CPSC 304 Project Cover Page

Milestone #:4	
Date:2022.Nov.25_	
Group Number:99	

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Milestone 4

Repository Link: https://github.students.cs.ubc.ca/CPSC304-2022W-

T1/project_b8o5r_d8t2c_e3x7g

Link to webpage for demo:

https://www.students.cs.ubc.ca/~xiaorang/cpsc304/index.php

Project Description

As we proposed, this project is to store, display, analysis the leage of legand championship information database. The web page can now show the information about the championship, including team, coach, play, champion, championship, and record for each match. Also, will built-in filter, user can find the information they want more quickly. Also, GUI provide interface for user to manipulate the database including insert new data, delete data, and update data.

Schema

Schema update:

Relation match has been removed as information is now kept with in record entity.

PlayerContract and CoachContract are divided into two table for BCNF.

Schema

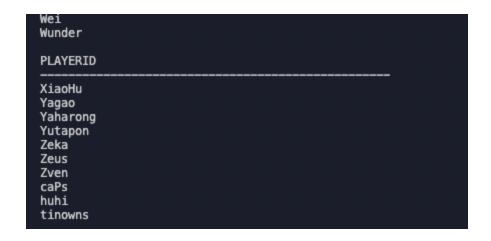
Entities

Team(Team_name, region) (region can not be null)

TEAMNAME	REG
TES	LPL
JDG	LPL
EDG	LPL
GENG	LCK
DRX T1	LCK LCK
DK	LCK
G2	LEC
RGE	LEC
MAD	LEC
FNC	LEC
TEAMNAME	REG
 100Т	LCS
C9	LCS
EG	LCS
CFO	PCS
BYG SGB	PCS VCS
GAM	VCS
DFM	ĹĴĹ
ISG	LLA
LLL	CBL
IW	TCL
TEAMNAME	REG
CHF	LC0
IG	LPL
RNG	LPL

Coach(Coach_name)

Player(Player_id)



Championship_Season, championship_name, Team_name, Bonus) (bonus must be unique)

CHAMPIONSHIPSEASON		
CHAMPIONSHIPNAME	TEAMNAME	BONUS
S12 WorldChampionship		1
S12 Mid-Season Invitational		2
S11 WorldChampionship		3
CHAMPIONSHIPSEASON		
CHAMPIONSHIPNAME	TEAMNAME	BONUS
S11 LPL summer		5

Record(Record_id, Championship_season, Championship_name)

CHAMPIONSHIPNAME	TEAMNAME	WINNER
97 S12 WorldChampionship	T1	DRX
98 S12 WorldChampionship	DRX	T1
99 S12 WorldChampionship	Т1	DRX
RECORDID CHAMPIONSHIPSEASON		
CHAMPIONSHIPNAME	TEAMNAME	WINNER
100 S12 WorldChampionship	T1	DRX
94 rows selected.		

Champion(Name, main lane)

Morgana	sup
CHAMPIONNAME	MAINLANE
Rakan	sup
Amumu	sup
Rell	sup
Senna	sup
Seraphine	sup
Leona	sup
Alistar	sup
Braum	sup
162 rows selected.	

ChampionSkill(skill name, **Champion_name**)

RECKLESS SWING RAGNAROK DEATH SENTENCE DARK PASSAGE FLAY	Olaf Olaf Thresh Thresh Thresh
SKILLNAME	CHAMPIONNAME
THE BOX PIERCING ARROW BLIGHTED QUIVER HAIL OF ARROWS CHAIN OF CORRUPTION	Thresh Varus Varus Varus Varus Varus
236 rows selected.	

DamageSkill(**skill name**, **Champion_name**, damage amount)

SKILLNAME	CHAMPIONNAME
DAMAGEAMOUNT	
COLLATERAL DAMAGE 15000	Graves
SIGIL OF MALICE 13000	LeBlanc
DISTORTION 15000	LeBlanc
12 rows selected.	

ControlSkill(**skill name**, **Champion_name**, control effect, control time)

SKILLNAME	CHAMPIONNAME
CONTROLEFFECT	
CONTROLTIME	
1	
DEPTH CHARGE Nautilus fires a shockwave into the earth the e rips up the earth above it, knocking enemi	
SKILLNAME	CHAMPIONNAME
CONTROLEFFECT	
CONTROLTIME	
opponent, the shockwave erupts, knocking hi	is target into the air and stunning

SupportSkill(skill name, Champion_name, heal, shield)

SKILLNAME		CHAMPIONNAME
HEAL	SHIELD	
DARK PASSAGE 0	200	Thresh
ZOOMIES 200	400	Yuumi

Relations

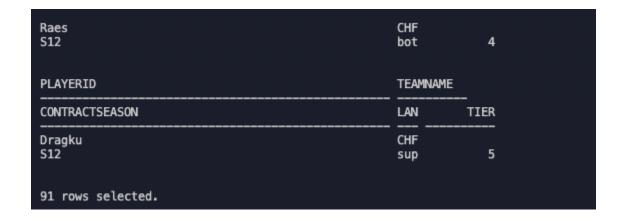
Coach Contract1(<u>Team_name, Coach_Name</u>, Coaching_season, role)

LLL S12	Escalante	head coach
IW S12	Robogod	head coach
TEAMNAME	COACHNAME	
COACHINGSE	ASON	COACHROLE

Coach Contract2(<u>role</u>, coach_salary)

COACHROLE	COACHSALARY
head coach	1000000
assistant coach	200000
leader	500000
manager	1200000
analyst	600000

Player Contract1(<u>Team_name, Player_ID</u>, Contract_season, Lane, tier) (tier can not be null)



Player Contract2(tier, Contract_Fee) (tier can not be null)

 TIER	CONTRACTFEE
1	5000000
2	1000000
3	500000
4	200000
5	100000

Pick(<u>Player_ID</u>, <u>Champion_name</u>, record_id, <u>Championship_season</u>, <u>Championship_name</u>, KDA, total_damage, lane)

PLAYERID	CHAMPIONNAME
RECORDID CHAMPIONSHIPSEASON	
CHAMPIONSHIPNAME	KDA
TOTALDAMAGE LAN	
Keria 98 S12	Karma
WorldChampionship 12164 sup	11.0
123 rows selected.	

Ban(<u>Coach_name</u>, <u>Champion_name</u>, <u>record_id</u>, <u>Championship_season</u>, <u>Championship_name</u>, choice_number, ban_rate) (choice_number can not be null)

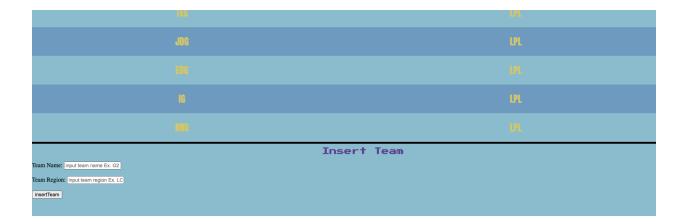
SSONG 96 S12 WorldChampionship	Graves 5 .141
COACHNAME	CHAMPIONNAME
RECORDID CHAMPIONSHIPSEASON	
CHAMPIONSHIPNAME	CHOICENUMBER BANRATE
Bengi 96 S12	Rell
WorldChampionship	2 .047
157 rows selected.	

Query Used in project

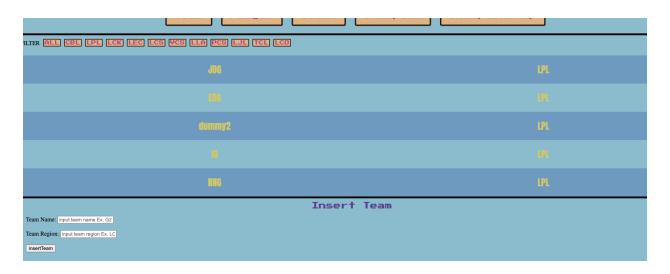
Insert

```
inction addToDB($table, $val1, $val2, $val3, $val4, $val5)
  global $db_conn;
  $plainSQL = "";
  if (connectToDB()) {
      switch ($table) {
          case "Team":
             $plainSQL = "INSERT into " . $table . " values('" . $val1 . "','" . $val2 . "')";
              break:
          case "Player":
             $plainSQL = "INSERT into " . $table . " values('" . $val1 . "')";
          case "Coach":
             $plainSQL = "INSERT into " . $table . " values('" . $val1 . "')";
          case "Champion":
             $plainSQL = "INSERT into " . $table . " values('" . $val1 . "','" . $val2 . "')";
          case "Championship":
             $plainSQL = "INSERT into " . $table . " values('" . $val1 . "','" . $val2 . "','" . $val3
              break;
          case "Record":
              $plainSQL = "INSERT into " . $table . " values('" . $val1 . "','" . $val2 . "','" . $val3
              break:
          default:
              break;
      if (executePlainSQL($plainSQL)) {
          OCICommit($db_conn);
          echo $val1 . ' has ben added to data base';
      } else {
          echo "Fail to add";
  disconnectFromDB();
```

before insert



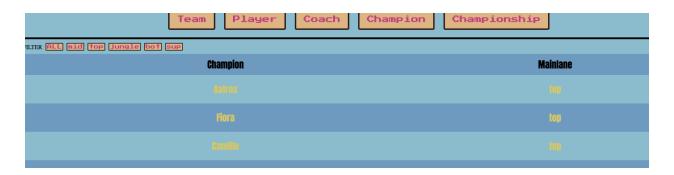
after insert (dummy2, LPL)



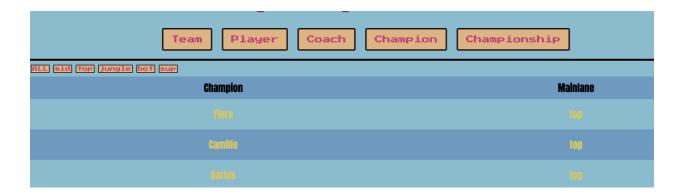
Delete

```
$plainSQL = "DELETE from " . $table . " WHERE TEAMNAME='" . $val1 . "'";
```

before delete



after delete aatrox



UPDATE

```
if(connectToDB()){
    executePlainSQL("UPDATE Record SET
    TEAMNAME ='".$_POST['championshipRecordTeam']."', WINNER ='".$_POST['Winner']."'
    WHERE CHAMPIONSHIPNAME='".$_POST['championshipRecordName']."'
    AND CHAMPIONSHIPSEASON='".$_POST['championshipRecordSeason']."'
    AND RECORDID='".$_POST['recordID']."'");
    OCICommit($db_conn);
```

before update



after update (two teams)



Selection

```
$result = executePlainSQL("SELECT * FROM " . $table);
```

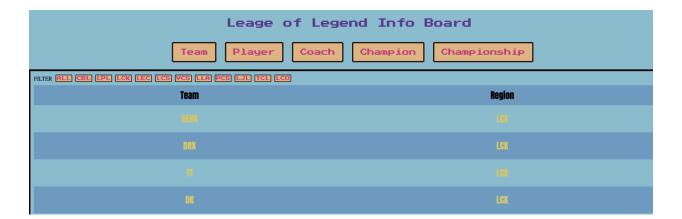
select shows all teams



Projection

```
$result = executePlainSQL("SELECT * FROM " . $table . " WHERE " . $mode . "='" . $value . "'")
```

projection for only LCK teams



Join

```
$result = executePlainSQL("select CoachContract1.coachName, CoachContract1.coachRole,
CoachContract2.coachSalary, CoachContract1.coachingSeason
from CoachContract1
inner join CoachContract2 on CoachContract1.coachRole = CoachContract2.coachRole
where CoachContract1.teamName = '".$team."'");
```

join shows the coach salary information

```
Coach Team:
head coach : Homme
Season: S12 Salary: 1000000
```

Aggregation with Group by

```
$result = executePlainSQL("select playerID, COUNT(CONTRACTSEASON) from PlayerContract1 where TEAMNAME ='".$team.
"' group by playerID having COUNT(CONTRACTSEASON)>0");
while($row = oci_fetch_array($result,OCI_BOTH)){
    echo 'Player: '.$row[0].' has been played for this team for '.$row[1].' contract period</br>';
}
```

GUI output

Player: Jackeylove has been played for this team for 1 contract period

Aggregation with Having

```
$result = executePlainSQL("select COACHNAME from CoachContract1 where TEAMNAME ='".$team.
"' group by COACHNAME having COUNT(COACHINGSEASON)>0");
while($row = oci_fetch_array($result,OCI_BOTH)){
    echo 'Coach: '.$row[0].' has coached team over 1 contract period</br>
}
```

GUI output

Coach: Homme has coached team over 1 contract period

Nested Aggregation with Group by

GUI output

```
Highlighted Time:
At season S12 , 369 plays great with an average kda: 1.85
```

Division

GUI output

```
This has has been participate in season: S11 S12
```