

Note: Your answers should be written on **this booklet**. in addition, throughout your answers, it is strongly advised to define the PHP functions, where it is necessary, to make the code clearer and less redundant, and all functions will be created in the "**functions.php**" file. For MySQL, use the "prepared statements".

Problem I (10 pts)

Write a PHP function **isDate(\$date)** that uses regular expressions to validate a date. A valid date is in the form YYYY-MM-DD. Ex: 2019-10-25

Problem II (43 pts)

Hockey is a team sport played on a specially equipped ice rink. The objective of each team is to score goals by sending a vulcanized rubber disc, called a puck, inside the opposing goal located at one end of the rink. The team consists of 5 players, who take turns on the ice, as well as 1 goalkeeper, who move in ice skates and handle the puck with a hockey stick as called in Belgium and Switzerland or called crosse in France.

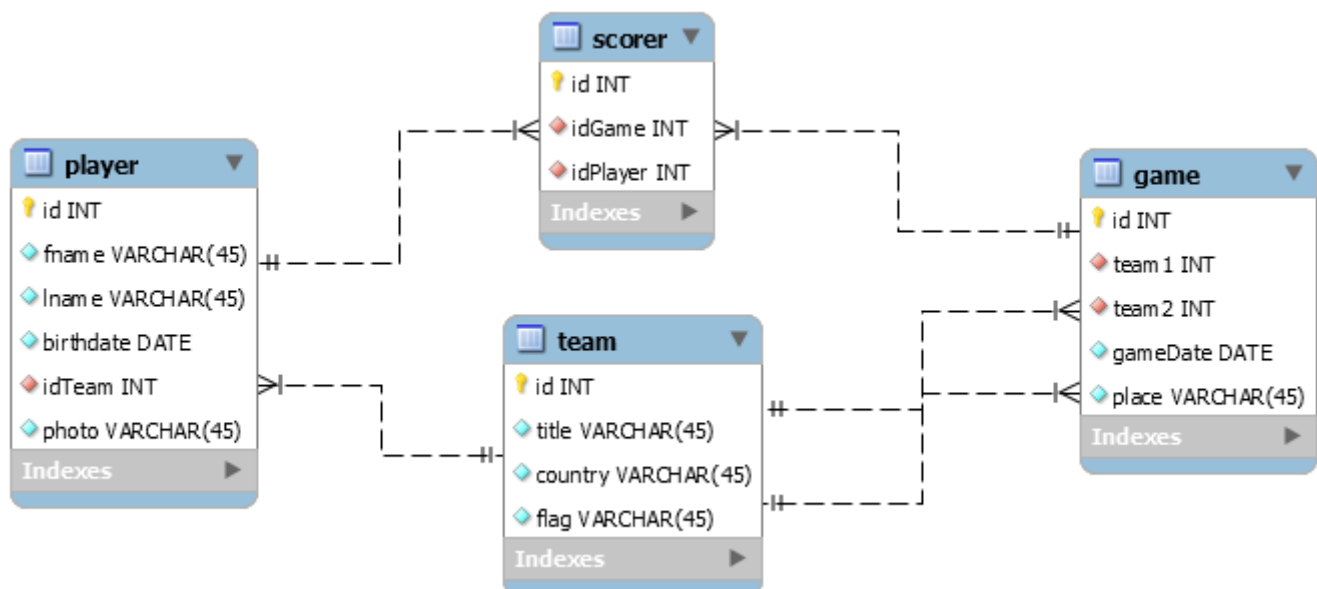


Figure 1

The diagram of the database used "figure 1" is given. Each team is composed of 6 players and it has a flag. The player information includes, among other things, their names and photos. A Hockey game is played between two teams on a specific date. It is assumed that, for a given date, one and only one Hockey match will take place. For each match, the number of goals scored by each team is stored in the "game" table. In the "scorer" table, scorers who scored goals in each match are recorded.

The backup and management of data is done using MySQL, installed on the same machine hosting the Web server. The database is called "Hockey". An administrator that has a username "admin" with the password "canada123" can connect to this database. The photos are stored externally and the paths to these files are in the corresponding fields "photo" and "flag".

Question 1. Write the function PHP/MySQL ***getTeamTitle(\$id)***, which takes as parameter the id of the team and returns its title.

Question 2. Write the PHP/MySQL function ***getScorersAndScores(\$idteam, \$idgame)***, which takes as parameter the id of a team and the id of a game and returns an associative array which contains the scorers of the this team in the match whose identifier is passed as parameter. Each element of the table contains all the scorer data.

Question 3. Write the function PHP/MySQL *gameInfo(\$in)* which, given a date or a game id, queries the database, and returns, using the functions of questions 1 and 2 and problem 1, in an associative array, the id of the game played on that day, the date, the place, the identifiers of the two teams playing and their titles, the scores and the names of the goal scorers in each team with their numbers of goals, and paths to the pictures of the players who scored goals. Remember to organize your associative array so that you can easily retrieve the returned data.

Enter the id of a game or the game date:

Send




Bell Centre - 2019-01-09	
Boston Bruins 4	Montreal Canadiens 3
<div> Bruce Cassidy (3)</div> <div> Phil Housley (1)</div>	<div> Jeff Blashill (1)</div> <div> Claude Julien (2)</div>

Figure 2

Question 4. Write in PHP/MySQL the page "liveScores.php" (Figure 2). You must use the ***gameInfo(\$in)*** function.

During the game, the site administrator must be able to update the database each time a goal is scored. We want to program this interface in the same page "liveScores.php". Note that this administration section will only be visible and accessible to the administrator "figure 3".

Question 5. Write the function PHP/MySQL ***addGoal(\$idgame, \$idplayer)*** which, given a game id and a player id, updates the database ("scorer" and "game" tables) to indicate that this player scored an extra goal in this game, of course to the advantage of his team.

<div data-bbox="268 421 596 474"><h1>Administrator</h1></div> <div data-bbox="237 515 627 627"><p>Username: <input type="text" value="admin"/></p><p>Password: <input type="password" value="....."/></p><p><input type="button" value="Login"/></p></div> <div data-bbox="389 658 483 692"><p>Figure 3</p></div>	<div data-bbox="833 405 1452 443"><h2>Welcome admin, update the current Game</h2></div> <div data-bbox="978 470 1305 645"><table border="1"><tr><td>Team 1 <input type="radio"/></td><td>Team 2 <input type="radio"/></td></tr><tr><td>Bruce Cassidy ▼</td><td>Jeff Blashill ▼</td></tr><tr><td colspan="2"><input type="button" value="Add Goal"/></td></tr><tr><td colspan="2"><input type="button" value="Logout"/></td></tr></table></div> <div data-bbox="1109 649 1206 683"><p>Figure 4</p></div>	Team 1 <input type="radio"/>	Team 2 <input type="radio"/>	Bruce Cassidy ▼	Jeff Blashill ▼	<input type="button" value="Add Goal"/>		<input type="button" value="Logout"/>	
Team 1 <input type="radio"/>	Team 2 <input type="radio"/>								
Bruce Cassidy ▼	Jeff Blashill ▼								
<input type="button" value="Add Goal"/>									
<input type="button" value="Logout"/>									

Question 6. Write the " administrator space" section of the "liveScores.php" page. It is assumed that an administrator authenticates in the same page "figure 3", and that we will put an indication in the session, so `$_SESSION['admin'] = 1`. In this space "figure 4", there are two simple "select" lists, each one containing the names of the players of one of the two teams, and two radio buttons for the teams. To indicate that a goal has occurred, the administrator checks the radio button of the team concerned and then chooses the name of the scorer and clicks the button "Add Goal". The "Logout" button closes the administrator space. This part does not require Ajax or jQuery. The code is written only in HTML/PHP/MySQL

Annex

```
define("servername","localhost");
define("username","root");
define("password","");
define("database","hockey");
```

Table : game

id	team1	team2	gameDate	place
1	1	2	2019-01-09	Bell Centre
2	1	2	2019-01-13	Prudential Center

Table : player

id	fname	lname	birthdate	idTeam	photo
1	Bruce	Cassidy	1995-01-17	1	player1.jpg
2	Phil	Housley	1994-01-11	1	player2.jpg
3	Jeff	Blashill	1994-01-25	2	player3.jpg
4	Claude	Julien	1995-01-29	2	player4.jpg

Table : scorer

id	idGame	idPlayer
1	1	1
2	1	3
3	2	1
4	2	4
5	1	2
6	1	1
7	1	4
8	1	1
9	1	4

Table : team

id	title	country	flag
1	Boston Bruins	Boston	team1.png
2	Montreal Canadiens	Montreal	team2.png