AP - Assignment 6

Create a C# program to manage a list of patients with the following description:

Sr No.	Description
1	Class **Patient** presents a patient which has private fields **id, name, gender, yob, contact**. - Create the properties for each private field so that: ○ pID: has format Pxxxxx , x: digits ○ pName at least 2 characters but not excess 30. ○ pGender just accept male or female ○ pYOB (write only): from 1900 to now ○ pContact doesn't accept an empty string ○ pAge (read only): return the patient's age - Constructors - Methods: - void **Accept()** - String **ToString()** - void **PrintInfo()**
2	Class **Clinic** manages a list of patient, has a collection **SortedList<String,Patient>** named **pList** to store **Patient** objects. Delegate : void DValid(String msg) Event: EventValid Methods: - void **AddNewPatient()** : need checking the validity of ID (must be unique) – if ID has existed, raise the event EventValid. - IEnumerator<**Patient**> **GetEnumerator()** return list of patients. - Patient **Search(String patientCode)** return a Patient object whose PID is patientCode, or return null if not found. - void **Remove (string patientCode)** remove the patient which PID is patientCode from the list.
3	Finally create the Main class which contains main method. The main method will help user manipulate on Patient list through a menu as following: 1- **Add new Patient** 2- **Print all Patients** 3- **Search by ID** 4- **Search by Name** 5- **Remove a patient by ID** 6- **Exit**