'sort all elements in list of results according to time shift started

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'Modifications: Sorts record structures, not plain arrays. Allows sorting entire structure by one specific field.

Private Sub quickSort

    'sort by one specific field

    If length of List > 1 then

pivot = first element of the array

start = first index of array

end = last index of array

while start <= end

while array(start) < pivot

increment start by 1

end while

while array(end) > pivot

decrement end by 1

end while

if start <= end then

swap array(start) with array(end)

increment start by 1

decrement end by 1

end if

end while

        quickSort(array from first index to End)

        quickSort(array from Start to last index)

End Sub

'Save results of search (shifts and statistics) to a text file at path specified by user

Private Sub save search results button is clicked

    show save file dialogue (dlgSaveResuts) and get file path

create/overwrite text file

write header to file

write employees name to file

for each results

write result to file

end for

write "Employee statistics:" header to file

write employee statistics to file

close text file

End Sub

'Search archived rosters for all shifts worked by specified employee. Also calculate basic statistics from these results

Private Sub when Search button clicked

    'search archive from this year back to MAXYEAR years in the past

    For each year to search

        reset local variables

        if MAXYEARs have not elapsed since 2019

            search from oldest existing archive

        end if

        if roster from year exists then

            for each week of year

                if roster from week exists then

                    Open Excel Application

                    Open roster Workbook

                    Open primary Worksheet

                    for each day of the week

                        for each record in sheet

                            if found name of employee

                                copy information from spreadsheet archive to results array

                                add resultant shift to listbox

                                increment totalShifts by 1

                                increment totalHours by length of shift

                                if timeStart is earlier than earliestStart then

                                    earliestStart = timeStart

                                end If

                                if timeEnd is later than latestEnd then

                                    latestEnd = timeEnd

                                end if

                            end if

                        end for

                    end for

                    close files

                end if

            end for

        end if

    end for

    populate every text-box with corresponding data

    enable sort and save results buttons

End Sub

'Sort results of search by time shift was started

Private Sub when sort results button is clicked

    quickSort results by shift start time

Clear shifts worked listbox

'repopulate listbox

for each item in sorted list

add item to listbox

end for

End Sub