A. [25 Pts] List objects you have identified with 2-3 sentence description of the functionality of each object.

class CTScanForm

It contains all the details needed to be filled by patient for registering in a CT scan.

class Patient

Patient is responsible for registering in a hospital for performing CT scan. Patient can register for CT scan by filling the form and can see patient view after performing CT scan by the technician.

class Receptionist

Receptionist request the patient to fill in the form for performing the CT scan. The receptionist verifies the information from patient intake form, generates the patient ID and schedules the exam date for the patient.

class Technician

On the exam date given by receptionist to the patient, technician performs the CT scan of the patient and the results are recorded into the patient's record using the patient ID. At last, CT scan report is generated by the technician.

class PatientRecord

Patient Record is responsible for generating the patient's record. It is an abstract class since it can't generate view on its own.

class PatientView

Patient View is responsible for generating view for the patient to investigate the patient's report.

class DoctorView

Doctor View is responsible for generating view for the doctor to investigate the patient's report.
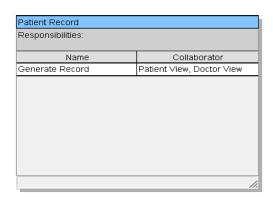
class Doctor

Doctor views the CT Doctor view for the respective patient using the report generated by technician. Doctor determines the risk and email the patient about his/her test results indicating risk factors.
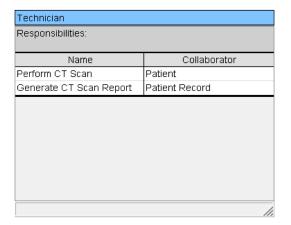
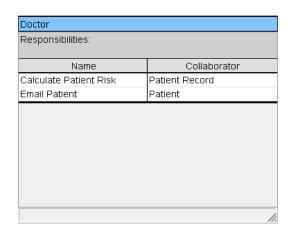B. [25 Pts] Develop CRC diagram for each object identified in A above.

Patient
Responsibilities:

Name	Collaborator
Register for CT Scan	
Fill CT Scan Form	CT Scan Form
See Patient View	Patient View

Receptionist
Responsibilities:

Name	Collaborator
Verify Form	CT Scan Form
Schedule Exam Date	Patient

Patient Record
Responsibilities:

Name	Collaborator
Generate Record	Patient View, Doctor View

Patient View
Responsibilities:

Name	Collaborator
Generate Patient View	Patient Record

Technician

Responsibilities:

Name	Collaborator
Perform CT Scan	Patient
Generate CT Scan Report	Patient Record

Doctor

Responsibilities:

Name	Collaborator
Calculate Patient Risk	Patient Record
Email Patient	Patient

Doctor View

Responsibilities:

Name	Collaborator
Generate Doctor View	Patient Record

CT Scan Form

Responsibilities:

Name	Collaborator
Fill Form	Patient

C. [50 Pts] Draw the class diagram using Astah and copy and paste the class diagram here.