# **Cricket Match Database System**

Database System Term Project Part II

25.11.2019



# **PROJECT REPORT**

Deepankar Acharyya CSB17017

Parikshit Saikia CSB17035

**GROUP NO: 18**Submitted To:
Dr. Sarat Saharia

COURSE CODE: CO302

# **Overview**

A database application to keep information about a cricket match.

Information should be produced in such a way that a full scorecard can be produced.

# **Problem Statement Definition:**

To design a Web Database application (using PHP and MySQL) to store information about international T20 cricket matches (Men). The Database will store information about the cricket matches and the information can be used to produce a scorecard (for any match, given the match-id). The user can enter the match-id in the system and the system can generate the full scorecard for the match.

The full scorecard for a particular match will consist of the overall Match, batting and bowling statistics (Team-wise and Player-wise and Innings-wise).

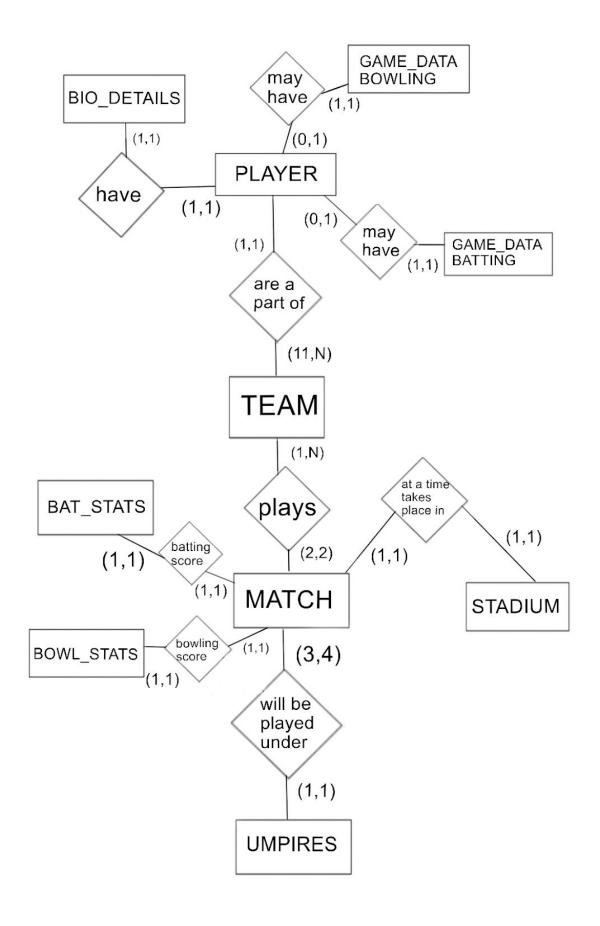
# **Reference of report part 1:**

In our previous report we strategized our plan to how to display the scorecard, What are the entities required and their corresponding attributes, defined the properties of the attributes and generated a full ER model of the problem statement.

### The Entity-Relationship Model for the following problem statement:

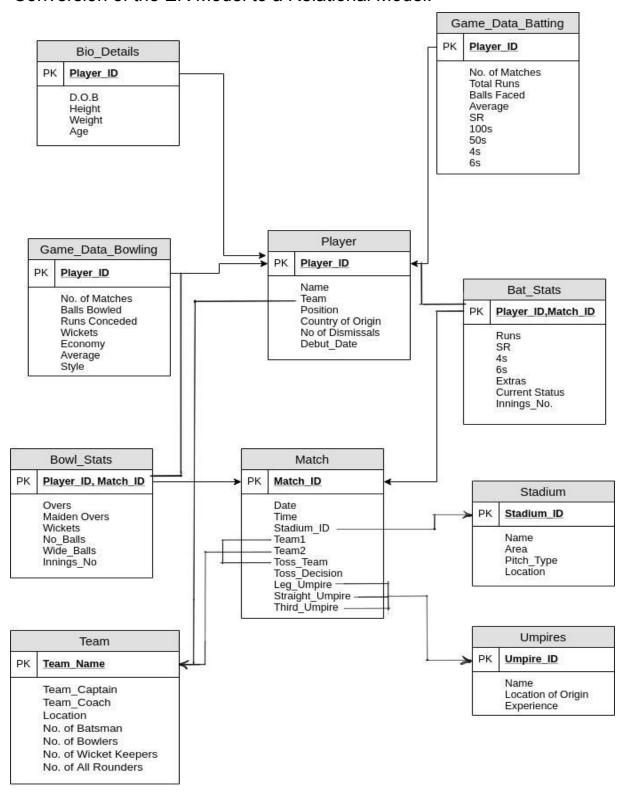
#### NOTE:

The ER Model below has been made as concise as possible (due to the limitation of space and for the maintenance of clarity). Kindly refer to the project report 1 for the attributes.



After making the ER diagram we made the normalized Relational Model and discovered the relational constraints and functional dependencies

### Conversion of the ER Model to a Relational Model:



## **IMPLEMENTATION OF THE RELATION MODEL:**

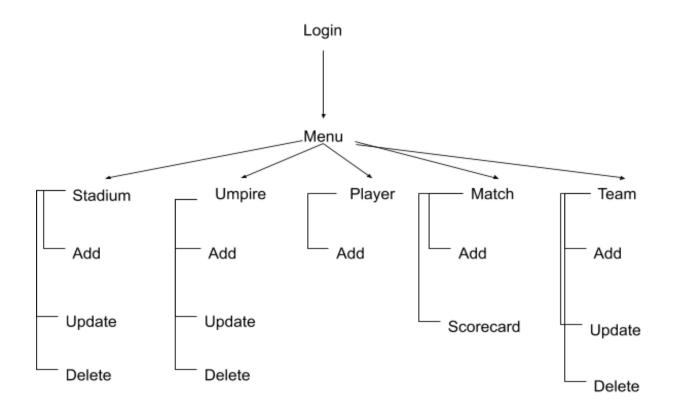
After making the relational model, it was time to implement the model. We used Xampp which provides server, Mysql for making the frontend and backend.

After creating the cricket database, and all the necessary tables in myPhpAdmin. We have to create an interface to enter the data (frontend) and also an integration code that will run some PHP code in the backend (SQL commands) which will store the data in our database.

# **APPROACH:**

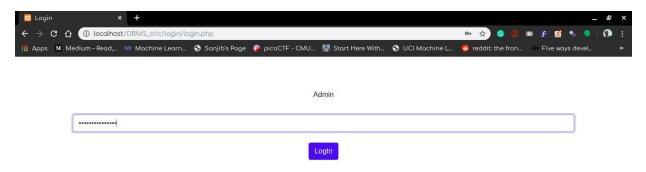
First, we create a simple login system which will lead to our menu, having 5 options Stadium, Umpire, Player, Match, and Team. In each option, we can add, update and delete except the Player and Match (which we can only add).

In the match option, we have the Scorecard Generator which will take Match\_ID as an input and generates the scorecard.



# **SECTION WISE CODE SNIPPET AND SCREENSHOTS:**

# **Creating Login:**



### **LOGIN BACKEND CODE**

```
<?php
require_once('database_Connectivity.php');
if(isset($_POST['login'])){
    $pass=$_POST['password'];
    if(empty($pass)){
        echo "Please fill in the Blanks";
        die("Login-Failed!");
        header("Location:Index_login.php");
    }
    else{
        echo "You are logged in!";
        header("Location:Index_menu.php");
    }} ?>
```

# **Creating Menu:**



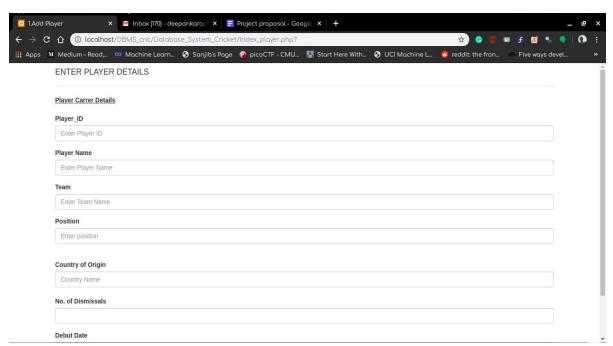
#### **MENU FRONTEND CODE**

```
<html>
  <head>
    <title>MENU</title>
    link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">
  </head>
  <body class="text-center" data-gr-c-s-loaded="true">
    <br><br><br>>
    <form action="Index_player.php">
    <button type="submit">ADD PLAYER</button>
    </form>
    <form action="Index_umpire.php">
    <button type="submit">UMPIRE</button>
    </form>
    <form action="Index_stadium.php">
    <button type="submit">STADIUM</button>
    </form>
```

```
<form action="Index_team.php">
<button type="submit">TEAM</button>
</form>

<form action="Index_match.php">
<button type="submit">MATCH</button>
</form>
<form action="Index_login.php">
<button type="submit">EXIT</button>
</form>
</body>
</html>
```

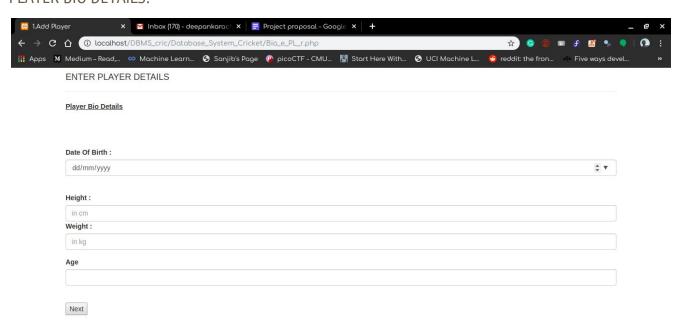
# **PLAYER DATA ENTRY:**



```
if(isset($_POST['submit1'])){
    $id = $_POST['inputId'];
    $name = $_POST['inputName'];
    $team = $_POST['inputTeam'];
    $position = $_POST['inputPos'];
    $country = $_POST['input_Country'];
    $Dismis = $_POST['input_Dismissals'];
    $ip_date = $_POST['input_date'];

$sql = "INSERT INTO PLAYER VALUES
('{$name}','{$id}','{$country}',{$Dismis},'{$team}','{$position}','{$ip_date}')";
    $connection->query($sql);
}
```

### PLAYER BIO DETAILS:



```
if(isset($_POST['button1'])){

$id = $_POST['inputId'];

$DOB = $_POST['inputDOB'];

$Ht = $_POST['input_Ht'];

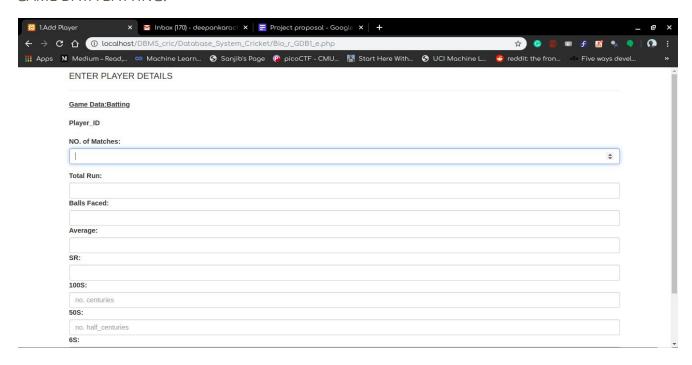
$Wt = $_POST['input_Wt'];

$Age = $_POST['input_Age'];

$sql = "INSERT INTO Bio_Details VALUES
('{$id}','{$DOB}',{$Ht},{$Wt},{$Age});";

$result =$connection->query($sql);
}
```

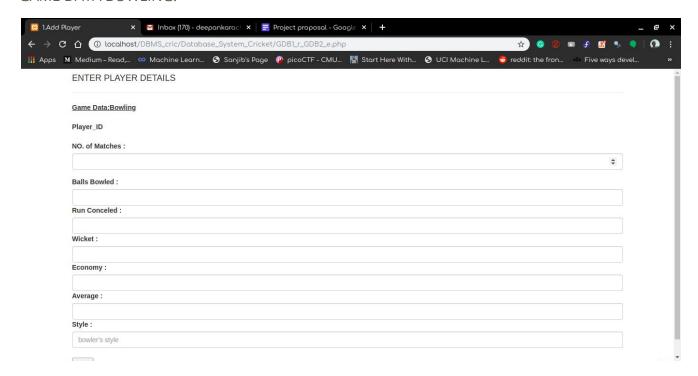
#### GAME DATA BATTING:



```
if(isset($_POST['button2'])){
$id = $_POST['inputId'];
```

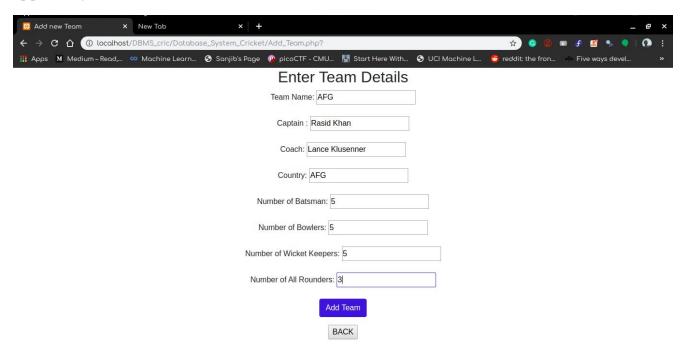
```
$match = $_POST['ip_no_match'];
$run = $_POST['ip_run'];
$ball_faced = $_POST['ip_ballFaced'];
$avg = $_POST['ip_avg'];
$SR = $_POST['ip_SR'];
$s100 = $_POST['ip_100s'];
$s50 = $_POST['ip_50s'];
$s6 = $_POST['ip_6s'];
$s4 = $_POST['ip_4s'];
// insert player id;
$sq1 = "INSERT INTO Game_Data_Batting VALUES
('{$id}',{$match},{$run},{$ball_faced},{$avg},{$SR},{$s100},{$s50},{$s6},{$s4});";
$result =$connection->query($sq1);
}
```

#### GAME DATA BOWLING:



## **TEAM CODE**

### ADD TEAM:



```
//create connection
$connection = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($connection->connect_error) {
    die("Connection failed: " . $connection->connect_error);
}

if (isset($_POST['Add_Team'])) {
    //extracting the values
    $team=$_POST['name'];
    $captain=$_POST['captain'];
    $coach=$_POST['coach'];
    $location=$_POST['location'];
    $batsman=$_POST['batsmans'];
```

```
$wicket keeper=$ POST['wicket keepers'];
$all rounder=$ POST['all rounders'];
$sql1="INSERT INTO Team values
if ($connection->query($sql1) ==TRUE) {
    echo "New record created successfully";
    $connection->close();
    echo "Error: " . $sql1 . "<br>" . $connection->error;
    $connection->close();
    header("Location:Index team.php");
```

### **DELETE TEAM:**

```
if(isset($_POST['Delete_Team'])){
    //extracting the values
    $id=$_POST['team'];
    //forming MySQL commands
```

```
$sql1="DELETE FROM Team where Team_Name='{$id}'";

if($connection->query($sql1)==TRUE){
    echo "record removed successfully";
    header("Location:Index_menu.php");
    $connection->close();}

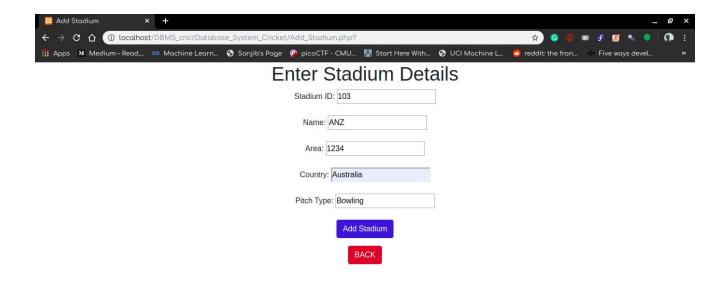
else{ echo "Error: " . $sql1 . "<br>" . $connection->error;
    $connection->close();
}
header("Location:Index_team.php");
```

#### IJPDATF.

```
if(isset($ POST['Update Team'])){
  $team=$ POST['name'];
  $captain=$ POST['captain'];
  $coach=$ POST['coach'];
  $batsman=$ POST['batsmans'];
  $bowler=$ POST['bowlers'];
  $wicket keeper=$ POST['wicket keepers'];
  $all rounder=$ POST['all rounders'];
  $sql1="UPDATE Team set
  if ($connection->query($sql1) ==FALSE) {
```

```
else{
    echo "Record Updated Successfully!";
    }}
$connection->close();
header("Location:Index_menu.php");
```

# **STADIUM:**



### ADD:

```
if(isset($_POST['Add_Stadium'])){
    //extracting the values
    $id=$_POST['Stadium_ID'];
    $name=$_POST['Name'];
    $location=$_POST['Location'];
```

```
$area=$_POST['Area'];
$pitch=$_POST['Pitch_Type'];
//forming mysql commands
$sql1="INSERT INTO Stadium values
({$id},'{$name}',{$area},'{$pitch}','{$location}')";
if($connection->query($sql1)==TRUE){
    echo "New record created successfully";
    header("Location:Index_menu.php");
    $connection->close();
}
else{
    echo "Error: " . $sql1 . "<br>;
$connection->error;
$connection->close();
}
header("Location:Index_menu.php");
}
```

### DELETE:

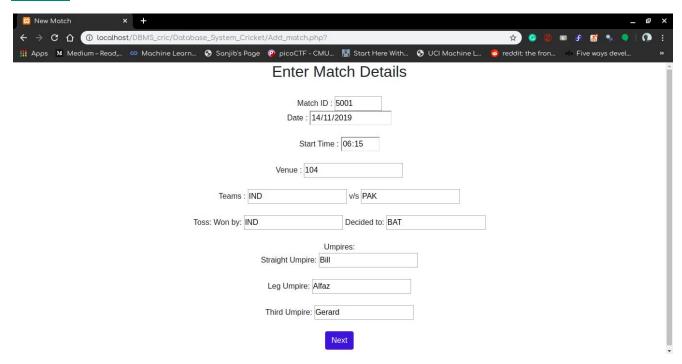
```
if(isset($_POST['Delete_Stadium'])){
    //extracting the values
    $id=$_POST['Stadium_ID'];
    //forming mysql commands
    $sql1="DELETE FROM Stadium where Stadium_ID={$id}";
    if($connection->query($sql1)==TRUE){
        echo "record removed successfully";
        header("Location:Index_menu.php");
        $connection->close();
```

```
else{
    echo "Error: " . $sql1 . "<br>" . $connection->error;
    $connection->close();}
header("Location:Index_menu.php");
exit;}
```

### **UPDATE:**

```
$id=$ POST['ID'];
  $name=$ POST['Name'];
  $pitch=$ POST['Pitch'];
  $area=$ POST['Area'];
  $sql1="UPDATE Stadium set
  if ($connection->query($sql1) ==FALSE) {
      echo "Record Updation Error!".$connection->error;
$connection->close();
header("Location:Index menu.php");
```

### MATCH:



### ADD MATCH

```
if(isset($_POST['Next1'])){

$match_ID=$_POST['match_ID'];
$date=$_POST['date'];
$time=$_POST['time'];
$stadium=$_POST['location'];
$team1=$_POST['team1'];
$team2=$_POST['team2'];
$toss_team=$_POST['toss_team'];
$toss_decision=$_POST['toss_decision'];
$leg_umpire=$_POST['umpire2'];
$st_umpire=$_POST['umpire1'];
$third_umpire=$_POST['umpire3'];
```

```
$team2=$team1;
      $team1=$toss team;
  if($toss decision=='BOWL'){
      $first=$team1;
      $second=$team2;
      $first=$team2;
      $second=$team1;
  $sql1="INSERT INTO Matches values
   $sql bowl1="SELECT Name, Player ID FROM PLAYER where Team='{$first}' and
Position in ('Bowler', 'AllRound')";
   $sql bowl2="SELECT Name,Player ID FROM PLAYER where Team='{$second}' and
   if ($connection->query($sql1) ==TRUE) {
      echo "Error: " . $sql1 . "<br>" . $connection->error;
   $result bowl1=$connection->query($sql bowl1);
   $result bowl2=$connection->query($sql bowl2);
```

```
else{
   header("Location:Add_match.php");
}
$connection->close();
```

```
$mid=$ POST['match id'];
$pid=$ POST['bowl1 id'];
$no ball=$ POST['bowl1 NB'];
$wide ball=$ POST['bowl1 WB'];
$i=0;
while($i<count($pid)){</pre>
    $pid1=$pid[$i];
    $overs1=$overs[$i];
    $no_ball1=$no_ball[$i];
    $wide ball1=$wide ball[$i];
    $sql1="INSERT INTO Bowl Stats VALUES
```

```
$sq12="Update Game Data Bowling set
       $connection->query($sql1);
       $connection->query($sql2);
       $i=$i+1;
  $pid=$ POST['bowl2 id'];
  $overs=$ POST['bowl2 O'];
  $maiden=$ POST['bowl2 M'];
  $wicket=$ POST['bowl2 W'];
  $no ball=$ POST['bowl2 NB'];
  $wide ball=$ POST['bowl2 WB'];
  $i=0;
  while($i<count($pid)){</pre>
       $pid1=$pid[$i];
       $overs1=$overs[$i];
       $maiden1=$maiden[$i];
       $wicket1=$wicket[$i];
       $no ball1=$no ball[$i];
       $wide ball1=$wide ball[$i];
       $sql1="INSERT INTO Bowl Stats VALUES
2)";
       $sql2="Update Game Data Bowling set
No_of_Matches=No_of_Matches+1,Wickets=Wickets+{$wicket1},Balls Bowled=Balls Bo
```

```
$connection->query($sql1);
$connection->query($sql2);
$i=$i+1;
}

$first=$_POST['first'];
$second=$_POST['second'];
$sql3="SELECT Name,Player_ID FROM PLAYER where Team='{$first}' and Position in ('Batsman','AllRound','WktKpr')";
$sql4="SELECT Name,Player_ID FROM PLAYER where Team='{$second}' and Position in ('Batsman','AllRound','WktKpr')";
$result_bat2=$connection->query($sql3);
$result_bat1=$connection->query($sql4);
```

```
<?php

while($row = $result_bat1->fetch_assoc()) {
    echo "";
    echo '<input type="text" name="bat1_id[]"

value='.$row['Player_ID'].' readonly>';
    echo '<input type="text" name="bat1_name[]"

value='.$row['Name'].' readonly>';
    echo '<input type="number" name="bat1_R[]">';

echo '<input type="number" name="bat1_SR[]">';

echo '<input type="number" name="bat1_4s[]">';

echo '<input type="number" name="bat1_4s[]">';

echo '<input type="number" name="bat1_Es[]">';

echo '<input type="number" name="bat1_Es[]">';

echo '<input type="number" name="bat1_Es[]">';

echo '<input type="number" name="bat1_Es[]">';

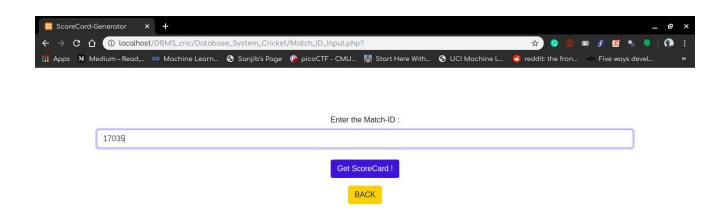
echo '<input type="number" name="bat1_S[]">';

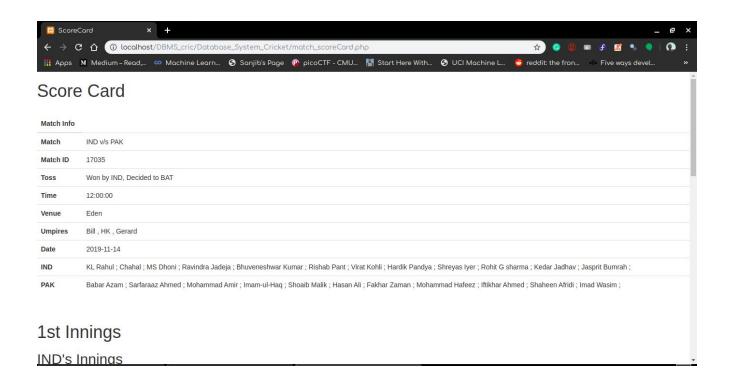
echo '<input type="number" name="
```

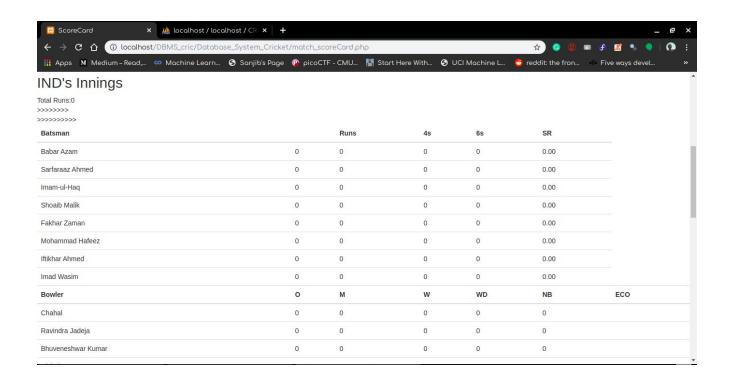
```
$mode='SET @@global.sql mode="NO AUTO CREATE USER,NO ENGINE SUBSTITUTION"';
$connection->query(mode);
if(isset($ POST['Next3'])){
  $pid=$ POST['bat1 id'];
  $SR=$ POST['bat1 SR'];
  $s4=$ POST['bat1 4s'];
  $s6=$ POST['bat1 6s'];
  $Es=$ POST['bat1 Es'];
  while($i < count($pid)) {</pre>
      $pid1=$pid[$i];
       $runs1=$runs[$i];
       $SR1=$SR[$i];
       $s41=$s4[$i];
       $s61=$s6[$i];
       $Es1=$Es[$i];
       $S1=$S[$i];
```

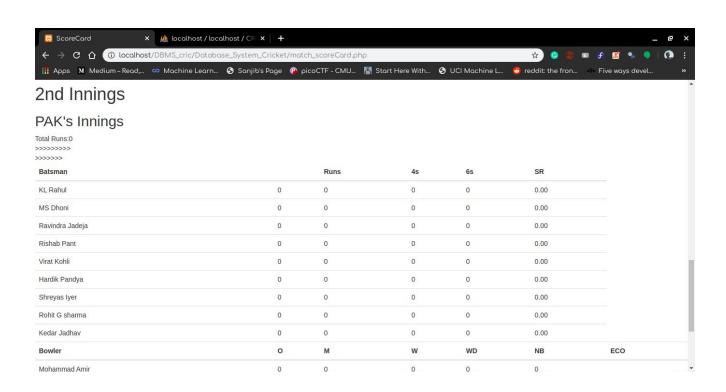
```
$s100=$runs1/100;
      $s50=$runs1/50;
      $sql1="INSERT INTO Bat Stats VALUES
      $sql2="Update Game Data Batting set
,50s=50s+{$s50},4s=4s+{$s41},6s=6s+{$s61} where Player ID='{$pid1}'";
      if($connection->query($sql1) ==TRUE){
          echo "Error: " . $sql1 . "<br>" . $connection->error;
      if($connection->query($sq12) ==TRUE){
          echo "Error: " . $sql2 . "<br>" . $connection->error;
     $i=$i+1;
```

# **SCORECARD:**









```
$match id=$ POST["matchid"];
  $sql1="SELECT * From Matches where Match ID={$match id}";
   $result1=$connection->query($sql1);
  $row1 = $result1->fetch array();
  $sql2="SELECT Name from Stadium where Stadium ID={$row1["Stadium ID"]}";
  $result2=$connection->query($sql2);
  $row2=$result2->fetch array();
   $sql31="SELECT * from Bat Stats where Match ID={$match id} and
   $result31=$connection->query($sq131);
   $sql32="SELECT * from Bat Stats where Match ID={$match id} and
  $result32=$connection->query($sq132);
  $sql41="SELECT * from Bowl Stats where Match ID={$match id} and
  $result41=$connection->query($sq141);
  $sql42="SELECT * from Bowl Stats where Match ID={$match id} and
Innings No=2";
  $result42=$connection->query($sq142);
  $sql5="Select Name from PLAYER where Team='{$row1["Team1"]}'";
```

```
$result5=$connection->query($sq15);
  $sq16="Select Name from PLAYER where Team='{$row1["Team2"]}'";
  $result6=$connection->query($sq16);
  $sql7="Select Sum(Runs) AS tr from Bat_Stats where Innings_No=2 and
Match ID={$match id} ";
  $sql8="Select Sum(Runs) AS tr from Bat Stats where Innings No=1 and
Match ID={$match id} ";
  $result7=$connection->query($sql7);
  $result8=$connection->query($sq18);
  $row7 = $result7->fetch array();
  $row8 = $result8->fetch array();
  $totalruns1=$row8['tr'];
  $totalruns2=$row7['tr'];
  if($result1->num rows>0){
      echo "No Results Found!";
```

```
'
<!php

if ($result31->num_rows>0) {

    while ($row = mysqli_fetch_array($result31)) {

    //retrieving the name of the player

    $sql_temp="SELECT Name from PLAYER where

Player_ID='{$row['Player_ID']}'";

$result_temp=$connection->query($sql_temp);

}
```

```
$row temp=$result temp->fetch array();
   $name=$row temp['Name'];
     echo $name ;
     echo $row['Current Status'] ;
     echo '';
     echo $row['Runs'];
     echo $row['4s'];
     echo '';
     echo $row['6s'];
     echo $row['SR'];
     echo '>' ;
else echo "No Data Found!";
```

```
//retrieving the economy of the player

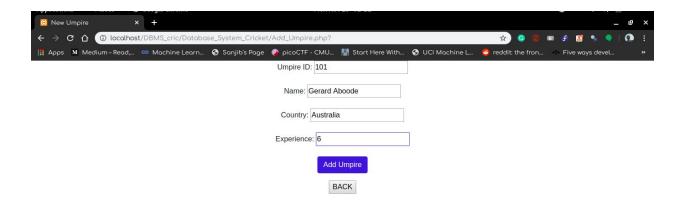
$sql_temp="SELECT Economy from Game_Data_Bowling where
Player_ID='{$row['Player_ID']}'";

$result_temp=$connection->query($sql_temp);

$row_temp=$result_temp->fetch_array();

$economy=$row_temp['Economy'];
```

## **UMPIRE DATA ENTRY:**



### **UMPIRE BACKEND CODE:**

```
<?php
//credentials
$servername= "localhost";
$username="CSB17017@35";
$password="helloworld";
$dbname = "CRICKET_DBMS";

//create connection
$connection = new mysqli($servername, $username,$password,$dbname);

// Check connection</pre>
```

```
if ($connection->connect_error) {
  die("Connection failed: " . $connection->connect_error);
}
if(isset($_POST['Add_Umpire'])){
  //extracting the values
  $id=$_POST['Umpire_ID'];
  $name=$_POST['Name'];
  $location=$_POST['Location'];
  $experience=$_POST['Experience'];
  //forming mysql commands
  $sql1="INSERT INTO Umpires values ({$id},'{$name}','{$location}',{$experience})";
  if($connection->query($sql1)==TRUE){
    echo "New record created successfully";
    header("Location:Index_menu.php");
    $connection->close();
    exit;
  }
  else{
    echo "Error: " . $sql1 . "<br>" . $connection->error;
    $connection->close();
  }
} ?>
UMPIRE UPDATE CODE:
<?php
//credentials
 $servername= "localhost";
 $username="CSB17017@35";
 $password="helloworld";
 $dbname = "CRICKET_DBMS";
```

```
//create connection
$connection = new mysqli($servername, $username,$password,$dbname);
// Check connection
if ($connection->connect_error) {
  die("Connection failed: " . $connection->connect_error);
}
if(isset($_POST['Update_Umpire'])){
  //extracting the values
  $id=$_POST['ID'];
  $name=$_POST['Name'];
  $location=$_POST['Location'];
  $experience=$_POST['Experience'];
  //forming mysql commands
  $sql1="UPDATE Umpires set Name='{$name}',Location_of_Origin='{$location}',Experience={$experience}
where Umpire_ID={$id} ";
  if($connection->query($sql1)==FALSE){
     echo "Record Updation Error!".$connection->error;
  }
  else{
     echo "Record Updated Successfully!";
     header("Location:Index_menu.php");
    }
}
$connection->close();
exit;
?>
```

### **UMPIRE DELETE CODE:**

```
<?php
//credentials
 $servername= "localhost";
 $username="CSB17017@35";
 $password="helloworld";
 $dbname = "CRICKET_DBMS";
//create connection
$connection = new mysqli($servername, $username,$password,$dbname);
// Check connection
if ($connection->connect_error) {
  die("Connection failed: " . $connection->connect_error);
}
if(isset($_POST['Delete_Umpire'])){
  //extracting the values
  $id=$_POST['Umpire_ID'];
  //forming mysql commands
  $sql1="DELETE FROM Umpires where Umpire_ID={$id}";
  if($connection->query($sql1)==TRUE){
     echo "record removed successfully";
     header("Location:Index_menu.php");
     $connection->close();
  }
  else{
     echo "Error: " . $sql1 . "<br>" . $connection->error;
     $connection->close();
  }
  header("Location:Index.php");
  exit;
} ?>
```

-----XXX------XXX