

```
1 namespace HospitalManagementSystem
2 {
3     public class Manage
4     {
5         private List<PatientRecord> _patient_records = new
            List<PatientRecord>();
6         private string _file_path = "E:/COS20007/CustomProgram/
            HospitalRecords.txt";
7
8
9         public Manage()
10        {
11            LoadRecordsFromFile();
12        }
13
14        public void AddPatientRecord(Patient patient, string
            treatment_plan, string assigned_staff)
15        {
16            PatientRecord new_record = new PatientRecord(patient.Name,
            patient.DOB, patient.Contact, patient.Symptoms,
            treatment_plan, assigned_staff);
17
18            _patient_records.Add(new_record);
19            Console.WriteLine($"Patient record for {patient.Name} has been
            added.");
20
21            SaveRecordsToFile();
22        }
23
24        public void RemovePatientRecord(Patient patient)
25        {
26            PatientRecord record_remove = _patient_records.Find(r =>
            r.Name == patient.Name);
27
28            if (record_remove != null)
29            {
30                _patient_records.Remove(record_remove);
31                Console.WriteLine($"Patient record for {patient.Name} has
            been removed.");
32                SaveRecordsToFile();
33            }
34            else
35            {
36                Console.WriteLine($"No patient record found for
            {patient.Name}.");
37            }
38        }
39
40        public void DisplayAllRecords()
```

```
41     {
42         if (_patient_records.Count == 0)
43         {
44             Console.WriteLine("No patient records available.");
45             return;
46         }
47
48         Console.WriteLine("Displaying all patient records:");
49         foreach (var record in _patient_records)
50         {
51             record.DisplayRecord();
52             Console.WriteLine();
53         }
54     }
55
56
57     public PatientRecord FindPatientRecordByName(string patient_name)
58     {
59         return _patient_records.Find(r => r.Name == patient_name);
60     }
61
62     public void SaveRecordsToFile() // Make this public for external saving ↗
63     {
64         using (StreamWriter writer = new StreamWriter(_file_path))
65         {
66             foreach (var record in _patient_records)
67             {
68                 writer.WriteLine(record.Name);
69                 writer.WriteLine(record.DateOfBirth.ToString("yyyy-MM-dd"));
70                 writer.WriteLine(record.Contact);
71                 writer.WriteLine(string.Join(",", record.Symptoms));
72                 writer.WriteLine(record.TreatmentPlan);
73                 writer.WriteLine(record.AssignedStaff);
74             }
75         }
76         Console.WriteLine("Records saved to file.");
77     }
78
79     private void LoadRecordsFromFile()
80     {
81         if (File.Exists(_file_path))
82         {
83             using (StreamReader reader = new StreamReader(_file_path))
84             {
85                 while (!reader.EndOfStream)
86                 {
87                     string name = reader.ReadLine();
```

```
88         DateTime dob = DateTime.Parse(reader.ReadLine());
89         string contact = reader.ReadLine();
90         string[] symptoms = reader.ReadLine().Split(',');
91         string treatment_plan = reader.ReadLine();
92         string assigned_staff = reader.ReadLine();
93
94         PatientRecord record = new PatientRecord(name,
95         dob, contact, symptoms, treatment_plan, assigned_staff);
96         _patient_records.Add(record);
97     }
98     Console.WriteLine("Records loaded from file.");
99 }
100 else
101 {
102     Console.WriteLine("No records file found, starting
103         fresh.");
104 }
105 }
106 }
107
```