that allows developers to interact with databases in a Pythonic way. This makes it easy to develop database-driven web applications.

ii) **Admin interface**: Django provides an out-of-the-box admin interface that allows developers to manage their data easily. This can save a lot of time and effort when developing web applications.

iii) **Authentication and authorization**: Django provides built-in authentication and authorization features. This makes it easy to develop secure web applications.

iv) **Caching**: Django provides built-in caching features that can improve the performance of web applications.

v) **Form handling**: Django provides built-in form handling features that make it easy to create and validate forms.

vi) **Signals**: Django provides a signal system that allows developers to decouple their code and make it more reusable.

vii) **Middleware**: Django provides a middleware system that allows developers to intercept and modify requests and responses.

viii) **Testing framework**: Django provides a built-in testing framework that makes it easy to test web applications.

6. SQLite:

i) **Lightweight and embeddable**: SQLite is a lightweight, embeddable database that does not require any installation or configuration. This makes it ideal for use in mobile applications, embedded systems, and other applications where a full-fledged database is not required.

ii) **Reliable and secure**: SQLite is a reliable and secure database engine that has been used in production for many years. It supports ACID transactions and provides a number of security features, such as encryption and access control.

iii) **Easy to use**: SQLite is easy to use and manage, even for users with no prior experience with databases. It provides a simple SQL interface and a number of tools for managing databases, such as the sqlite3 command-line tool.

iv) **Full SQL support**: SQLite supports the full SQL language, including SELECT, INSERT, UPDATE, DELETE, CREATE TABLE, and DROP TABLE. This means that SQLite can be used to create and manage databases in the same way as any other SQL database.

USECASE: SQLite supported our project in manipulating and creating the database for cricket stats.

Methodology (Algorithm/Approach and experimentation):

The front end of the website gives the user an attractive view of the first appearance of the website. Enhanced with the proper use of Cascading Style Sheets(CSS) the front end can be regarded as the first milestone of our project when a user sees it visually for the first time. That's why we have named our website 'CricStat' which is self-explanatory about the Project and it's idea. Building up a clean. User Interface required minute styling to small components of our website. Once the UI was ready, our team started working on the user authentication and authorization segment of our project.

We have incorporated a log-in functionality through which a user can log-in into it and can see the statistics of the player of their wish. Connecting the database can be regarded as the heart of our project as it was the main part that influenced the proper working and efficient query processing by fetching the necessary data from the database. The statistics of the player are displayed through the use of various visualizations by integrating Power BI I frame in the

project. As a result, we can get accurate statistical records and it's analysis through this project.

The Database Management Systems play a key role in bringing data into light as client requests are encountered on the website. Our website named as 'Cric Stat' is about the display of statistics of various cricket players and their records in cricket. Cric-Stat is equipped with a large database that contains the records and scores of cricket players. Bridging the gap between random datasets and arriving towards a goal to gain valuable insights and knowledge, our team has developed this website that can fetch the statistics of the player as and when desired. Our statistics include various parameters to judge player performance like the total number of runs, wickets, centuries, half-centuries, partnerships, etc.

Code:

GitHub Repository:- CricStat DBMS

Results and Discussion: The project results helped in analyzing player performance on various cricket parameters. This provided a deep dive into the playing strategy of different players, with an edged perspective to their mindset and approach towards playing cricket.

Conclusion: Thus we have understood that valuable key insights can be easily deducted about player performance by speculating the stats and records of various cricket players.