```javascript
var express = require('express');
var bodyParser = require('body-parser');
var mysql = require('mysql2');
var path = require('path');
var connection = mysql.createConnection({
            host: '34.133.251.39',
            user: 'root',
            password: 'test1234',
            database: 'CS411'
});

connection.connect;


var app = express();

// set up ejs view engine
app.set('views', path.join(__dirname, 'views'));
app.set('view engine', 'ejs');

app.use(express.json());
app.use(express.urlencoded({ extended: false }));
app.use(express.static(__dirname + '../public'));

/* GET home page, respond by rendering index.ejs */
app.get('/', function(req, res) {
  res.render('index', { title: 'Mark Attendance' });
});


app.get('/modify', function(req, res) {
    res.send({'message': 'Successfully changed the table!'});
});



// this code is executed when a user clicks the form submit "Update" button//
app.post('/modify', function(req, res) {
  var action = req.body.Action;
  var first_table = req.body.first_table;
  var second_table = req.body.second_table;
  var third_table = req.body.third_table;
  var first_condition = req.body.first_condition;
```

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var second_condition = req.body.second_condition;
var third_condition = req.body.third_condition;
var fourth_condition = req.body.fourth_condition;
var fifth_condition = req.body.fifth_condition;
var sixth_condition = req.body.sixth_condition;
var seventh_condition = req.body.seventh_condition;

var first_column_name = req.body.first_column_name;
var second_column_name = req.body.second_column_name;
var third_column_name = req.body.third_column_name;
var fourth_column_name = req.body.fourth_column_name;
var fifth_column_name = req.body.fifth_column_name;
var sixth_column_name = req.body.sixth_column_name;
var seventh_column_name = req.body.seventh_column_name;




var sql11 = `SELECT * FROM ${first_table}`;
var sql12 = `SELECT * FROM ${first_table} WHERE ${first_column_name} =
'${first_condition}'`;
var sql13 = `SELECT * FROM ${first_table} WHERE ${first_column_name} =
'${first_condition}' AND ${second_column_name} = '${second_condition}'`;
var sql21 = `INSERT INTO ${first_table} (${first_column_name}, ${second_column_name})
VALUES ('${first_condition}','${second_condition}')`;
var sql22 = `INSERT INTO ${first_table} (${first_column_name}, ${second_column_name},
${third_column_name}, ${fourth_column_name}, ${fifth_column_name}, ${sixth_column_name})
VALUES ('${first_condition}','${second_condition}', '${third_condition}','${fourth_condition}',
'${fifth_condition}','${sixth_condition}')`;
var sql32 = `DELETE FROM ${first_table} WHERE ${first_column_name} = '${first_condition}'
AND ${second_column_name} = '${second_condition}'`;
var sql33 = `DELETE FROM ${first_table} WHERE ${first_column_name} = '${first_condition}'
AND ${second_column_name} = '${second_condition}' AND ${third_column_name} =
'${third_condition}'`;
var sql41 = `UPDATE ${first_table} SET ${second_column_name} = '${second_condition}'
WHERE ${first_column_name} = '${first_condition}'`;
var sql42 = `UPDATE ${first_table} SET ${third_column_name} = '${third_condition}' WHERE
${first_column_name} = '${first_condition}' AND ${second_column_name} =
'${second_condition}'`;
var sql51 = `SELECT * FROM ${first_table} JOIN ${second_table} ON
${first_table}.${first_column_name} = ${second_table}.${second_column_name}`;
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  var sql52 = `SELECT * FROM ${first_table} JOIN ${second_table} ON
${first_table}.${first_column_name} = ${second_table}.${second_column_name} WHERE
${first_table}.${third_column_name} = '${third_condition}'`;
  var sql53 = `SELECT * FROM ${first_table} JOIN ${second_table} ON
${first_table}.${first_column_name} = ${second_table}.${second_column_name} WHERE
${first_table}.${third_column_name} = '${third_condition}' AND
${first_table}.${fourth_column_name} = '${fourth_condition}'`;
  var sql61 = `SELECT  DISTINCT ${first_column_name}, ${second_column_name} FROM
${first_table} JOIN ${second_table} ON ${first_table}.${third_column_name} =
${second_table}.${fourth_column_name} WHERE ${fifth_column_name} IN (SELECT
${fifth_column_name} FROM ${third_table} WHERE '${sixth_condition}' <=
${sixth_column_name} and ${seventh_column_name} <= '${seventh_condition}')`;
  var sql62 = `SELECT ${first_column_name}, AVG(${second_column_name} +
${third_column_name}) FROM ${first_table} WHERE ${fourth_column_name} IN (SELECT
${fourth_column_name} FROM ${second_table} WHERE ${fifth_column_name} =
'${fifth_condition}') GROUP BY ${first_column_name}`;



 function DoAction(action, first_table) {
        let result;
 if (action == "Search_all") {
   result = sql11;
 } else if (action == "Search_1_where"){
   result = sql12;
 } else if (action == "Search_2_where"){
   result = sql13;
 } else if (action == 'Insert' && first_table == 'Company'){
   result = sql21;
 } else if (action == 'Insert' && first_table != 'Company'){
   result = sql22;
 } else if (action == "Remove_2_where"){
   result = sql32;
 } else if (action == "Remove_3_where"){
   result = sql33;
 } else if (action == "Update_1_where"){
   result = sql41;
 } else if (action == "Update_2_where"){
   result = sql42;
 } else if (action == "Join_no_where"){
   result = sql51;
 } else if (action == "Join_1_where"){
   result = sql52;
 } else if (action == "Join_2_where"){
```

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    result = sql53;
  } else if (action == "Advanced_1"){
    result = sql61;
  } else if (action == "Advanced_2"){
    result = sql62;
  }
  return result;
};


console.log(DoAction(action, first_table));
connection.connect(function(err) {
  if (err) throw err;
  connection.query(DoAction(action, first_table), function (err, result, fields) {
    if (err) throw err;

      console.log(result);
      if (action == "Search_all" || action == "Search_1_where" || action == "Search_2_where" ||
action == "Advanced_1" || action == "Advanced_2" ) {
      var table =''; //to store html table
      var result0 = result[0];
      var result_key = Object.keys(result0);


      //create html table with data from result//
      for(var i=0; i<result.length; i++){
       table +='<tr><td>'+ (i+1);
       for(var j=0; j<result_key.length; j++){
        table += '</td><td>'+ result[i][result_key[j]];
            }
       table += '</td></tr>';
      }
      table2 ='<table border="1"><tr><th>Nr.';
      for(var z=0; z<result_key.length; z++){
       table2 +='</th><th>' +  result_key[z];
      }
      table2 +='</th></tr>'+ table +'</table>';
      res.send(table2);
      } else {
      res.redirect('/modify');
      };
    });
  });
});
```

```
app.listen(80, function () {
    console.log('Node app is running on port 80');
});
```