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China

2017 International Skills Competition of China

IT Software Solutions for Business

Test Project

Session 2

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Contents

Session 2 of this Test Project consists of the following documentation/files:

1. TP09_S2_actual.pdf   (Session 2 instructions)

Introduction

In this session, you will be developing the function "NBA Management System" based on the previous work you have done and the standard database "NBA" provided. Before you start the work of this session, you need at first finish "Main Screen" and "Visitor Main" form, and make sure that all links are working correctly.

Instructions to the Competitor

You have 2.5 hours for this session.

Please use English all over your development except for particular specification. E.g. texts of forms, feedback or prompt message, comments etc. All deliverables are in English.

Please save your deliverables to the folder "Session2" under the 2nd drive directory in your computer.

You need to refer to "wireframe" for the form layouts and button links in the development of this session.

By the end of this session, you will need to have the following deliverables ready to submit so that the system will be finished on time.

Make sure that you follow the provided style guide throughout all parts of the system.

Make sure that you provide appropriate validation and error messages throughout all parts of the system.

Make sure that all relevant buttons/links are working at the end of the session.

Make sure that you use appropriate naming conventions for all parts of the system as needed.

Make sure that you do not modify the database structure during your development. When submitting deliverables in the end, there is no need to submit the database, because the assessment of the program will be conducted based on the standard database.

In the end, you need to make the folder which stores the deliverables of that session into a compressed file and submit the compressed file "Session2.rar".

DELIVERABLES   (SESSION 2)

2.1 CREATE "PLAYERS MAIN"

CREATE "PLAYERS MAIN"

Create the form as outlined in "Players Main" of the "wireframe.ppsx".

This form displays players' information to the visitors. The visitors can search a player by season, team and player name.

In the form, display the 26 English Letters from A to Z. By clicking the corresponding letters, the visitors can search the wanted information by the initials of player name. The selected letter should be highlighted by adding border or in other ways.

Display in the combo box of Season the information of season of the database by time in descending order.

The combo box of Team displays all the teams in the system with the following format: Team Name.

Display player information according to the uniform No. in ascending order, including:

● Photo: player photo

● No.: the number of the uniform

● Name: player name

● Team: player team

● Position: players' position on court

● Weight

● Height

● Experience: the experience value in NBA, which is Current Year minus Selected Year.

● Country: nationality

Paging feature should be developed, with 10 records on each page in the form of list, including:

● Redirect to the first page by clicking ⏮ .

● Redirect to one previous page by clicking ◀ .

● Redirect to next page by clicking ▶ .

● Redirect to the last page by clicking ⏭ .
● Designated page can also be redirected to by entering specific page number and then clicking Enter key.

The total number of records, the number of records on each page should be shown at the bottom of the form, with the following format: "Total XX records, YY records in one page".

Redirect to this form by clicking "Players" button on the "Visitor Main" form.

2.2 CREATE "PLAYER DETAIL"

CREATE "PLAYER DETAIL"

Create the form as outlined in "Player Detail" of the "wireframe.ppsx".

This form shows players' details to the visitors, including Photo, No. , Height, Team, Date of Birth, Experience, College, Salary; Average scores for each game (PPG) in current season as well as during the player's career (Career), average assists for each game(APG), average rebounds for each game (RPG). The calculation for the average values during the player's career (Career) is the values that exclude the data of current season.

This tab displays the statistics of the player's each index for each game in current season. The horizontal axis of the coordinate axis displays date of the match, the vertical axis displays the data.

The visitors can view player's data according to the following types:

- Points
- Rebounds
- Assists
- Steals
- Blocks

When viewing the player's data, by clicking an index, that index will be highlighted in blue color, and the data will be loaded and displayed in the broken line chart in a timely manner. The average value of the selected index's value will be shown above the broken line chart.

Redirect to this form by clicking the player's photo or name in "Players Main" form.

2.3 CREATE "MATCHUP LIST"

CREATE "MATCHUP LIST"

Create the form as outlined in "Matchup List" of the "wireframe.ppsx". This form allows the visitors to view the information of all the matchups. If there is no match in the selected date, an appropriate message should be given.

The visitors can choose a date to view the matchup information on that day. The matchup information shall be sorted by the start time of the matches in ascending order. The dates will deduct one day by clicking "<" once; The dates will add one day by clicking ">" once.

The matchup information on the current day will include the following:

- Status: show the matchup status in the first column. If the game has not started yet, display "Not Start" on a blue background; if the game is on, display "Running" on a red background; if the game is over, display "Finished" on a gray background.
- Logo of Team Away
- Name of Team Away

- Result: its format is "Scores of Team Away-Scores of Team Home". If the game has not started yet, display "-"; if the game is on, display the real-time scores; if the game is over, display the final result.
- Logo of Team Home
- Name of Team Home
- Location

Display above the form the game that is the closest to the current time, the displayed information including: Logo of Team Away and of Team Home, Name and Start Time. If matches in the current day have all finished, then display the last match's information of the day, including: Logo of Team Away and Team Home, Name, Score.

Display the details of matchups by clicking "View" button. If the game has not started yet, then the "View" button should be disabled.

For details of "View" button, please refer to deliverable 2.4 "Matchup Detail".

Redirect to this form by clicking "Matchups" button on the "Visitor Main" form.

2.4 CREATE "MATCHUP DETAIL"

CREATE "MATCHUP DETAIL"

Create the form as outlined in "Matchup Detail" of the "wireframe.ppsx". This form allows the visitors to view details of matches.

Load teams' information and matches' scores above the form. Teams' information includes Team Name and Logo. Scores include the total scores and scores of each quarter. The winning team's name and scores should be shown in bold. If the game goes to overtime, then the overtime session should also be loaded with "OT1" for the 1st overtime session and "OT2" for the 2nd one, and so forth. If the match is not over yet, the scores of those quarters not started yet shall be shown as "".

Status: show the matchup status below the Score. If the game has not started yet, display "Not Start" on a blue background; if the game is on, display "Running" on a red background; if the game is over, display "Finished" on a gray background.

If the game has not finished yet, then the data loaded in the form are the data that are on the current phase.

Tab "Team Status"
This tab compares the matches data of the two teams in the form of list, including:

- FG Made-Attempted：its format is "The Number of Field Goals Made – The Number of Field Goals Attempted".

- 3PT Made-Attempted：its format is "The Number of 3-Points Made – The Number of 3-Points Attempted".

- FT Made-Attempted：its format is "The Number of Free Throws Made – The Number of Free Throws Attempted".
- Rebounds
- Assists
- Steals
- Blocks
- Turnovers

Load the two teams' Logos above the list, with Team Away at the front and Team Home at the back.

Tab "Short Chart"

In this tab, load the Logo of Team Home at the center of the court. Load the two teams' Logos and the start-up players' information by the two sides of the court. Display on the left the players of Team Away and on the right the players of Team Home, including:

- Photo
- Name: its format is "Name(Uniform Number)"

Tab "Log"

In the tab, record the events occurring in each quarter in detail through the list, and those events should be displayed by time in descending order, including:

- OccurTime
- Team: Team Name (abbr.)
- Player: its format is "Player's Name(Uniform Number)"
- ActionType
- Remark

The visitors can choose different quarters to view the details of the matches as shown above. If a match goes to overtime, load the overtime sessions with "OT1" for the 1st overtime and "OT2" for the 2nd overtime, and so forth.

Redirect to this form by clicking "View" button in "Matchups List" form.

2.5 CREATE "PHOTOS"

CREATE "PHOTOS"

Create the form as outlined in "Photos" of the "wireframe.ppsx". This form shows brilliant photos to the visitors.

Photos shall be displayed by paging according to their creation time in descending order. What is shown in the form is the thumbnails of the photos.

Display the option menu as shown in the diagram by clicking the right-hand button of the mouse upon the photos, and the downloading for single photo will be realized.

By clicking Button "Download pictures in current page", all the pictures in the current page shall be downloaded into the designated location in the local disk. When the downloading is completed, prompt the saving location.

Develop the paging function, with 12 photos displayed in each page. Paging is composed of the following types:

- Redirect to the first page by clicking "|<".
- Redirect to the previous page by clicking "<".
- Redirect to the next page by clicking ">".
- Redirect to the last page by clicking ">|".
- Specific page number can also be entered, and the specific page will be redirected to by clicking "Enter" key.

The total number of records, the number of records in each page and the total number of pages shall also be shown at the bottom of the form with the format: "Total XX pictures , YY pictures in one page, Total ZZ Pages".

Redirect to this form by clicking "Photos" button on the "Visitor Main" form.