**/\*\*AUTHOR NAME: LOH EU-GNE**

**STUDENT ID: 0125919**

**SUBJECT CODE: XDCS 1094**

**PAGE: DEVELOPER DEVELOPER\*/**

**import java.io.Serializable;**

**public class Developer implements Serializable{**

**String DeveloperName, gender;**

**String DeveloperId;**

**Address add;**

**project p;**

**//constuctors**

**Developer(String DeveloperName, String gender, String DeveloperId, Address add, project p){**

**this.DeveloperName=DeveloperName;**

**this.gender=gender;**

**this.DeveloperId=DeveloperId;**

**this.add=add;**

**this.p=p;**

**}//close developer constructor**

**public String getDeveloperName(){**

**return this.DeveloperName=DeveloperName;**

**}//close get method**

**public String getgender(){**

**return this.gender=gender;**

**}**

**public String getDeveloperId(){**

**return this.DeveloperId=DeveloperId;**

**}**

**public void setDeveloperName(String DeveloperName){**

**this.DeveloperName=DeveloperName;**

**}//close set method**

**public void setgender(String gender){**

**this.gender=gender;**

**}//close set method**

**public void setDeveloperId(String DeveloperId){**

**this.DeveloperId=DeveloperId;**

**}//close set method**

**public void editclientName(String clientName){**

**this.p.setclientName(clientName);**

**}**

**public void editUnitNo(String UnitNo){**

**this.add.setUnitNo(UnitNo);**

**}**

**public void editStreetName(String StreetName){**

**this.add.setStreetName(StreetName);**

**}**

**public void editcity(String city){**

**this.add.setcity(city);**

**}**

**public void editpostCode(String postCode){**

**this.add.setpostCode(postCode);**

**}**

**public void editcost(String cost){**

**this.p.setcost(cost);**

**}**

**}//close class**

**/\*\*AUTHOR NAME: LOH EU-GNE**

**STUDENT ID: 0125919**

**SUBJECT CODE: XDCS 1094**

**PAGE: FT DEVELOPER\*/**

**import java.io.Serializable;**

**public class FullTimeDeveloper extends Developer implements Serializable{**

**double AnnualSalary;**

**FullTimeDeveloper(String DeveloperName, String DeveloperID, String gender, double AnnualSalary, Address add, project p){**

**super(DeveloperName, gender, DeveloperID, add, p);**

**this.AnnualSalary=AnnualSalary;**

**}//close developer constructor**

**public String getDeveloperName(){**

**return this.DeveloperName=DeveloperName;**

**}//close get method**

**public String getgender(){**

**return this.gender=gender;**

**}**

**public String getDeveloperId(){**

**return this.DeveloperId=DeveloperId;**

**}**

**public double getAnnualSalary(){**

**return this.AnnualSalary=AnnualSalary;**

**}**

**public void DisplayAddressDetails(){**

**System.out.println("Full Time Developer Unit No: " +add.getUnitNo());**

**System.out.println("Full Time Developer StreetName: " +add.getStreetName());**

**System.out.println("Full Time Developer City: " +add.getcity());**

**System.out.println("Full Time Developer Post Code: " +add.getpostCode());**

**}**

**public void DisplayProjectDetails(){**

**System.out.println("Full Time Developer Project ID: " +p.getprojectID());**

**System.out.println("Full Time Developer Client Name: " +p.getclientName());**

**System.out.println("Full Time Developer Cost: " +p.getcost());**

**//System.out.println("Full Time Developer Project Start Date: " +p.getstartDate());**

**}**

**public void setDeveloperName(String DeveloperName){**

**this.DeveloperName=DeveloperName;**

**}//close set method**

**public void setgender(String gender){**

**this.gender=gender;**

**}//close set method**

**public void setDeveloperId(String DeveloperId){**

**this.DeveloperId=DeveloperId;**

**}//close set method**

**public void setAnnualSalary(double AnnualSalary){**

**this.AnnualSalary=AnnualSalary;**

**}//close set method**

**}//close class**

**/\*\*AUTHOR NAME: LOH EU-GNE**

**STUDENT ID: 0125919**

**SUBJECT CODE: XDCS 1094**

**PAGE: PT DEVELOPER\*/**

**import java.io.Serializable;**

**public class PartTimeDeveloper extends Developer implements Serializable{**

**double HourlyRate, MaxNumOfHour;**

**PartTimeDeveloper(String DeveloperName, String gender, String DeveloperID, double HourlyRate, double MaxNumOfHour, Address add, project p){**

**super(DeveloperName, gender, DeveloperID, add, p);**

**this.HourlyRate=HourlyRate;**

**this.MaxNumOfHour=MaxNumOfHour;**

**}//close developer constructor**

**public String getDeveloperName(){**

**return this.DeveloperName=DeveloperName;**

**}//close get method**

**public String getgender(){**

**return this.gender=gender;**

**}**

**public String getDeveloperId(){**

**return this.DeveloperId=DeveloperId;**

**}**

**public double getHourlyRate(){**

**return this.HourlyRate=HourlyRate;**

**}**

**public double getMaxNumOfHour(){**

**return this.MaxNumOfHour=MaxNumOfHour;**

**}**

**public void DisplayAddressDetails(){**

**System.out.println("Part Time Developer Unit No: " +add.getUnitNo());**

**System.out.println("Part Time Developer StreetName: " +add.getStreetName());**

**System.out.println("Part Time Developer City: " +add.getcity());**

**System.out.println("Part Time Developer Post Code: " +add.getpostCode());**

**}**

**public void DisplayProjectDetails(){**

**System.out.println("Part Time Developer Project ID: " +p.getprojectID());**

**System.out.println("Part Time Developer Client Name: " +p.getclientName());**

**System.out.println("Part Time Developer Cost: " +p.getcost());**

**//System.out.println("Part Time Developer Project Start Date: " +p.getstartDate());**

**}**

**public void setDeveloperName(String DeveloperName){**

**this.DeveloperName=DeveloperName;**

**}//close set method**

**public void setgender(String gender){**

**this.gender=gender;**

**}//close set method**

**public void setDeveloperId(String DeveloperId){**

**this.DeveloperId=DeveloperId;**

**}//close set method**

**public void setHourlyRate(double HourlyRate){**

**this.HourlyRate=HourlyRate;**

**}//close set method**

**public void setMaxNumOfHour(double MaxNumOfHour){**

**this.MaxNumOfHour=MaxNumOfHour;**

**}//close set method**

**}//close class**

**/\*\*AUTHOR NAME: LOH EU-GNE**

**STUDENT ID: 0125919**

**SUBJECT CODE: XDCS 1094**

**PAGE: PROJECT\*/**

**import java.util.\*;**

**import java.io.Serializable;**

**import java.time.LocalDate;**

**public class project implements Serializable{**

**String projectID;**

**String clientName;**

**String cost;**

**LocalDate startDate;**

**Date PrdEndDate;**

**Date ActualEndDate;**

**String projectTxt;**

**project(String projectID, String clientName, String cost, LocalDate startDate, String projectTxt){**

**this.projectID=projectID;**

**this.clientName=clientName;**

**this.cost=cost;**

**this.startDate=startDate;**

**//this.PrdEndDate=PrdEndDate;**

**//this.ActualEndDate=ActualEndDate;**

**this.projectTxt=projectTxt;**

**}//close developer constructor**

**public String getprojectID(){**

**return this.projectID=projectID;**

**}//close get method**

**public String getclientName(){**

**return this.clientName=clientName;**

**}**

**public String getcost(){**

**return this.cost=cost;**

**}**

**public LocalDate getstartDate(){**

**return this.startDate=startDate;**

**}**

**public Date getPrdEndDate(){**

**return this.PrdEndDate=PrdEndDate;**

**}**

**public Date getActualEndDate(){**

**return this.ActualEndDate=ActualEndDate;**

**}**

**public String getprojectTxt(){**

**return this.projectTxt=projectTxt;**

**}**

**public void setprojectID(String projectID){**

**this.projectID=projectID;**

**}//close set method**

**public void setclientName(String clientName){**

**this.clientName=clientName;**

**}//close set method**

**public void setcost(String cost){**

**this.cost=cost;**

**}//close set method**

**public void setstartDate(LocalDate startDate){**

**this.startDate=startDate;**

**}//close set method**

**public void setPrdEnddate(Date PrdEndDate){**

**this.PrdEndDate=PrdEndDate;**

**}//close set method**

**public void setActualEndDate(Date ActualEndDate){**

**this.ActualEndDate=ActualEndDate;**

**}//close set method**

**public void projectTxt(String projectTxt){**

**this.projectTxt=projectTxt;**

**}//close set method**

**}//close class**

**/\*\*AUTHOR NAME: LOH EU-GNE**

**STUDENT ID: 0125919**

**SUBJECT CODE: XDCS 1094**

**PAGE: TEST DEVELOPER\*/**

**//Main Menu Function**

**//Declaring Function**

**import java.util.Scanner;**

**import java.time.LocalDate;**

**import java.io.Serializable;**

**import java.io.\*;**

**import java.time.temporal.ChronoUnit;**

**import java.time.format.DateTimeFormatter;**

**import java.time.format.FormatStyle;**

**import java.time.DayOfWeek;**

**import java.time.Month;**

**import java.time.Year;**

**import java.util.TimeZone;**

**import java.util.Date;**

**import java.text.SimpleDateFormat;**

**//Menu Class**

**//Variables Declaration**

**public class EmployeeMenu{ //class**

**public static int choice=0, num=0, choice1=0, choiceM=0, editFTC=0, editPTC=0, choiceM2=0;**

**public static double AnnualSalary, MaxNumOfHour, HourlyRate, newAnnualSalary,newHourlyRate;**

**public static String DeveloperID, reply, reply2, next="y",UnitNo, StreetName, city, postCode, projectID, clientName, cost, PrdEndDate, ActualEndDate, projectTxt, newDeveloperName,newclientName, newgender, newUnitNo, newStreetName, newpostCode,newcost,DeveloperName, gender, newcity;**

**public static LocalDate startDate;**

**static Scanner myObj = new Scanner(System.in);**

**public static FullTimeDeveloper ft[]=new FullTimeDeveloper[50];**

**public static PartTimeDeveloper pt[]=new PartTimeDeveloper[50];**

**public static int idx=0, Pidx=0;**

**public static void EnterFullTimeDet()throws Exception{**

**do{**

**next="Y";**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Developer Name: ");**

**System.out.println("----------------------------------------\n");**

**DeveloperName= myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Gender: ");**

**System.out.println("----------------------------------------\n");**

**gender=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter ID: ");**

**System.out.println("----------------------------------------\n");**

**DeveloperID=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Annual Salary: ");**

**System.out.println("----------------------------------------\n");**

**AnnualSalary=myObj.nextDouble();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Unit No: ");**

**System.out.println("----------------------------------------\n");**

**UnitNo=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Street Name: ");**

**System.out.println("----------------------------------------\n");**

**StreetName=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter City: ");**

**System.out.println("----------------------------------------\n");**

**city=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Postcode: ");**

**System.out.println("----------------------------------------\n");**

**postCode=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Project ID: ");**

**System.out.println("----------------------------------------\n");**

**projectID=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Client Name: ");**

**System.out.println("----------------------------------------\n");**

**clientName=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Cost: ");**

**System.out.println("----------------------------------------\n");**

**cost=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Project Starting Date: ");**

**System.out.println("----------------------------------------\n");**

**LocalDate today=LocalDate.now();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Project Details: ");**

**System.out.println("----------------------------------------\n");**

**projectTxt=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Project End Date: ");**

**System.out.println("----------------------------------------\n");**

**LocalDate tomorrow=today.plus(15, ChronoUnit.DAYS);**

**System.out.println("----------------------------------------\n");**

**System.out.println("Project Actual End Date: ");**

**System.out.println("----------------------------------------\n");**

**LocalDate tomorrowActual=today.plus(30, ChronoUnit.DAYS);**

**System.out.println("----------------------------------------\n");**

**System.out.println("Do you want to save the details: [Y/N] ");**

**System.out.println("----------------------------------------\n");**

**reply=myObj.next();**

**if (reply.equals("Y") || reply.equals("y")) {//if statement**

**SaveFullTimeRec();**

**System.out.println("Details Have Been Saved :)");**

**System.out.println("Do you want to enter another Full-Time details: [Y/N] ");**

**next=myObj.next();**

**}//if statement**

**}while(next.equals("Y")||next.equals("y"));**

**}//Enter full time details**

**//SAVE FULLTIME REC**

**public static void SaveFullTimeRec() throws Exception{**

**Address add=new Address(UnitNo, StreetName, city, postCode);**

**project p=new project(projectID, clientName, cost, startDate, projectTxt);**

**ft[idx]=new FullTimeDeveloper(DeveloperName, DeveloperID, gender, AnnualSalary, add, p);**

**idx++;**

**}//Save full time**

**public static void ViewFullTimeLog() throws Exception{**

**int i=0;**

**for (i=0; i<idx; i++){**

**System.out.println("Full Time Developer Name: " +ft[i].getDeveloperName());**

**System.out.println("Full Time Developer Gender: " +ft[i].getgender());**

**System.out.println("Full Time Developer ID: " +ft[i].getDeveloperId());**

**System.out.println("Full Time Developer Annual Salary: " +ft[i].getAnnualSalary());**

**ft[i].DisplayAddressDetails();**

**ft[i].DisplayProjectDetails();**

**}//for loop**

**}//end ViewFullTimeLog**

**public static void EnterPartTimeDet()throws Exception{**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Developer Name: ");**

**System.out.println("----------------------------------------\n");**

**DeveloperName= myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Gender: ");**

**System.out.println("----------------------------------------\n");**

**gender=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter ID: ");**

**System.out.println("----------------------------------------\n");**

**DeveloperID=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Hourly Rate: ");**

**System.out.println("----------------------------------------\n");**

**HourlyRate=myObj.nextDouble();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Maximum Number Of Hours: ");**

**System.out.println("----------------------------------------\n");**

**MaxNumOfHour=myObj.nextDouble();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Street Name: ");**

**System.out.println("----------------------------------------\n");**

**StreetName=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter City: ");**

**System.out.println("----------------------------------------\n");**

**city=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Postcode: ");**

**System.out.println("----------------------------------------\n");**

**postCode=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Project ID: ");**

**System.out.println("----------------------------------------\n");**

**projectID=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Client Name: ");**

**System.out.println("----------------------------------------\n");**

**clientName=myObj.next();**

**System.out.println("----------------------------------------\n");**

**System.out.println("Enter Cost: ");**

**System.out.println("----------------------------------------\n");**

**cost=myObj.next();**

**System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");**

**System.out.println("Starting Date: ");**

**System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");**

**LocalDate date = LocalDate.now();**

**System.out.println("Project Actual End Date: ");**

**System.currentTimeMillis();**

**System.out.println("Enter Project Details: ");**

**projectTxt=myObj.next();**

**System.out.println("Do you want to save the details: [Y/N] ");**

**reply2=myObj.next();**

**if (reply2.equals("Y") || reply2.equals("y")) {**

**SavePartTimeRec();**

**System.out.println("Details Have Been Saved :)");**

**}**

**}//Enter full time details**

**//SAVE PARTTIME REC**

**public static void SavePartTimeRec() throws Exception{//save pt**

**FileOutputStream pFile=new FileOutputStream(new File("PartTimers.txt"));**

**ObjectOutputStream op=new ObjectOutputStream(pFile);**

**Address add=new Address(UnitNo, StreetName, city, postCode);**

**System.out.println("pt1=");**

**project p=new project(projectID, clientName, cost, startDate, projectTxt);**

**System.out.println("pt2=");**

**pt[Pidx]=new PartTimeDeveloper(DeveloperName, DeveloperID, gender, MaxNumOfHour,HourlyRate, add, p);**

**System.out.println("pt3=");**

**System.out.println("Pidx=" +Pidx);**

**Pidx++;**

**//Write Objects to file**

**op.writeObject(pt);**

**op.close();**

**pFile.close();**

**//PartTimeDeveloper ft=new PartTimeDeveloper()**

**}//save pt**

**public static void ViewPartTimeLog() throws Exception{**

**int i=0;**

**System.out.println("Pidx=" +Pidx);**

**for (i=0; i<Pidx; i++){**

**System.out.println("Part Time Developer Name: " +pt[i].getDeveloperName());**

**System.out.println("Part Time Developer Gender: " +pt[i].getgender());**

**System.out.println("Part Time Developer ID: " +pt[i].getDeveloperId());**

**System.out.println("Part Time Developer Max Num Of Hour : " +pt[i].getMaxNumOfHour());**

**pt[i].DisplayAddressDetails();**

**pt[i].DisplayProjectDetails();**

**}//for loop**

**}//end ViewFullTimeLog**

**public static void ViewEmployeeLog() throws Exception{**

**do{**

**System.out.println("\t========================\n");**

**System.out.println("\tView Employees Log\n");**

**System.out.println("\t========================\n");**

**System.out.println("\t [1]View Full Time Employee Log\n");**

**System.out.println("\t [2]View Part Time Employee Log\n");**

**System.out.println("\t [3]Return To Main Menu\n");**

**//Enable user input**

**Scanner myObj = new Scanner(System.in);**

**System.out.println("Enter Your Choice:");**

**choice1 = myObj.nextInt();**

**//Use Switch Case**

**switch(choice1){**

**case 1:**

**ViewFullTimeLog();**

**break;**

**case 2:**

**ViewPartTimeLog();**

**break;**

**case 3:**

**MainMenu();**

**break;**

**case 0:**

**System.out.println("Bye Bye!");**

**break;**

**default:**

**System.out.println("Invalid Choice!\n");**

**} //switch**

**} while (choice1 != 0);**

**}//view employee log**

**//Registring New Employee**

**public static void RegisterNewEmployee() throws Exception{**

**do{**

**System.out.println("\t==============================\n");**

**System.out.println("\tRegister New Employee \n");**

**System.out.println("\t==============================\n");**

**System.out.println("\t [1]New Full-Time Employee\n");**

**System.out.println("\t [2]New PartTime Employee\n");**

**System.out.println("\t [0]Return to Main Menu\n");**

**//Enable user input**

**Scanner myObj = new Scanner(System.in);**

**System.out.println("Enter Your Choice:");**

**num = myObj.nextInt();**

**//Use Switch Case**

**switch(num){**

**case 1:**

**EnterFullTimeDet();**

**break;**

**case 2:**

**EnterPartTimeDet();**

**break;**

**case 0:**

**System.out.println("Bye Bye!");**

**break;**

**default:**

**System.out.println("Invalid Choice!\n");**

**} //switch**

**} while (num != 0);**

**}//end registration method**

**public static void ModifyEmployeeDetails() throws Exception{**

**do{**

**System.out.println("\t==============================\n");**

**System.out.println("\tMODIFY DEVELOPER DETAILS\n");**

**System.out.println("\t==============================\n");**

**System.out.println("\t [1]Edit Full-Time Employee\n");**

**System.out.println("\t [2]Edit Part-Time Employee\n");**

**System.out.println("\t [3]Return To Main Menu\n");**

**Scanner myObj = new Scanner(System.in);**

**System.out.println("Enter Your Choice:");**

**choiceM = myObj.nextInt();**

**switch(choiceM){**

**case 1:**

**EditFullTimeEmployee();**

**break;**

**case 2:**

**EditPartTimeEmployee();**

**break;**

**default:**

**System.out.println("Invalid Choice!\n");**

**} //switch**

**}while (choiceM != 3);**

**}//menu**

**public static void EditFullTimeEmployee() throws Exception{**

**int x=0, found=0;**

**System.out.println("\t=============================\n");**

**System.out.println("\tEdit Full-Time Employee\n");**

**System.out.println("\t=============================\n");**

**System.out.println("Enter ID To Search: ");**

**DeveloperID=myObj.next();**

**for(x=0; x<idx; x++){**

**if(DeveloperID.equals(ft[x].DeveloperId)){ //loop**

**found=1;**

**break;**

**}//loop**

**}//SEARCHING**

**if(found==1){**

**System.out.println("Full Time Developer ID: " +ft[x].getDeveloperId());**

**System.out.println("Full Time Developer Name: " +ft[x].getDeveloperName());**

**System.out.println("Full Time Developer Gender: " +ft[x].getgender());**

**System.out.println("Full Time Developer Annual Salary: " +ft[x].getAnnualSalary());**

**ft[x].DisplayAddressDetails();**

**ft[x].DisplayProjectDetails();**

**}//SEARCHING**

**System.out.println("\t===========================\n");**

**System.out.println("\tSELECT AN ITEM TO EDIT\n");**

**System.out.println("\t===========================\n");**

**System.out.println("Full Time Developer Project ID: ");**

**System.out.println("[1]Full Time Developer Name");**

**System.out.println("[2]Full Time Developer Gender ");**

**System.out.println("[3]Full Time Developer Annual Salary");**

**System.out.println("[4]Full Time Developer Unit No: ");**

**System.out.println("[5]Full Time Developer StreetName: ");**

**System.out.println("[6]Full Time Developer City: ");**

**System.out.println("[7]Full Time Developer Post Code: ");**

**System.out.println("[8]Full Time Developer Client Name: ");**

**System.out.println("[9]Full Time Developer Cost: ");**

**System.out.println("[0]Return To Modify Menu");**

**System.out.println("\tSELECT AN ITEM TO EDIT\n");**

**Scanner myObj = new Scanner(System.in);**

**System.out.println("Enter Your Choice:");**

**editFTC = myObj.nextInt();**

**//Use Switch Case**

**switch(editFTC){**

**case 1:**

**System.out.print("Enter New Full-Time Developer Name: ");**

**newDeveloperName=myObj.next();**

**ft[x].setDeveloperName(newDeveloperName);**

**break;**

**case 2:**

**System.out.print("Enter New Full-Time Developer Gender: ");**

**newgender=myObj.next();**

**ft[x].setgender(newgender);**

**break;**

**case 3:**

**System.out.print("Enter New Full-Time Developer Annual Salary: ");**

**newAnnualSalary=myObj.nextDouble();**

**ft[x].setAnnualSalary(newAnnualSalary);**

**break;**

**case 4:**

**System.out.print("Enter New Full-Time Unit No: ");**

**newUnitNo=myObj.next();**

**ft[x].editUnitNo(newUnitNo);**

**break;**

**case 5:**

**System.out.print("Enter New Full-Time Street Name: ");**

**newStreetName=myObj.next();**

**ft[x].editStreetName(newStreetName);**

**break;**

**case 6:**

**System.out.print("Enter New Full-Time City: ");**

**newcity=myObj.next();**

**ft[x].editcity(newcity);**

**break;**

**case 7:**

**System.out.print("Enter New Full-Time Postcode: ");**

**newpostCode=myObj.next();**

**ft[x].editpostCode(newpostCode);**

**break;**

**case 8:**

**System.out.print("Enter New Client Name:");**

**newclientName=myObj.next();**

**ft[x].editclientName(newclientName);**

**break;**

**case 9:**

**System.out.print("Enter New Full-Time Project Cost: ");**

**newcost=myObj.next();**

**ft[x].editcost(newcost);**

**break;**

**case 0:**

**break;**

**}//edit FTC**

**}//edit**

**public static void EditPartTimeEmployee() throws Exception{ //open edit**

**int y=0, Pfound=0;**

**System.out.println("\t=============================\n");**

**System.out.println("\tEdit Part-Time Employee\n");**

**System.out.println("\t=============================\n");**

**System.out.println("Enter ID To Search: ");**

**DeveloperID=myObj.next();**

**System.out.println("Pidx=" +Pidx);**

**for(y=0; y<Pidx; y++){**

**if(DeveloperID.equals(pt[y].DeveloperId)){**

**Pfound=1;**

**break;**

**}**

**}//SEARCHING**

**if(Pfound==1){**

**System.out.println("Part Time Developer ID: " +pt[y].getDeveloperId());**

**System.out.println("Part Time Developer Name: " +pt[y].getDeveloperName());**

**System.out.println("Part Time Developer Gender: " +pt[y].getgender());**

**System.out.println("Part Time Developer Hourly Rate: " +pt[y].getHourlyRate());**

**pt[y].DisplayAddressDetails();**

**pt[y].DisplayProjectDetails();**

**}//SEARCHING**

**System.out.println("\t===========================\n");**

**System.out.println("\tSELECT AN ITEM TO EDIT\n");**

**System.out.println("\t===========================\n");**

**System.out.println("Full Time Developer Project ID: ");**

**System.out.println("[1]Part Time Developer Name");**

**System.out.println("[2]Part Time Developer Gender ");**

**System.out.println("[3]Part Time Developer Hourly Rate");**

**System.out.println("[4]Part Time Developer Unit No ");**

**System.out.println("[5]Part Time Developer StreetName ");**

**System.out.println("[6]Part Time Developer City ");**

**System.out.println("[7]Part Time Developer Post Code ");**

**System.out.println("[8]Part Time Developer Client Name ");**

**System.out.println("[9]Part Time Developer Cost ");**

**System.out.println("[0]Return To Modify Menu");**

**System.out.println("\tSELECT AN ITEM TO EDIT\n");**

**Scanner myObj = new Scanner(System.in);**

**System.out.println("Enter Your Choice:");**

**editPTC = myObj.nextInt();**

**//Use Switch Case**

**switch(editPTC){**

**case 1:**

**System.out.print("Enter New Part-Time Developer Name: ");**

**newDeveloperName=myObj.next();**

**pt[y].setDeveloperName(newDeveloperName);**

**break;**

**case 2:**

**System.out.print("Enter New Part-Time Developer Gender: ");**

**newgender=myObj.next();**

**pt[y].setgender(newgender);**

**break;**

**case 3:**

**System.out.print("Enter New Part-Time Developer Hourly Rate: ");**

**newHourlyRate=myObj.nextDouble();**

**pt[y].setHourlyRate(newHourlyRate);**

**break;**

**case 4:**

**System.out.print("Enter New Part-Time Unit No: ");**

**newUnitNo=myObj.next();**

**pt[y].editUnitNo(newUnitNo);**

**break;**

**case 5:**

**System.out.print("Enter New Part-Time Street Name: ");**

**newStreetName=myObj.next();**

**pt[y].editStreetName(newStreetName);**

**break;**

**case 6:**

**System.out.print("Enter New Part-Time City: ");**

**newcity=myObj.next();**

**pt[y].editcity(newcity);**

**break;**

**case 7:**

**System.out.print("Enter New Part-Time Postcode: ");**

**newpostCode=myObj.next();**

**pt[y].editpostCode(newpostCode);**

**break;**

**case 8:**

**System.out.print("Enter New Client Name:");**

**newclientName=myObj.next();**

**pt[y].editclientName(newclientName);**

**break;**

**case 9:**

**System.out.print("Enter New Part-Time Project Cost: ");**

**newcost=myObj.next();**

**pt[y].editcost(newcost);**

**break;**

**case 0:**

**break;**

**}//switch edit PTC**

**}//edit method**

**public static void MainMenu() throws Exception{**

**//loadFullTimeDeveloper();**

**do{**

**System.out.println("\t==================================\n");**

**System.out.println("\tWelcome To KDU Developers Firm \n");**

**System.out.println("\t==================================\n");**

**System.out.println("\t [1]Register New Employee\n");**

**System.out.println("\t [2]View Employee's Log\n");**

**System.out.println("\t [3]Modify Employee Details\n");**

**System.out.println("\t [0]Log Out\n");**

**//Enable user input**

**Scanner myObj = new Scanner(System.in);**

**System.out.println("Enter Your Choice:");**

**choice = myObj.nextInt();**

**//Use Switch Case**

**switch(choice){ //switch**

**case 1:**

**RegisterNewEmployee();**

**break;**

**case 2:**

**ViewEmployeeLog();**

**break;**

**case 3:**

**ModifyEmployeeDetails();**

**break;**

**case 0:**

**System.out.println("Bye Bye!");**

**break;**

**default:**

**System.out.println("Invalid Choice!\n");**

**}//switch**

**}while (choice != 0);**

**SaveFullTimeDeveloper();**

**}//end main menu**

**public static void loadFullTimeDeveloper() throws Exception{ //open load ft**

**idx=0;**

**FileInputStream fi=new FileInputStream(new File("FullTimers.txt"));**

**ObjectInputStream oi=new ObjectInputStream(fi);**

**for (idx= 0; idx < oi.available();)**

**ft[idx]=(FullTimeDeveloper)oi.readObject();**

**oi.close();**

**fi.close();**

**}//load full time developer**

**public static void SaveFullTimeDeveloper() throws Exception{**

**FileOutputStream f=new FileOutputStream(new File("FullTimers.txt"));**

**ObjectOutputStream o=new ObjectOutputStream(f);**

**for (int z=0; z<idx; z++){ //open for loop**

**//Write Objects to file**

**o.writeObject(ft[z]);**

**}//close for loop**

**}//save ft**

**public static void loadPartTimeDeveloper() throws Exception{**

**Pidx=0;**

**FileInputStream pi=new FileInputStream(new File("PartTimers.txt"));**

**ObjectInputStream Poi=new ObjectInputStream(pi);**

**for (Pidx= 0; Pidx < Poi.available();)**

**pt[Pidx]=(PartTimeDeveloper)Poi.readObject();**

**Poi.close();**

**pi.close();**

**}//load full time developer**

**public static void SavePartTimeDeveloper() throws Exception{ //open save pt**

**FileOutputStream f=new FileOutputStream(new File("PartTimers.txt"));**

**ObjectOutputStream o=new ObjectOutputStream(f);**

**for (int z=0; z<Pidx; z++){//open for loop**

**//Write Objects to file**

**o.writeObject(pt[z]);**

**}//close for loop**

**o.close();**

**f.close();**

**}//close save pt**

**public static void main(String args[])throws Exception{**

**//Print Menu**

**//Login Function**

**String Username;**

**String Password;**

**Password = "kdu";**

**Username = "kdu";**

**Scanner input1 = new Scanner(System.in);**

**System.out.println("Enter Username : ");**

**String username = input1.next();**

**Scanner input2 = new Scanner(System.in);**

**System.out.println("Enter Password : ");**

**String password = input2.next();**

**if (username.equals(Username) && password.equals(Password)){**

**System.out.println("Access Granted! Welcome!");**

**MainMenu();**

**}**

**else if (username.equals(Username)) {//else if**

**System.out.println("Invalid Password!");**

**} else if (password.equals(Password)) {//else if**

**System.out.println("Invalid Username!");**

**}else {//else**

**System.out.println("Invalid Username & Password!");**

**}//else**

**}//login main**

**}//class**