Data Structures and Algorithm (CSE 2001)
Minor Project-1 (2024)

(Last Date of Submission: 15/05/2024)

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Objective: To create a member database and retrieve records from it.

Problem: A member of a golf club is having the following attributes and methods. Create a class to represent a member of the club. Consider appropriate constructors or setter methods to set the details and a method display() to display the details of one member.

Member class
private int MemberID
private String LastName
private String FirstName
private int Handicap
private char Gender
private String Team
private String MemberType
private int Coach
private long Phone
private Date JoinDate
Constructors/setter methods
void display()

Date class members
private int day
private String month
private int year

Create an array **member[]** of member objects and set the details. The details of the member table may look like the following. Each row represents a member details that is one Member class object.

MemberID	LastName	FirstName	Handicap	Gender	Team	MemberType	Coach	Phone	JoinDate
118	McKenzie	Melissa	30	F		Junior	153	963270	28-May-05
138	Stone	Michael	30	M		Senior		983223	31-May-09
153	Nolan	Brenda	11	F	TeamB	Senior		442649	12-Aug-06
176	Branch	Helen		F		Social		589419	06-Dec-11
178	Beck	Sarah		F		Social		226596	24-Jan-10
228	Burton	Sandra	26	F		Junior	153	244493	09-Jul-13
235	Cooper	William	14	M	TeamB	Senior	153	722954	05-Mar-08
239	Spence	Thomas	10	M		Senior		697720	22-Jun-06
258	Olson	Barbara	16	F		Senior		370186	29-Jul-13
286	Pollard	Robert	19	M	TeamB	Junior	235	617681	13-Aug-13
290	Sexton	Thomas	26	M		Senior	235	268936	28-Jul-08
323	Wilcox	Daniel	3	M	TeamA	Senior		665393	18-May-09
331	Schmidt	Thomas	25	M		Senior	153	867492	07-Apr-09
332	Bridges	Deborah	12	F		Senior	235	279087	23-Mar-07
339	Young	Betty	21	F	TeamB	Senior		507813	17-Apr-09
414	Gilmore	Jane	5	F	TeamA	Junior	153	459558	30-May-07
415	Taylor	William	7	M	TeamA	Senior	235	137353	27-Nov-07
461	Reed	Robert	3	M	TeamA	Senior	235	994664	05-Aug-05
469	Willis	Carolyn	29	F		Junior		688378	14-Jan-11
487	Kent	Susan		F		Social		707217	07-Oct-10

After the table of data created do the following tasks:

- Display the records where the member's JoinDate is earlier than 07-Apr-09.
- Display the records of all the senior members whose handicap score is less than 12.
- Display the records of all the female senior members who are part of TeamB.

Marks Distribution:

1. Creation of Member and Date class.   [2 Marks]
2. Setting the details of array of **n** members.   [3 Marks]
3. Display the records where the member's JoinDate is earlier than 07-Apr-09.   [4 Marks]
4. Display the records of all senior members whose handicap score is less than 12.   [3 Marks]
5. Display the records of all the female senior members who are part of TeamB.   [3 Marks]

Note: Create the required classes in a package named same as your registration number. Prepare a description file (word file) to show the process and output of your project. Save the description file in the same package. Compress the package and submit.

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