Collections used: HashMap, TreeMap, ArrayList

The HashMap was used to store the information about patients using their ID as a key making it easier to find a patient in the Clinic System. With this, instead of searching manually for a patient using their name (which may cause issues as two or more patients may have the same name), we can use just the unique patient ID to access the information we need.

The TreeMap was used to store information such as appointments, in a way that orders the information based on the date (chronological order). This helped in accessing the needed information in a chronological manner, simulating and displaying information in order as would be done in a real-world situation.

The ArrayList was used to store lists of items such as the doctors in the hospital and all the patients registered as one collection for easy management. This helped create a common place to store common objects which when needed can be found at one point and used as needed.

I defined my own Date class as a simpler version of the original class which made working with date and time and date-time objects easier. It contains a constructor for creating just a date, one for creating just a time and one for creating both a date and a time. Also, based on which constructor was used, the Overridden toString() method either returns a formatted version of the date, time or date-time.

Lastly, I created an enumeration to store the various most common complaints/reasons for visiting the hospital for patients which also doubled as a department for the doctors. This was done to keep things in order and organize the relative complaints of the patients as well as group the doctors based on their department or their specialty.