1. Name: Xiaotong Diao
**2. Title**: Healthcare Service
3. Project Summary:A healthcare service website that patients can schedule appointments and pay bills, and doctors can send prescriptions to patients. We will set up for several patients and one doctor.
4. Project Requirements:

Requirement	ID
patients can signup	UR-01
patients, doctors, admin can log in	UR-02
Patients can search for available scheduling session by doctor's name	UR-03
Patients can view all available sessions	UR-04
Patients can schedule an appointment	UR-05
Patients can cancel an appointment	UR-06
Patients can view bill	UR-07
Patients can pay bill	UR-08
Patients can choose insurance	UR-09
Patients can view prescription form	UR-10
Admin can search a patient by name	UR-11
Admin can add a doctor	UR-12
Admin can delete a doctor	UR-13
Admin can view a patent's appointment	UR-14
Admin can add bill information	UR-15
Doctors can cancel appointment	UR-16
Doctors can add available session	UR-17
Doctors can delete available session	UR-18
Doctor can add prescription	UR-19

5. UI Mockups:

Patients:
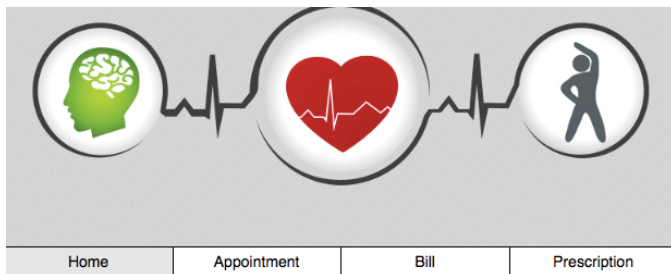
Account Information

| Home | Appointment | Bill | Prescription |

Login ID: 12435245

Name: Ruby Paul

Address: xxxxxx

Phone Number: 720-244-2458
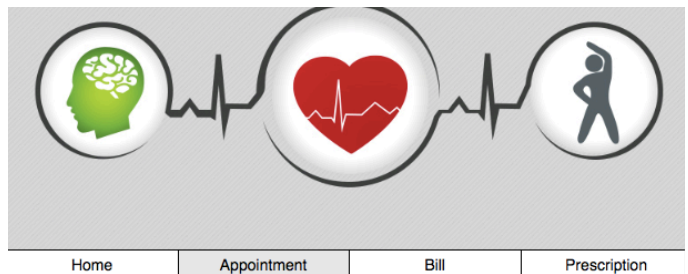
Search for appointment

| Home | Appointment | Bill | Prescription |

[year ▼] [month ▼] [day ▼] [time ▼] [doctor's name ▼]

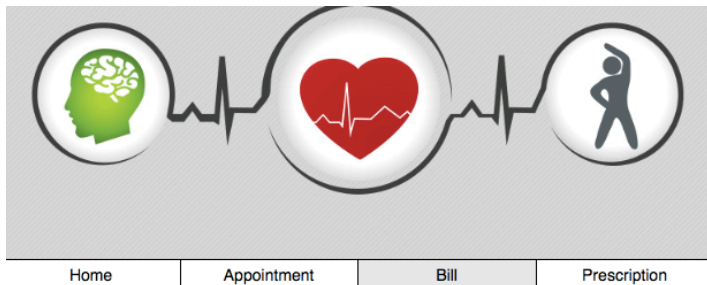2018.03.14 8:00 am Dr. Mark Smith   [schedule]

2018.03.14 9:00 am Dr. Mark Smith   [schedule]

2018.03.14 1:00 pm Dr. Daniel Martin   [schedule]

2018.03.14 3:00 pm Dr. Mark Smith   [schedule]

My appointment

2018.02.14 8:00 am Dr. Mark Smith   [cancel]
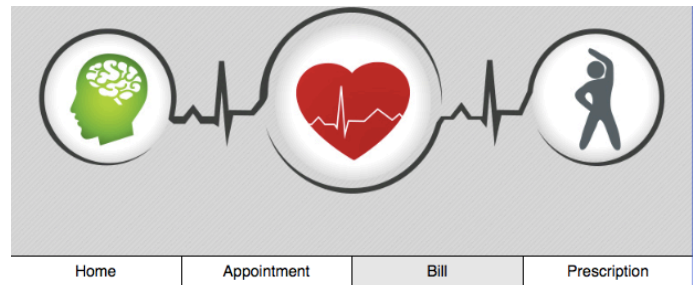
Bill Information

| Home | Appointment | Bill | Prescription |

Appointment date: 2018-05-23 12:00

Doctor: William Martin

Bill: 75.00$

[Pay]

Select Insurance

| Home | Appointment | Bill | Prescription |

[insurance ▼]

Total Amount you need to Pay: 20$ [Pay]

Home	Appointment	Bill	Prescription

Prescription

Appointment date: 2018-05-23 12:00

Doctor: William Martin

Diagnosis: xxxxx

Medicine: xxxxx

Admin:

Patients	Appointment	Doctors

Search for Patient

Id: xxxxx
Name: xxx
Address:xxx
Phone:xxx
Appointment id: xxxx Date:xxx Doctor:xxx paid
Appointment id: xxxx Date:xxx Doctor:xxx unpaid   [Add Bill]

Patients	Appointment	Doctors

Enter Bill

[Total Amount]

[Add Bill]

Search Appointment

Patient's Name

Name

Doctor's Name

Name

Date

2018.4.2 11:00

Patients | Appointment | Doctors

Add Doctor

Name | phone | title | Add

Delete Doctor

Name | Search

Id: xxxxx Name: xxx Phone:xxx title:xxx | Delete

Doctors:

Session | Appointment

Add Session

year | month | day | time | Add

Delete Session

year | month | day | time | Search

2018.3.5 2:00 pm | Delete

2018.5.6 8:00 am | Delete

Session | Appointment

Incoming Appointment

2018.3.5 2:00 pm | Cancel

2018.5.6 8:00 am | Cancel

Add Prescription

2018.1.5 2:00 pm xxx | Add

2018.2.6 8:00 am xxx | Add

Session | Appointment

2018.1.5 2:00 pm xxx

Diagnosis | Medicine

Add

6. Class Diagram:

Patient
-id:String
-name:String
-address:String
-phone:String
-type:int

+viewSessions(_name.String):ArrayList<Session>
+viewAllSessions():ArrayList<Session>
+viewAppointment(_patientId.String):Appointment
+scheduleAppointment(_appointmentId.String):void
+cancelAppointment(_appointmentId.String):void
+viewBill(_appointmentId.String):Bill
+payBill(_billId:String):void
+viewPrescription(_appointmentId.String):Prescription

Admin
-id:String
-password:String
-type:int

+viewAppointment(_patientName.String, _doctorName.String, _session.Session):Appointment
+viewPatient(_patientName.String):Patient
+addDoctor(name.String, phone.String):void
+deleteDoctor(doctorId.String):void
+addBill(_appointmentId.String, _amount.Double):void

<<interface>> Users

+viewAppointment()

AccountCreator

+getType():Users

Appointment
-appointmentId:String
-patientId:String
-status:Bool
-bill:Bill
-prescription:Prescription

Doctor
-id:String
-name:String
-title:String
-phone:String
-password:String
-type:int

+cancelAppointment(_appointmentId.String):void
+addSession(_doctorId.String, _session.Session):void
+deleteSession(_doctorId.String, _session.Session):void
+addPrescription(_appointmentId.String, diagnosis.String, medicine.String):void
+viewAppointment(_doctorId.String, _session.Session):ArrayList<Appointment>

<<interface>> Insurance

+calculateDeductAmount()

Bill
-billId:String
-appointmentId:String
-amount:double
-status:Bool
-insurance:Insurance

Prescription
-prescId:String
-appointmentId:String
-diagnosis:String
-medicine:String

Session
-id:String
-doctorId
-year:int
-month:int
-day:int
-time:String

DianInsurance
-amount:double

+calculateDeductAmount():double

ISOInsurance
-amount:dounle

+alculateDeductAmount():double

GoldenPlanInsurance
-amount:double

+calculateDeductAmount():double