VISHWAKARMA INSTITUE OF TECHNOLOGY

DEPARTMENT OF ENGINEERING SCIENCES AND HUMANITIES

PSAP PROJECT BATCH No:-2	**PSAP PROJECT GROUP No:-I6**	**ACADEMIC YEAR 2022-23**	**SEMESTER-1**
TITLE OF PROJECT	Employee Information Management System		
DOMAIN	PSAP		
TOOLS	VS Code		
TECHNOLOGY	Programming in C		
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The given code is an Employee Management System written in C programming language. The system allows the user to perform various operations on employee records such as add, delete, modify, display, and search.

The code begins by including various header files such as stdio.h, string.h, stdlib.h, math.h, and conio.h. It then defines a structure named emp which contains various fields such as ID, Name, Designation, Salary, Gender, Branch, Permanent Address, Present Address, Phone, and Email. It also defines a macro named "Employee" which is used to refer to the structure emp.

The code then defines several functions such as welcome(), printChar(), printHead(), add(), del(), modify(), displayList(), searchRecord(), and displaybasic(). These functions are responsible for performing various operations on employee records.

The main() function of the program begins by opening a file named "employeeInfo.txt" in read-write binary mode. If the file does not exist, it creates a new file with the same name in write mode. The function then prompts the user to enter their username and password. The program uses the conio.h library to mask the password input with asterisks for security purposes. If the user enters the correct username and password, the program displays the main menu of the employee management system.

The main menu allows the user to perform various operations such as adding an employee, deleting an employee, modifying an employee record, displaying the employee list, searching for an employee record, and displaying basic information. The program uses a switch statement to execute the operation chosen by the user.

The add() function allows the user to add a new employee record to the file. The function prompts the user to enter the various fields of the emp structure, and then writes the structure to the file using the fwrite() function.

The del() function allows the user to delete an existing employee record from the file. The function prompts the user to enter the ID of the employee record to be deleted, and then searches for the record in the file using the fread() function. If the record is found, it is deleted using the fseek() and fwrite() functions.

The modify() function allows the user to modify an existing employee record in the file. The function prompts the user to enter the ID of the employee record to be modified, and then searches for the record in the file using the fread() function. If the record is found, the function prompts the user to enter the new values for the various fields of the emp structure, and then writes the modified structure back to the file using the fseek() and fwrite() functions.

The displayList() function displays a list of all employee records in the file. The function reads the records from the file using the fread() function and displays them on the console using printf().

The searchRecord() function allows the user to search for an employee record based on their ID. The function prompts the user to enter the ID of the employee record to be searched, and then searches for the record in the file using the fread() function. If the record is found, it is displayed on the console using printf().

The displaybasic() function displays basic information about all employee records in the file such as their ID, Name, Designation, and Salary. The function reads the records from the file using the fread() function and displays the basic information on the console using printf().

The program makes use of various functions such as fseek(), fread(), and fwrite() to perform file operations on employee records. It also makes use of conio.h library to provide masked password input for security purposes.