Class Diagram Manager:

Account Manager:

```
Visual Paradigm Standard Edition(Nanyang Technological University)
                                   AccountManager
    accountDAO : AccountDAO
    instance : AccountManager
   +updateAccountDao(context : Context) : void
   +updateAccount(AccountDetails: Bundle, context: Context): long
   +findAccount(nric : String, context : Context) : Cursor
   +findAccount(nric:String):Cursor
   +authenticate (use mame: password: String): boolean
   +authenticate(usemame: password: String, context: Context): boolean
   +createAccount(Account/Details: Bundle, context: Context): long
   +isNewAccount(nric : String, context : Context) : boolean
   +doesUsernameExist(username: String, context: Context): boolean
   +extractUse mameExist(usemame: String): Account
   +getLaggedinAccountid(context : Context) : String
   +extractAccountDetails(AccountDetails: Bundle): Account
    +getAccountByld (id : long, context : Context) : Account
```

Alarm Broadcast Receiver:

```
Visual Paradigm Standard Edison(Nanyang Technologica
AlarmBroadCastReceiver
+onReceive(context : Context, intent : Intent)
```

Alarm setter:

```
Visual Paradigm Standard Edition(Nanyang Technological University)

AlarmSetter

+setAlarm(context : Context, appointment : Appointment, account : Account) : void
+cancelAlarm(context : Context, appointment : Appointment)
```

Appointment Manager:

```
Visual Paradigm Standard Edition (Nanyang Technological University
                                                                                                         AppointmentManager
     appointments: List<Appointment
     instance : AppointmentManager
    +getAvailableTime(date: Calendar, patient: Integer, doctor: Integer, context: Context): List<Boolean>
    +getTime Table(date: Calendar, patient: Integer, doctor: Integer, startTime: Integer, endTime: Integer, dustion: Integer, context: Context): List<Bodiean>
+getPatientFutureAppointmentList(patient: Integer, currentTime: Calendar, context: Context): List<Appointment>
     gerPatientPastAppointmentList(patient : Integer, currentTime : Calendar, context : Context) : List<Appointment>
    +getDactorFutureAppointmentList(dactor: Integer, currentTime: Calendar, context: Context): List<Appointment>
    +getDoctorPastAppointmentList(doctor: Integer, ourrentTime: Calendar, context: Context): List<Appointment>
+returnStatus(appointment: Appointment, ourrentTime: Calendar): String
     getInstance(): AppointmentManager
    +updateAppointmentDao(context : Context) : void
     +getAppointments(context : Context) : List<Appointment>
     getAvaliable Time Slot/date: Calendar, patient: Integer, doctor: Integer, clinio: Integer, startTime: Integer, endTime: Integer, duration: Integer, context: Context): List<Time fame>
    + gerPatientAppointmentList (patient: Integer, context: Context): List<Appointment>
+ gerPatientRecentAppointments(patient: Integer, currentTime: Calendar, context: Context): List<Appointment>
+ sort ByDate(inp: List<Appointment>): List<Appointment>
     sortBySpecialtyID(inp : List<Appointment>): List<Appointment>
    +getStatus(appointment: Appointment): String
+createAppointment(app: Appointment, context; Context): long
     editAppointment(app : Appointment, context : Context) : long
     +cancelAppointment(app : Appointment, context : Context) : long
    +getAppointmentBytD(id : Integer, context : Context) : Appointment
+getSpeciallyNameByAppointment(appointment : Appointment, context : Context) : String
     getServiceNameByAppointment(appointment - Appointment, context - Context) - String
+ getDoctorNameByAppointment(appointment - Appointment, context - Context) - String
     getClinicNameByAppointment(appointment : Appointment, context : Context) : String
```

Clinic Manager:

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Clinic Manager

-instance : ClinicManager()
-clinicDao : ClinicDAO

+updateClinicDao(context : Context) : void
+getClinicS(context : Context) : List<CLinic>
+getClinicsByCQuntry(country : String, context : Context) : List<CLinic>
+getClinicsByName(name : String, context : Context) : List<CLinic>
+getClinicsByName(name : String, context : Context) : List<Clinic>
+getClinicsClinic : Clinic, context : Context) : long
+editCLinic(clinic : Clinic, context : Context) : long
+getCountryByClinicId(clinicId : Integer, context : Context) : String
+getClinicNameByClinicId(clinicId : Integer, context : Context) : String
+getClinicNameByClinicId(clinicId : Integer, context : Context) : String

Container:

Visual Paradigm Standard Edition(Namyang Technological University)

Container

-accountManager: AccountManager
-appointmentManager: AppointmentManager
-dinicManager: ClinidManager
-doctorManager: DoctorManager
-doctorManager: DoctorManager
-patientManager: DoctorManager
-serviceManager: ServiceManager
-peti-initi(): void
+getAccountManager(): AccountManager
-peti-DoctorManager(): AppointmentManager
-peti-DoctorManager(): DoctorManager
-peti-DoctorManager(): DoctorManager
-peti-DoctorManager(): ServiceManager

Doctor Manager:

```
Visual Paradigm Standard Edison(Nanyang Technological University)

DoctorManager

-doctorDao: DoctorDaO
-instance: DoctorManager

+getInstance(): DoctorManager

+updateDoctorDao(context: Context): void

+getDoctorSyld(doctortd: Integer, context): List<Doctor>
+getDoctorSyld(doctortd: Doctor, context): List<Doctor>
+getDoctorSyld(doctor: Doctor, context: Context): long
+editDoctor(doctor: Doctor, context: Context): long
+cancelDoctor(doctor: Doctor, context: Context): long
```

Doctor Schedule Manager:

Patient Manager:

Visual Paradigm Standard Edition(Nanyang Technological University)

PatientManager

-patientDao : PatientDAO
-instance : PatientManager()

+getInstance() : PatientManager
+updatePatientDao(context : Context) : vaid
+getPatients(context : Context) : List<Patient>
+getPatients(context : Context) : List<Patient>
+getPatients(patient : Patient, context : Context) : List<Patient>
+createPatient(patient : Patient, context : Context) : long
+cancelPatient(patient : Patient, context : Context) : long
+cancelPatient(patient : Patient, context : Context) : long

Service Manager:

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```
-service Dao : Service DAO
-instance : ServiceManager

+getInstance() : static
+updateServiceDao(context : Context) : void
+getServices(context : Context) : List<Service>
+getServicesById(serviceid : Integer, context : Context) : List<Service>
+getServicesBySpecialtyID(specialtyId : Integer, context : Context) : List<Service>
+getServiceNameByID(serviceid : Integer, context : Context) : String
+getServiceDurationbyID(serviceid : Integer, context : Context) : Integer
+getServicePreappbyID(serviceid : Integer, context : Context) : String
+createService(service : Service, context : Context) : long
+editService(service : Service, context : Context) : long
+cancelService(service : Service, context : Context) : long
```

Session Manager:

```
Visual Paradigm Standard Edition(Nanyang Technological University

SessionManager

-pref: SharedPreferences
-editor: Editor
-context: Context
-PRIVATE_MODE: Integer = 1{readOnly.leaf}
-PREF_NAME: String = "UserSession" (readOnly.leaf)
-IS_LOGIN: String = "IsLoggedin" (readOnly.leaf)
-KEY_USERNAME = "username" (readOnly.leaf)
-KEY_PASSWORD = "password" (readOnly.leaf)
+SessionManager(context: Context)
+createLoginSession(username: String, password: String): Void
+detect.oginSession(): Void
+getAccountid(): long
```

Specialty Manager:

```
Visual Paradigm Standard Edison(Narryang Technological University)

Specialty Manager

-specialty Dao : Specialty DAO
-instance : Specialty Manager
+ getInstance() : Specialty Manager
+ updateSpecialty Dao (context : Context) : vaid
+ getSpecialty Specialty Context : Context) : List<Specialty>
+ getSpecialtiesByID(specialty) d: Integer, context : Context) : List<Specialty>
+ getSpecialtiesByID(specialty) d: Integer, context : Context) : List<Specialty>
+ getSpecialtyNameByID(specialty) d: Integer, context : Context) : String
+ createSpecialty(specialty : Specialty, context : Context) : Iding
+ ediSpecialty(specialty : Specialty, context : Context) : Iding
+ cancelSpecialty(specialty : Specialty, context : Context) : Iding
```