

ASSIGNMENT 9

Create an C# application as following:

- Create a delegate named '**DMess**' that has a string parameter and no return value.
- Create class '**Student**' with specifications:

Private Fields:

Srno.	Identifiers	Data type
1	ID	String
2	Maths	Int
3	English	Int

Public fields:

Srno.	Identifiers	Data type
1	Fullname	String

Public Properties:

SrNo	Identifers	Type	Refer to field	Description
1	pID	RW	ID	Have pattern "ST-xxx[xx]" x: digits
3	pMaths	W	Maths	Between 0 -100
4	pEnglish	W	English	Between 0 -100
5	pAvg	R		Calculate average of Maths and English

Event:

Srno.	Identifiers	Return type	Description
1	EMess	DMess	Raised when an invalid input assigned to properties

Methods:

Srno.	Identifiers	Return type	Description
1	Display ()	Void	Display detailed information
2	VadidProcess(String s)	Void	- Display error message - Allow re-input value at client.

- Create class '**StudentCollection**', implement Interface IEnumerable

i. Fields:

Srno.	Identifiers	Data type
1	stList	List <Student>

ii. Methods:

Srno.	Identifiers	Return	Description
1	Add()	void	Add a student into list
2	Override method GetEnumerator()	void	return list of passed students student (avg >=40)
3	Search (String Name)	void	Search a student by Name.
4	Remove (String ID)	void	Remove a student from list by ID.
5	DisplayAll ()	void	Display list of students

- d. Create menu-based client class “**TestStudents**” for testing class **StudentCollection**:
1. Add new student
 2. Display all students
 3. Display passed students
 4. Search students by name
 5. Remove a student by ID
 6. Quit