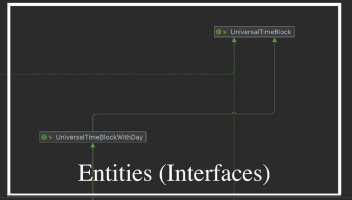
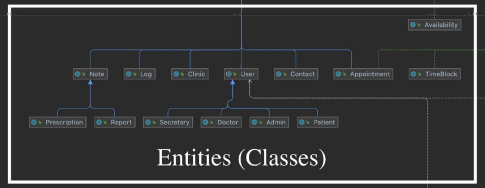
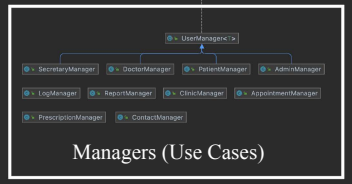
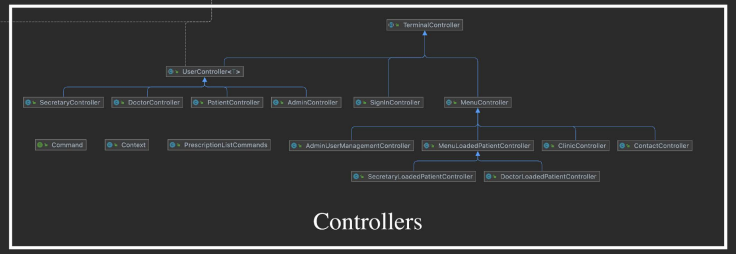
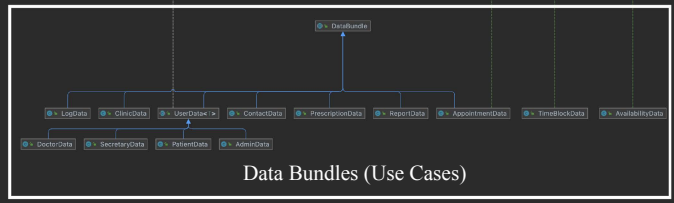
Program Structure



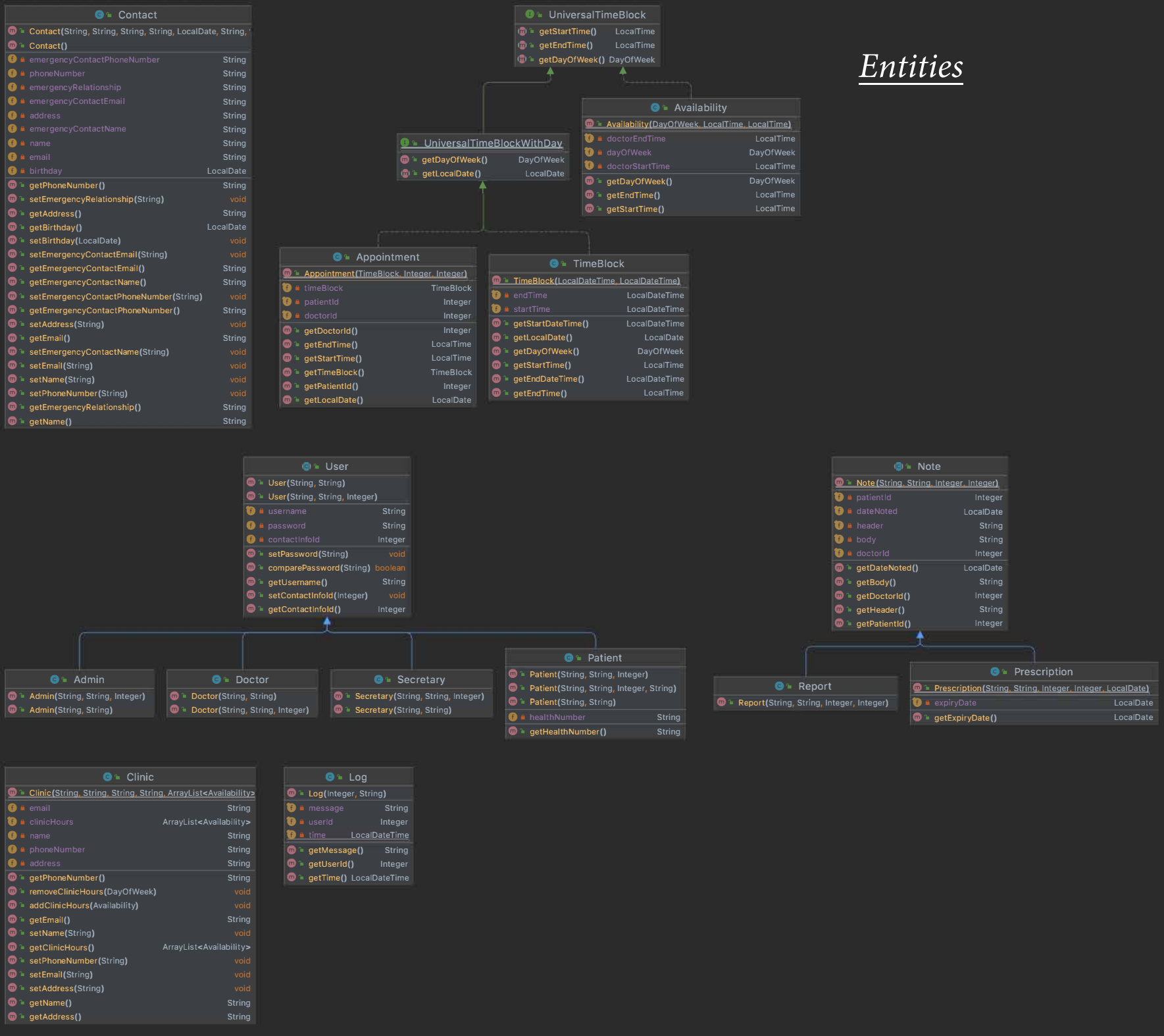




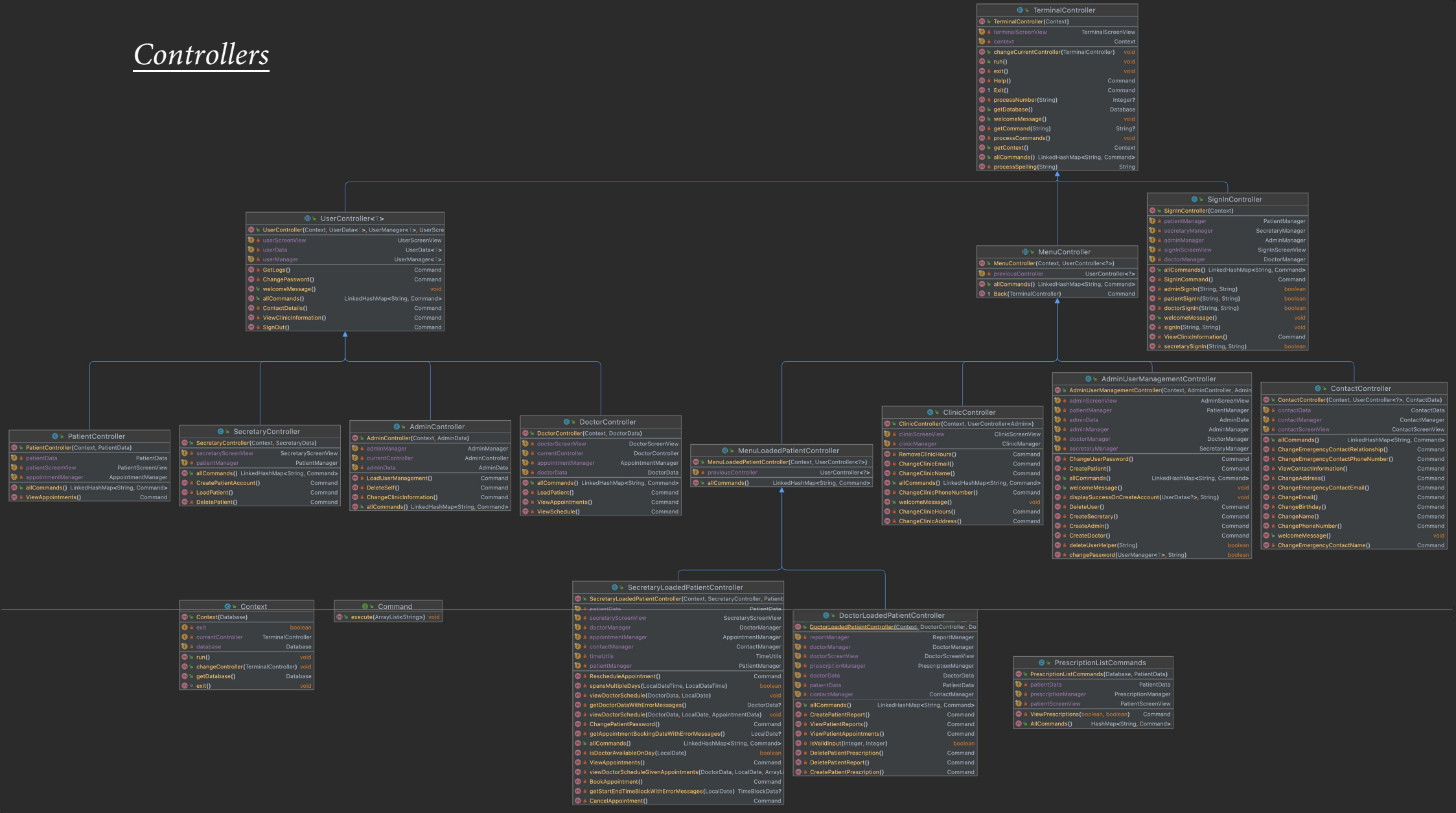




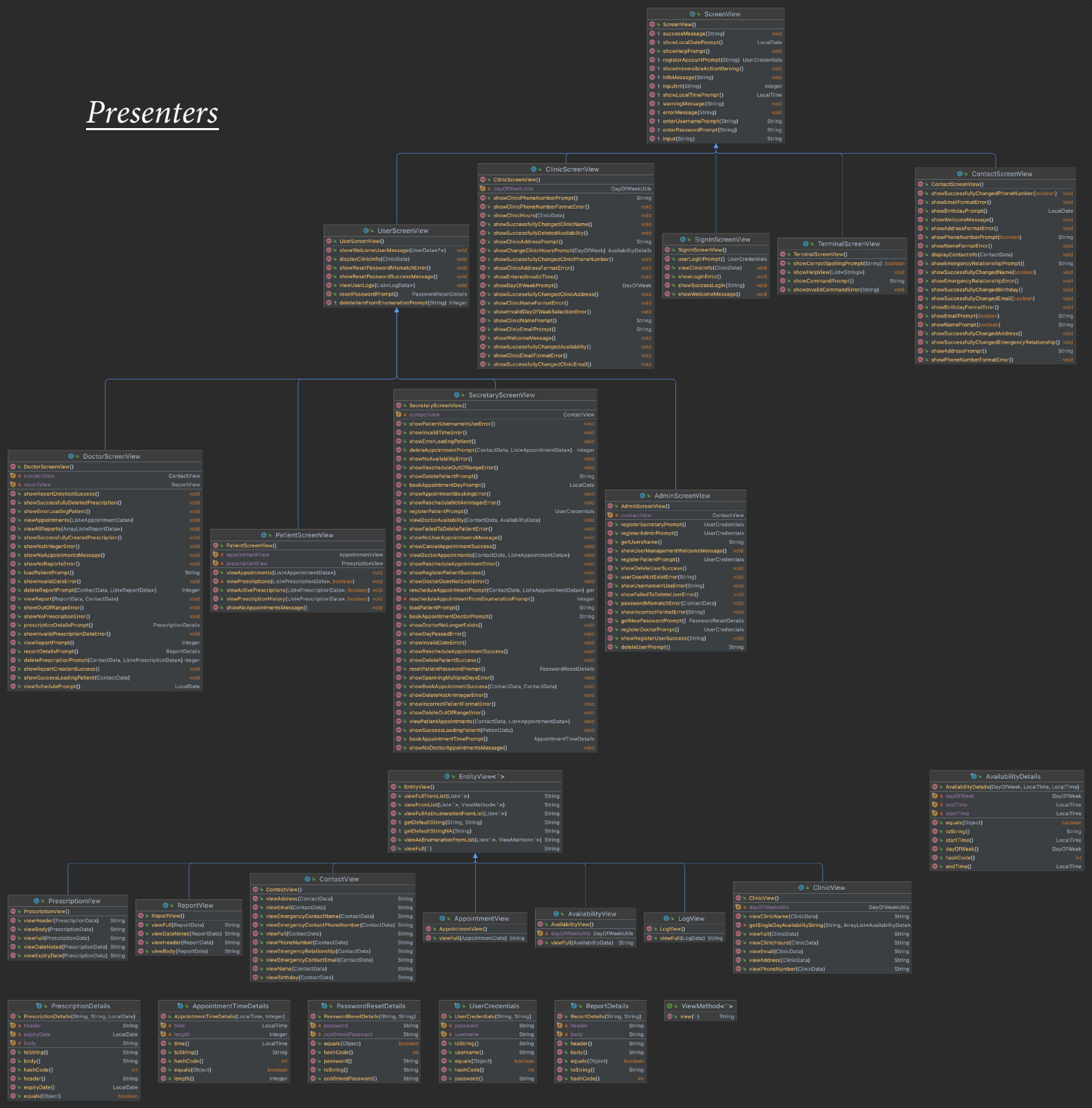
Entities


Contact
Contact(String, String, String, String, LocalDate, String,
Contact()
emergencyContactPhoneNumber String
phoneNumber String
emergencyRelationship String
emergencyContactEmail String
address String
emergencyContactName String
name String
email String
birthday LocalDate
getPhoneNumber() String
setEmergencyRelationship(String) void
getAddress() String
getBirthday() LocalDate
setBirthday(LocalDate) void
setEmergencyContactEmail(String) void
getEmergencyContactEmail() String
getEmergencyContactName() String
setEmergencyContactPhoneNumber(String) void
getEmergencyContactPhoneNumber() String
setAddress(String) void
getEmail() String
setEmergencyContactName(String) void
setEmail(String) void
setName(String) void
setPhoneNumber(String) void
getEmergencyRelationship() String
getName() String
UniversalTimeBlock
getStartTime() LocalTime
getEndTime() LocalTime
getDayOfWeek() DayOfWeek
Availability
Availability(DayOfWeek, LocalTime, LocalTime)
doctorEndTime LocalTime
dayOfWeek DayOfWeek
doctorStartTime LocalTime
getDayOfWeek() DayOfWeek
getEndTime() LocalTime
getStartTime() LocalTime
UniversalTimeBlockWithDay
getDayOfWeek() DayOfWeek
getLocalDate() LocalDate
Appointment
Appointment(TimeBlock, Integer, Integer)
timeBlock TimeBlock
patientId Integer
doctorId Integer
getDoctorId() Integer
getEndTime() LocalTime
getStartTime() LocalTime
getTimeBlock() TimeBlock
getPatientId() Integer
getLocalDate() LocalDate
TimeBlock
TimeBlock(LocalDateTime, LocalDateTime)
endTime LocalDateTime
startTime LocalDateTime
getStartDateTime() LocalDateTime
getLocalDate() LocalDate
getDayOfWeek() DayOfWeek
getStartTime() LocalTime
getEndDateTime() LocalDateTime
getEndTime() LocalTime
User
User(String, String)
User(String, String, Integer)
username String
password String
contactInfoId Integer
setPassword(String) void
comparePassword(String) boolean
getUsername() String
setContactInfoId(Integer) void
getContactInfoId() Integer
Note
Note(String, String, Integer, Integer)
patientId Integer
dateNoted LocalDate
header String
body String
doctorId Integer
getDateNoted() LocalDate
getBody() String
getDoctorId() Integer
getHeader() String
getPatientId() Integer
Admin
Admin(String, String, Integer)
Admin(String, String)
Doctor
Doctor(String, String)
Doctor(String, String, Integer)
Secretary
Secretary(String, String, Integer)
Secretary(String, String)
Patient
Patient(String, String, Integer)
Patient(String, String, Integer, String)
Patient(String, String)
healthNumber String
getHealthNumber() String
Report
Report(String, String, Integer, Integer)
Prescription
Prescription(String, String, Integer, Integer, LocalDate)
expiryDate LocalDate
getExpiryDate() LocalDate
Clinic
Clinic(String, String, String, String, ArrayList<Availability>
email String
clinicHours ArrayList<Availability>
name String
phoneNumber String
address String
getPhoneNumber() String
removeClinicHours(DayOfWeek) void
addClinicHours(Availability) void
getEmail() String
setName(String) void
getClinicHours() ArrayList<Availability>
setPhoneNumber(String) void
setEmail(String) void
setAddress(String) void
getName() String
getAddress() String
Log
Log(Integer, String)
message String
userId Integer
time LocalDateTime
getMessage() String
getUserId() Integer
getTime() LocalDateTime

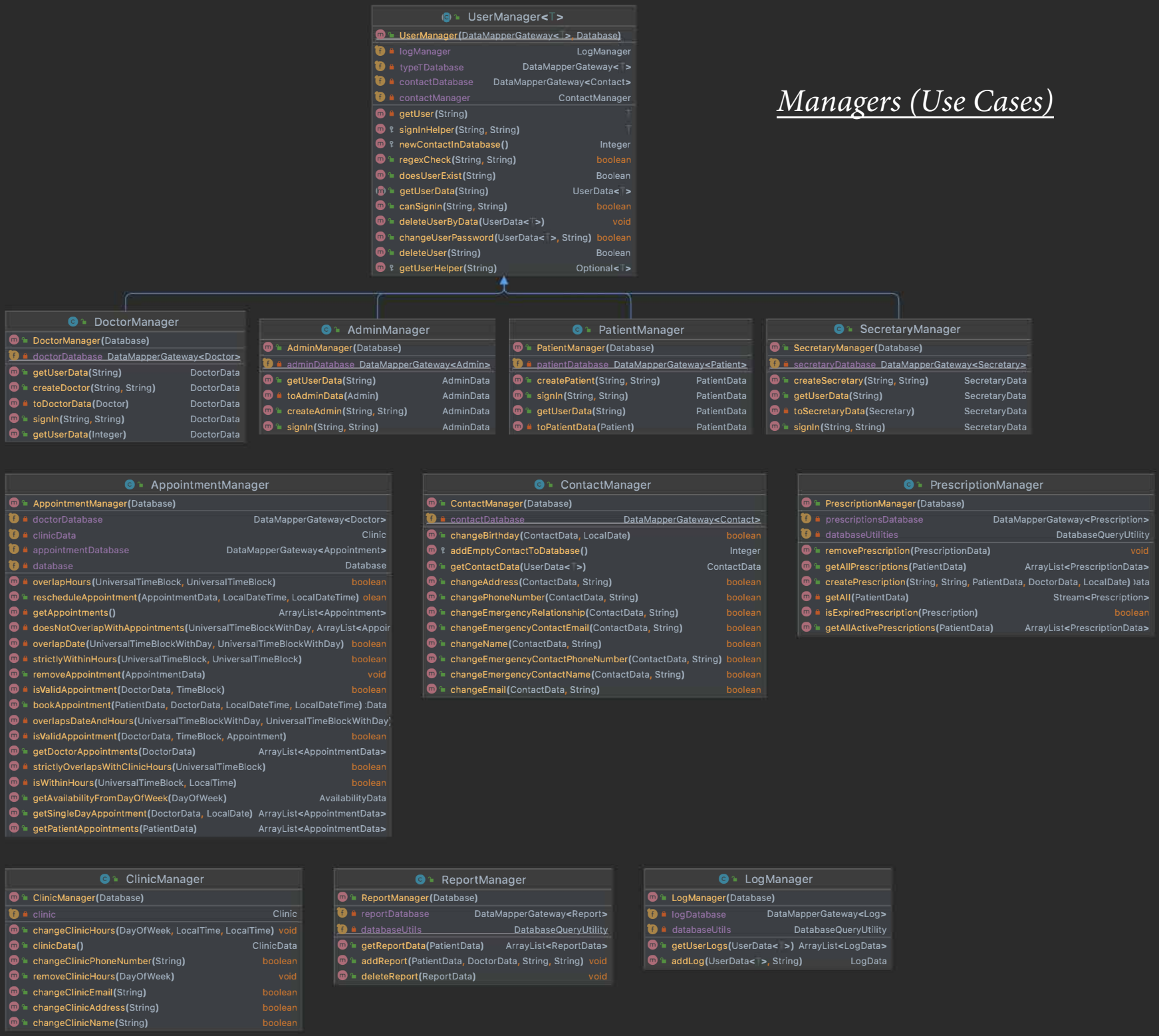
Controllers



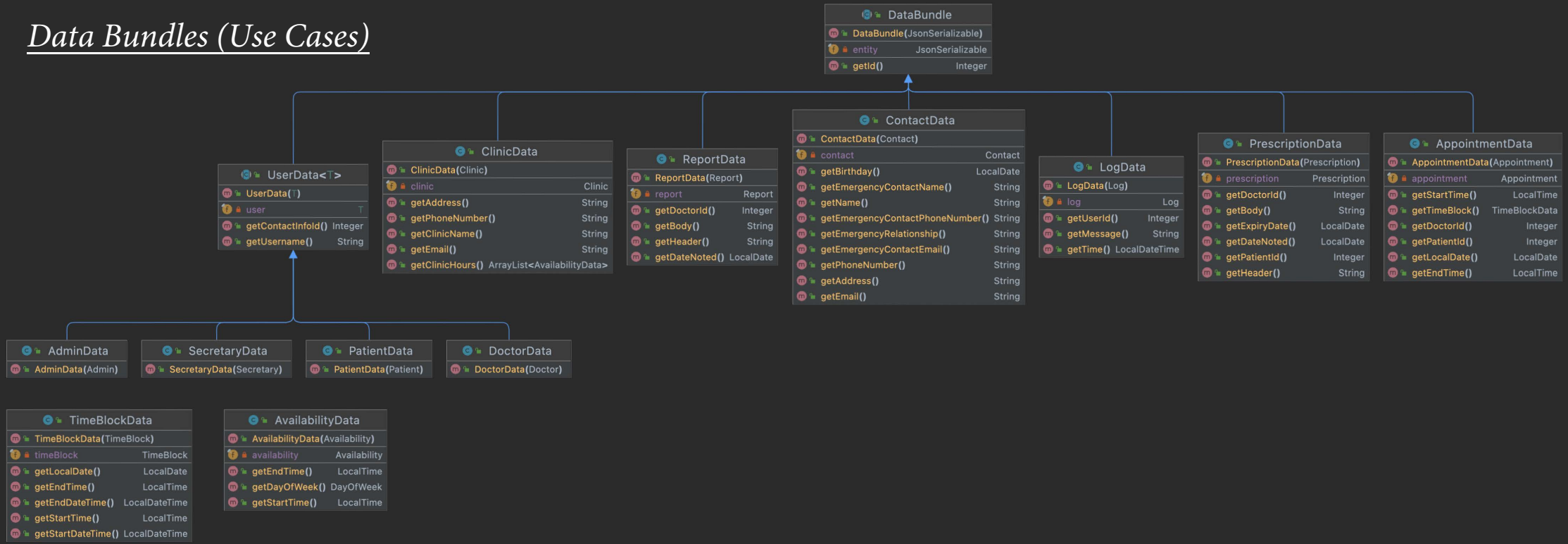
Presenters

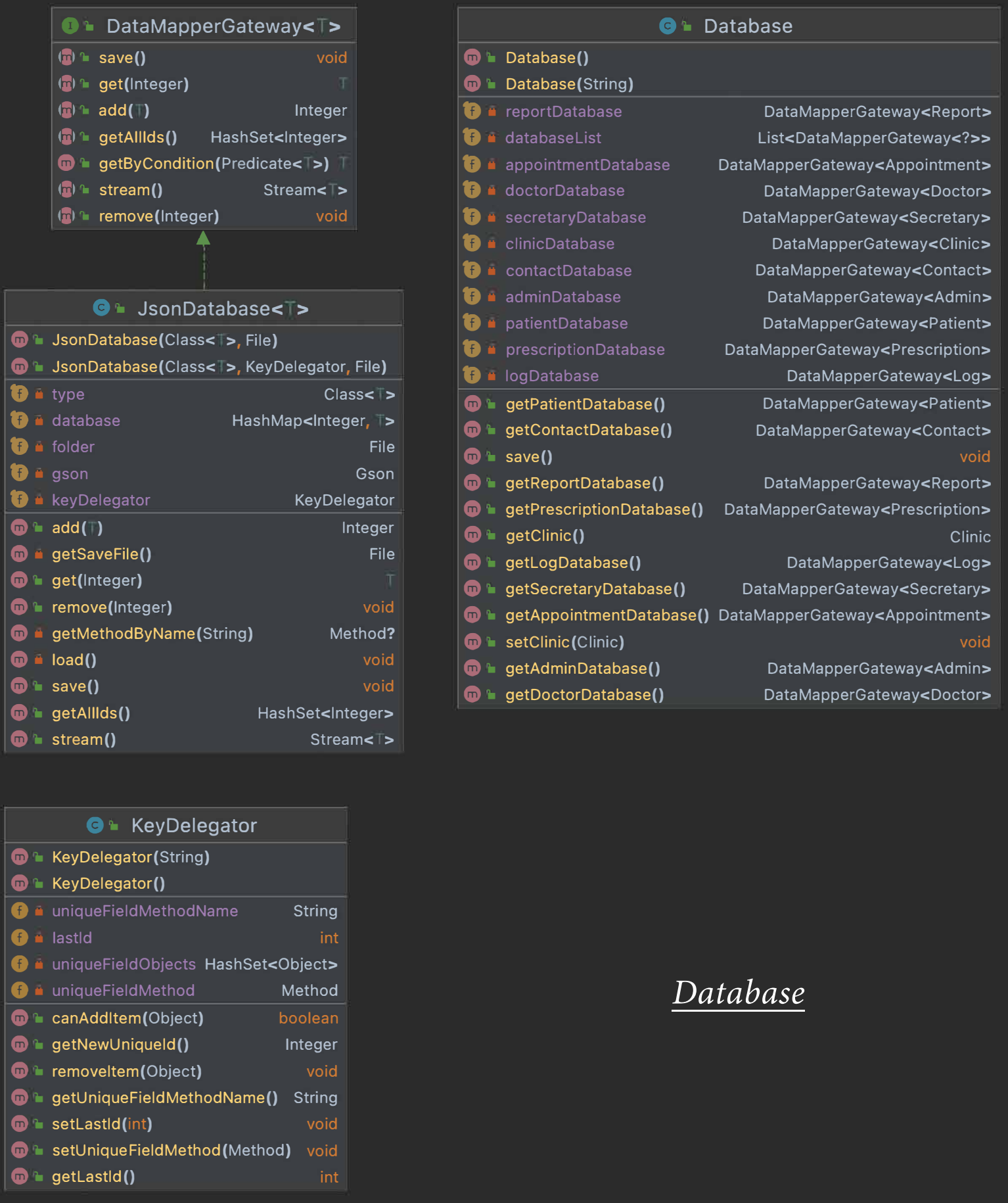

ScreenView
ScreenView()
successMessage(String) void
showLocalDatePrompt() LocalDate
showHelpPrompt() void
registerAccountPrompt(String) UserCredentials
showIrreversibleActionWarning() void
infoMessage(String) void
inputInt(String) Integer
showLocalTimePrompt() LocalTime
warningMessage(String) void
errorMessage(String) void
enterUsernamePrompt(String) String
enterPasswordPrompt(String) String
input(String) String
ClinicScreenView
ClinicScreenView()
dayOfWeekUtils DayOfWeekUtils
showClinicPhoneNumberPrompt() String
showClinicPhoneNumberFormatError() void
showClinicHours(ClinicData) void
showSuccessfullyChangedClinicName() void
showSuccessfullyDeletedAvailability() void
showClinicAddressPrompt() String
showChangeClinicHoursPrompt(DayOfWeek) AvailabilityDetails
showSuccessfullyChangedClinicPhoneNumber() void
showClinicAddressFormatError() void
showEnteredInvalidTime() void
showDayOfWeekPrompt() DayOfWeek
showSuccessfullyChangedClinicAddress() void
showClinicNameFormatError() void
showInvalidDayOfWeekSelectionError() void
showClinicNamePrompt() String
showClinicEmailPrompt() String
showWelcomeMessage() void
showSuccessfullyChangedAvailability() void
showClinicEmailFormatError() void
showSuccessfullyChangedClinicEmail() void
ContactScreenView
ContactScreenView()
showSuccessfullyChangedPhoneNumber(boolean) void
showEmailFormatError() void
showBirthdayPrompt() LocalDate
showWelcomeMessage() void
showAddressFormatError() void
showPhoneNumberPrompt(boolean) String
showNameFormatError() void
displayContactInfo(ContactData) void
showEmergencyRelationshipPrompt() String
showSuccessfullyChangedName(boolean) void
showEmergencyRelationshipError() void
showSuccessfullyChangedBirthday() void
showSuccessfullyChangedEmail(boolean) void
showBirthdayFormatError() void
showEmailPrompt(boolean) String
showNamePrompt(boolean) String
showSuccessfullyChangedAddress() void
showSuccessfullyChangedEmergencyRelationship() void
showAddressPrompt() String
showPhoneNumberFormatError() void
UserScreenView
UserScreenView()
showWelcomeUserMessage(UserData<?>) void
displayClinicInfo(ClinicData) void
showResetPasswordMismatchError() void
showResetPasswordSuccessMessage() void
viewUserLogs(List<LogData>) void
resetPasswordPrompt() PasswordResetDetails
deleteItemFromEnumerationPrompt(String) Integer
SignInScreenView
SignInScreenView()
userLoginPrompt() UserCredentials
viewClinicInfo(ClinicData) void
showLoginError() void
showSuccessLogin(String) void
showWelcomeMessage() void
TerminalScreenView
TerminalScreenView()
showCorrectSpellingPrompt(String) boolean
showHelpView(List<String>) void
showCommandPrompt() String
showInvalidCommandError(String) void
SecretaryScreenView
SecretaryScreenView()
contactView ContactView
showPatientUsernameInUseError() void
showInvalidTimeError() void
showErrorLoadingPatient() void
deleteAppointmentPrompt(ContactData, List<AppointmentData>) Integer
showNoAvailabilityError() void
showRescheduleOutOfRangeError() void
showDeletePatientPrompt() String
bookAppointmentDayPrompt() LocalDate
showAppointmentBookingError() void
showRescheduleNotAnIntegerError() void
registerPatientPrompt() UserCredentials
viewDoctorAvailability(ContactData, AvailabilityData) void
showFailedToDeletePatientError() void
showNoUserAppointmentsMessage() void
showCancelAppointmentSuccess() void
viewDoctorAppointments(ContactData, List<AppointmentData>) void
showRescheduleAppointmentError() void
showRegisterPatientSuccess() void
showDoctorDoesNotExistError() void
rescheduleAppointmentPrompt(ContactData, List<AppointmentData>) ger
rescheduleAppointmentFromEnumerationPrompt() Integer
loadPatientPrompt() String
bookAppointmentDoctorPrompt() String
showDoctorNoLongerExists() void
showDayPassedError() void
showInvalidDateError() void
showRescheduleAppointmentSuccess() void
showDeletePatientSuccess() void
resetPatientPasswordPrompt() PasswordResetDetails
showSpanningMultipleDaysError() void
showBookAppointmentSuccess(ContactData, ContactData) void
showDeleteNotAnIntegerError() void
showIncorrectPatientFormatError() void
showDeleteOutOfRangeError() void
viewPatientAppointments(ContactData, List<AppointmentData>) void
showSuccessLoadingPatient(PatientData) void
bookAppointmentTimePrompt() AppointmentTimeDetails
showNoDoctorAppointmentsMessage() void
DoctorScreenView
DoctorScreenView()
contactView ContactView
reportView ReportView
showReportDeletionSuccess() void
showSuccessfullyDeletedPrescription() void
showErrorLoadingPatient() void
viewAppointments(List<AppointmentData>) void
viewAllReports(ArrayList<ReportData>) void
showSuccessfullyCreatedPrescription() void
showNotIntegerError() void
showNoAppointmentsMessage() void
showNoReportsError() void
loadPatientPrompt() String
showInvalidDateError() void
deleteReportPrompt(ContactData, List<ReportData>) Integer
viewReport(ReportData, ContactData) void
showOutOfRangeError() void
showNoPrescriptionError() void
prescriptionDetailsPrompt() PrescriptionDetails
showInvalidPrescriptionDateError() void
viewReportPrompt() Integer
reportDetailsPrompt() ReportDetails
deletePrescriptionPrompt(ContactData, List<PrescriptionData>) Integer
showReportCreationSuccess() void
showSuccessLoadingPatient(ContactData) void
viewSchedulePrompt() LocalDate
PatientScreenView
PatientScreenView()
appointmentView AppointmentView
prescriptionView PrescriptionView
viewAppointments(List<AppointmentData>) void
viewPrescriptions(List<PrescriptionData>, boolean) void
viewActivePrescriptions(List<PrescriptionData>, boolean) void
viewPrescriptionHistory(List<PrescriptionData>, boolean) void
showNoAppointmentsMessage() void
AdminScreenView
AdminScreenView()
contactView ContactView
registerSecretaryPrompt() UserCredentials
registerAdminPrompt() UserCredentials
getUsersName() String
showUserManagementWelcomeMessage() void
registerPatientPrompt() UserCredentials
showDeleteUserSuccess() void
userDoesNotExistError(String) void
showUsernameInUseError(String) void
showFailedToDeleteUserError() void
passwordMismatchError(ContactData) void
showIncorrectFormatError(String) void
getNewPasswordPrompt() PasswordResetDetails
registerDoctorPrompt() UserCredentials
showRegisterUserSuccess(String) void
deleteUserPrompt() String
EntityView<T>
EntityView()
viewFullFromList(List<T>) String
viewFromList(List<T>, ViewMethod<T>) String
viewFullAsEnumerationFromList(List<T>) String
getDefaultString(String, String) String
getDefaultStringNA(String) String
viewAsEnumerationFromList(List<T>, ViewMethod<T>) String
viewFull(T) String
AvailabilityDetails
AvailabilityDetails(DayOfWeek, LocalTime, LocalTime)
dayOfWeek DayOfWeek
endTime LocalTime
startTime LocalTime
equals(Object) boolean
toString() String
startTime() LocalTime
dayOfWeek() DayOfWeek
hashCode() int
endTime() LocalTime
PrescriptionView
PrescriptionView()
viewHeader(PrescriptionData) String
viewBody(PrescriptionData) String
viewFull(PrescriptionData) String
viewDateNoted(PrescriptionData) String
viewExpiryDate(PrescriptionData) String
ReportView
ReportView()
viewFull(ReportData) String
viewDateNoted(ReportData) String
viewHeader(ReportData) String
viewBody(ReportData) String
ContactView
ContactView()
viewAddress(ContactData) String
viewEmail(ContactData) String
viewEmergencyContactName(ContactData) String
viewEmergencyContactPhoneNumber(ContactData) String
viewFull(ContactData) String
viewPhoneNumber(ContactData) String
viewEmergencyRelationship(ContactData) String
viewEmergencyContactEmail(ContactData) String
viewName(ContactData) String
viewBirthday(ContactData) String
AppointmentView
AppointmentView()
viewFull(AppointmentData) String
AvailabilityView
AvailabilityView()
dayOfWeekUtils DayOfWeekUtils
viewFull(AvailabilityData) String
LogView
LogView()
viewFull(LogData) String
ClinicView
ClinicView()
dayOfWeekUtils DayOfWeekUtils
viewClinicName(ClinicData) String
getSingleDayAvailabilityString(String, ArrayList<AvailabilityData>
viewFull(ClinicData) String
viewClinicHours(ClinicData) String
viewEmail(ClinicData) String
viewAddress(ClinicData) String
viewPhoneNumber(ClinicData) String
PrescriptionDetails
PrescriptionDetails(String, String, LocalDate)
header String
expiryDate LocalDate
body String
toString() String
body() String
hashCode() int
header() String
expiryDate() LocalDate
equals(Object) boolean
AppointmentTimeDetails
AppointmentTimeDetails(LocalTime, Integer)
time LocalTime
length Integer
time() LocalTime
toString() String
hashCode() int
equals(Object) boolean
length() Integer
PasswordResetDetails
PasswordResetDetails(String, String)
password String
confirmedPassword String
equals(Object) boolean
hashCode() int
password() String
toString() String
confirmedPassword() String
UserCredentials
UserCredentials(String, String)
password String
username String
toString() String
username() String
equals(Object) boolean
hashCode() int
password() String
ReportDetails
ReportDetails(String, String)
header String
body String
header() String
body() String
equals(Object) boolean
toString() String
hashCode() int
ViewMethod<T>
view(T) String

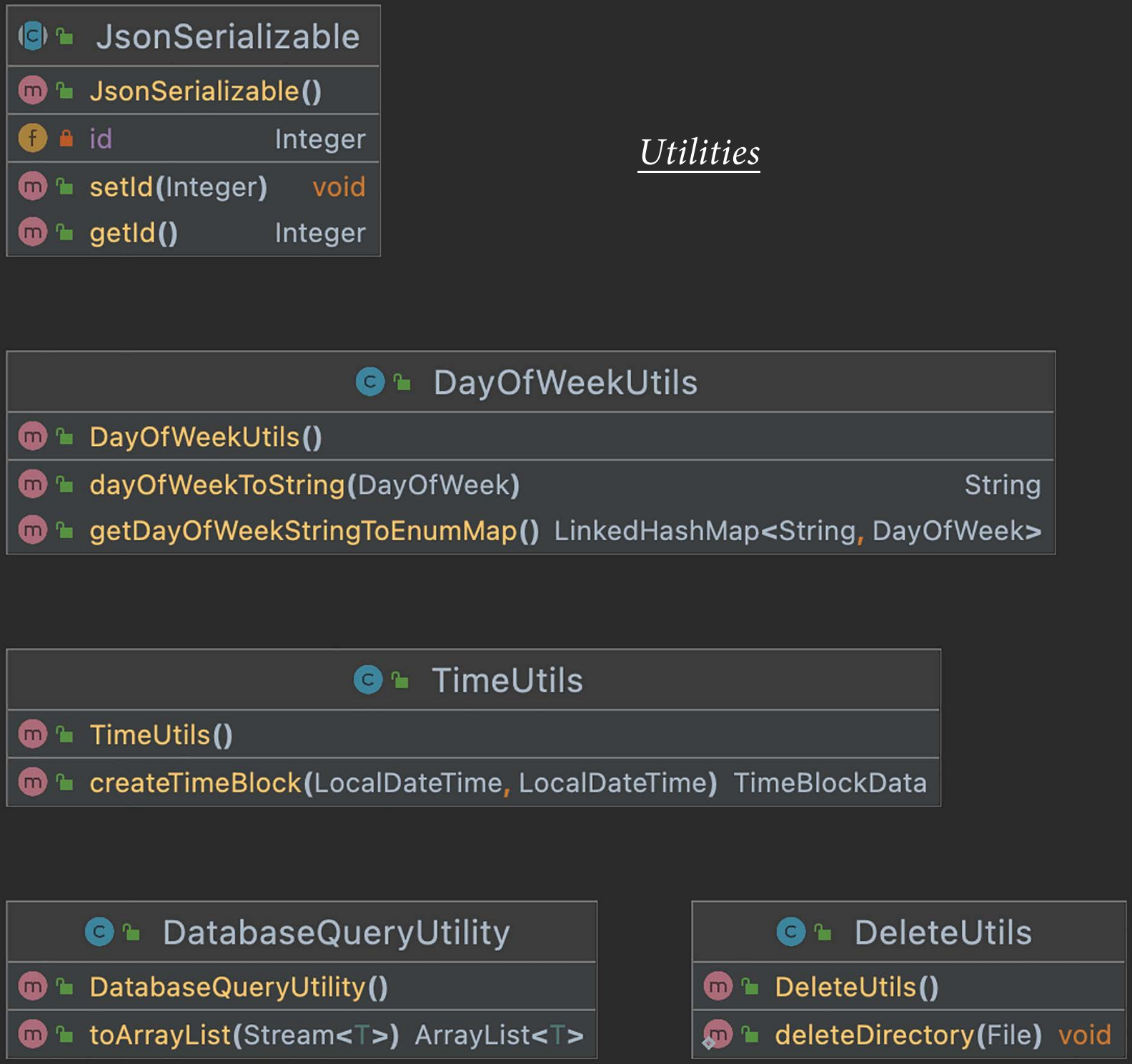
Managers (Use Cases)



Data Bundles (Use Cases)




DataMapperGateway<T>
save() void
get(Integer) T
add(T) Integer
getAllIds() HashSet<Integer>
getByCondition(Predicate<T>) T
stream() Stream<T>
remove(Integer) void
Database
Database()
Database(String)
reportDatabase DataMapperGateway<Report>
databaseList List<DataMapperGateway<?>>
appointmentDatabase DataMapperGateway<Appointment>
doctorDatabase DataMapperGateway<Doctor>
secretaryDatabase DataMapperGateway<Secretary>
clinicDatabase DataMapperGateway<Clinic>
contactDatabase DataMapperGateway<Contact>
adminDatabase DataMapperGateway<Admin>
patientDatabase DataMapperGateway<Patient>
prescriptionDatabase DataMapperGateway<Prescription>
logDatabase DataMapperGateway<Log>
getPatientDatabase() DataMapperGateway<Patient>
getContactDatabase() DataMapperGateway<Contact>
save() void
getReportDatabase() DataMapperGateway<Report>
getPrescriptionDatabase() DataMapperGateway<Prescription>
getClinic() Clinic
getLogDatabase() DataMapperGateway<Log>
getSecretaryDatabase() DataMapperGateway<Secretary>
getAppointmentDatabase() DataMapperGateway<Appointment>
setClinic(Clinic) void
getAdminDatabase() DataMapperGateway<Admin>
getDoctorDatabase() DataMapperGateway<Doctor>
JsonDatabase<T>
JsonDatabase(Class<T>, File)
JsonDatabase(Class<T>, KeyDelegator, File)
type Class<T>
database HashMap<Integer, T>
folder File
gson Gson
keyDelegator KeyDelegator
add(T) Integer
getSaveFile() File
get(Integer) T
remove(Integer) void
getMethodByName(String) Method?
load() void
save() void
getAllIds() HashSet<Integer>
stream() Stream<T>
KeyDelegator
KeyDelegator(String)
KeyDelegator()
uniqueFieldMethodName String
lastId int
uniqueFieldObjects HashSet<Object>
uniqueFieldMethod Method
canAddItem(Object) boolean
getNewUniqueId() Integer
removeItem(Object) void
getUniqueFieldMethodName() String
setLastId(int) void
setUniqueFieldMethod(Method) void
getLastId() int
Database


JsonSerializable
JsonSerializable()
id Integer
setId(Integer) void
getId() Integer
Utilities
DayOfWeekUtils
DayOfWeekUtils()
dayOfWeekToString(DayOfWeek) String
getDayOfWeekStringToEnumMap() LinkedHashMap<String, DayOfWeek>
TimeUtils
TimeUtils()
createTimeBlock(LocalDateTime, LocalDateTime) TimeBlockData
DatabaseQueryUtility
DatabaseQueryUtility()
toArrayList(Stream<T>) ArrayList<T>
DeleteUtils
DeleteUtils()
deleteDirectory(File) void