Team Pokémon Project Report

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Project Statement and Details:

Introduction: For our Final Project we are have created a website where you will be able access NFL data through the database that we created. In the website when you login/select the specific team that you want to look at you will be able to see the rushing yards, passing yards, points per game and the record for the past season. It's mostly a website based on for Team Statistics for the past season. All of the data that we are including in the website, its all from the last season which is the 2019-2020 NFL season. You'll be able to get all four types of data once you click on the specific team you wish to look at it. We as a group think this will give the person a good look on how good a team is and that it will give them some idea how good a team is based on the categories we have include, hope everyone will benefit from our website who likes football.

Pictures of Our Steps:

Handle request to edit DB on server:

```javascript
async function handleEditRequest(req, res) {
    console.log(req.body);
    if (!userIsLoggedIn) {
        res.json({success: false});
        return;
    }
    let team = req.body.teamName;
    let stat = req.body.stat;
    let newValue = req.body.newVal;
    let query = "select * from footballstats where name = '" + team + "';";
    console.log(query)
    let result = await client.query(query);
    console.log(newValue);

    //console.log(result);
    // process the result and get back to the client accordingly
    if (result == null || result == undefined || result.rows == undefined || result.rows.length  <= 0){
        res.json({success: false});
    }
    else {
        query = "update footballstats set " + stat + " = " + newValue  + " where name =  '" + team + "';";
        result = await client.query(query);
        res.json({success:true});
        console.log("Database successfuly updated!");
    }
}
```

Handle Submit Button on edit page:

```javascript
function handleButtonClick() {
    console.log("Submit button clicked.");

    // gather username and password information
    console.log(document.getElementById("team").value);
    console.log(document.getElementById("stat").value);

    let aTeam = document.getElementById("team").value;
    let aStat = document.getElementById("stat").value;
    let newValue = document.getElementById("newStat").value;
    switch(aStat) {
        case "wins":
        newValue = parseInt(newValue);
        break;
        case "losses":
        newValue = parseInt(newValue);
        break;
        case "Ties":
        newValue = parseInt(newValue);
        break;
        default:
        newValue = parseFloat(newValue);
        break;
    }
    let requestJson = JSON.stringify({teamName: aTeam, stat: aStat, newVal: newValue});

    // post http request to server for login
    const http = new XMLHttpRequest();
    const url = 'http://localhost:8000/editdb';
    http.open("POST", url);
    // set the content-type in header to json so that server would know the format
    http.setRequestHeader("Content-Type", "application/json");
    http.addEventListener('load', handleHttpResponse);
    // send data to server
    http.send(requestJson);
}
```

Function of add content to main page:

```javascript
function displayTeamStats(team){
    console.log(team.name);
    let record = "";
    if (team.ties !=0 ) {
        record = team.name + ": " + team.wins + "-" + team.losses; + "-" + team.ties;
    } else {
        record = team.name + ": " + team.wins + "-" + team.losses;
    }

    let ppg = team.name + ": " + team.ppg;
    let pypg = team.name + ": " + team.passypg;
    let rypg = team.name + ": " + team.rushypg;
    //console.log(team.division);
    //Record
    let headder = document.getElementById("records");
    headder = headder.getElementsByClassName(team.division)[0];
    let element = document.createElement('p');
    element.textContent = record;
    headder.appendChild(element);
    //PPG
    headder = document.getElementById("ppg");
    headder = headder.getElementsByClassName(team.division)[0];
    element = document.createElement('p');
    element.textContent = ppg;
    headder.appendChild(element);
    //pypg
    headder = document.getElementById("pypg");
    headder = headder.getElementsByClassName(team.division)[0];
    element = document.createElement('p');
    element.textContent = pypg;
    headder.appendChild(element);
    //rypg
    headder = document.getElementById("rypg");
    headder = headder.getElementsByClassName(team.division)[0];
    element = document.createElement('p');
    element.textContent = rypg;
    headder.appendChild(element);

}
```

The Database:

```
[stats=> select * from footballstats;
    name    | wins | losses | passypg | rushypg | ppg  | division | ties
------------+------+--------+---------+---------+------+----------+------
 Patriots   |  12  |    4   |  245.3  |  105.9  | 26.2 | afce     |   0
 Bills      |  10  |    6   |  200.4  |  130.9  | 19.6 | afce     |   0
 Dolphins   |   5  |   11   |  237.8  |   72.2  | 19.1 | afce     |   0
 Jets       |   7  |    9   |  194.4  |   78.6  | 17.2 | afce     |   0
 Ravens     |  14  |    2   |   210   |  204.8  | 33.2 | afcn     |   0
 Stealers   |   8  |    8   |  186.3  |   90.4  | 18.1 | afcn     |   0
 Bengals    |   2  |   14   |  228.2  |   94.8  | 17.4 | afcn     |   0
 Browns     |   6  |   10   |  221.1  |  118.8  | 20.9 | afcn     |   0
 Texans     |  10  |    6   |  241.7  |  124.7  | 23.6 | afcs     |   0
 Colts      |   7  |    9   |  194.2  |  133.1  | 22.6 | afcs     |   0
 Titans     |   9  |    7   |  207.7  |  143.5  | 25.1 | afcs     |   0
 Jaguars    |   6  |   10   |   235   |  106.7  | 18.8 | afcs     |   0
 Eagles     |   9  |    7   |   235   |  121.1  | 24.1 | nfce     |   0
 Cowboys    |   8  |    8   |  296.6  |  134.6  | 27.1 | nfce     |   0
 Giants     |   4  |   12   |  233.2  |  105.3  | 21.3 | nfce     |   0
 Redskins   |   3  |   13   |  175.8  |   98.9  | 16.6 | nfce     |   0
 Packers    |  13  |    3   |  236.9  |  109.2  | 23.5 | nfcn     |   0
 Bears      |   8  |    8   |  205.7  |   91.1  | 17.5 | nfcn     |   0
 Lions      |   3  |   12   |  243.8  |  103.2  | 21.3 | nfcn     |   1
 Saints     |  13  |    3   |   263   |  107.9  | 28.6 | nfcs     |   0
 Falcons    |   7  |    9   |  294.6  |   85.1  | 23.8 | nfcs     |   0
 Buccaneers |   7  |    9   |  302.8  |   95.1  | 28.6 | nfcs     |   0
 Panthers   |   5  |   11   |  228.1  |  113.7  | 21.2 | nfcs     |   0
 49ers      |  13  |    3   |  220.7  |  153.5  | 29.9 | nfcw     |   0
 Seahawks   |  11  |    5   |   243   |  131.9  | 25.3 | nfcw     |   0
 Rams       |   9  |    7   |  281.2  |   93.7  | 24.6 | nfcw     |   0
 Cardinals  |   5  |   10   |  217.3  |  124.4  | 22.8 | nfcw     |   1
 Vikings    |  10  |    6   |  215.3  |  127.2  | 25.4 | nfcn     |   0
 Broncos    |   7  |    9   |  194.7  |  103.9  | 17.6 | afcw     |   0
 Raiders    |   7  |    9   |  245.4  |  118.3  | 19.6 | afcw     |   0
 Chargers   |   5  |   11   |  276.6  |   90.8  | 21.1 | afcw     |   0
 Chiefs     |  12  |    4   |  282.8  |  101.5  | 28.2 | afcw     |   0
(32 rows)
```

```
[it110=> select * from stats;
   team    | wins | losses | touchdowns | turnovers | passyards
-----------+------+--------+------------+-----------+-----------
 patriots  |  12  |    4   |     42     |    15     |    3961
 jets      |   7  |    9   |     25     |    25     |    3111
 bills     |  10  |    6   |     34     |    19     |    3229
 dolphins  |   5  |   11   |     32     |    26     |    3804
(4 rows)
```

Experiences and Thoughts:

Understanding Web Development: We as a group understand that when it comes to web

development many key components needed to make it successful. When doing this you need a

frontend as well as a backend. For the front end you will need an HTML file, a CSS file, and you

may include a JavaScript file if you need to but it can also be included in the backend as well, In

the backend you will need a Node.js server and a databases to access information. In our project our frontend is made up with an HTML file and CSS for styling, we are including pictures as well as other elements to made it visually appealing for the person who's looking at the website. We also included some information in the HTML file that will be present on the website. In the backend we have a database where all of our information is included with the Node.js server and JavaScript, we as a group think it has come out really good and has enhanced our understanding of web development.

Improvement for Our Website:

When looking at our project we see there can be a lot of things done to make our website better, but the number one thing that we came up with is stimulating the next season games. We think by stimulating the next season games by points per game vs each team for the next season, we try to conclude a winner and give a stimulation on the whole season. This stimulation would be based on using the data from the 2019-2020 season against the teams that a specific team is facing in the upcoming season. We think if we could've included this, it would've made the website more complex.

Each Member's Contribution:

Azim Kamthewala – Helped create HTML file and CSS, wrote the group report

Mark Lydon – Created the HTML file and CSS, helped with the report

Peter Belsley – Did most of the backend work for our projects as well as connected the frontend and backend to make sure everything is working well, ensure all the requirements are met

Jerry Supp - Helped with the HTML and CSS file making