

Hospital Management System

Patient Table

Attribute	MS Access Data Type	Validation Rules
PatientID	AutoNumber (if PK) or Number (Long Integer)	Auto-increment, primary key
FullName	Short Text	Required, letters only
DateOfBirth	Date/Time	Required, must be in the past
Gender	Short Text	Must match value in GenderLookup
ContactNumber	Short Text	Required, 10-15 digits
Email	Short Text	Optional, must be a valid email
Address	Short Text	Optional
BloodGroup	Short Text	Must match BloodGroupLookup

Doctor Table

Attribute	MS Access Data Type	Validation Rules
DoctorID	AutoNumber (if PK) or Number (Long Integer)	Auto-increment
FullName	Short Text	Required
Specialty	Short Text	Must match SpecialtyLookup
ContactNumber	Short Text	Required, digits only
Email	Short Text	Required, valid email
Availability	Short Text	Format: 'Mon-Fri, 9am-5pm'

Appointment Table

Attribute	MS Access Data Type	Validation Rules
AppointmentID	AutoNumber (if PK) or Number (Long Integer)	Auto-increment
PatientID	AutoNumber (if PK) or Number (Long Integer)	References Patient.PatientID
DoctorID	AutoNumber (if PK) or Number (Long Integer)	References Doctor.DoctorID
AppointmentDate	Date/Time	Must be today or future
AppointmentTime	Date/Time	Required
Status	Short Text	Must match AppointmentStatusLookup

Admission Table

Attribute	MS Access Data Type	Validation Rules
AdmissionID	AutoNumber (if PK) or Number (Long Integer)	Auto-increment
PatientID	AutoNumber (if PK) or Number (Long Integer)	References Patient.PatientID
AdmissionDate	Date/Time	Today or earlier
RoomNumber	Short Text	Required
DischargeDate	Date/Time	>= AdmissionDate or NULL

Prescription Table

Attribute	MS Access Data Type	Validation Rules
PrescriptionID	AutoNumber (if PK) or Number (Long Integer)	Auto-increment
AppointmentID	AutoNumber (if PK) or Number (Long Integer)	References AppointmentID
MedicineName	Short Text	Required
Dosage	Short Text	e.g., '500mg'
DurationInDays	AutoNumber (if PK) or Number (Long Integer)	> 0

Billing Table

Attribute	MS Access Data Type	Validation Rules
BillID	AutoNumber (if PK) or Number (Long Integer)	Auto-increment
PatientID	AutoNumber (if PK) or Number (Long Integer)	References Patient
AdmissionID	AutoNumber (if PK) or Number (Long Integer)	Optional, references Admission
AppointmentID	AutoNumber (if PK) or Number (Long Integer)	Optional, references Appointment
Amount	Currency	> 0
PaymentStatus	Short Text	Match PaymentStatusLookup
PaymentDate	Date/Time	Optional, valid date

PaymentStatusLookup Table

Value
PaymentStatus
Paid
Unpaid
Partially Paid

Foreign Keys Summary

Foreign Key	References
Appointment.PatientID	Patient.PatientID
Appointment.DoctorID	Doctor.DoctorID
Doctor.Specialty	SpecialtyLookup.Specialty
Patient.Gender	GenderLookup.Gender
Patient.BloodGroup	BloodGroupLookup.BloodGroup
Appointment.Status	AppointmentStatusLookup.Status
Admission.PatientID	Patient.PatientID
Prescription.AppointmentID	Appointment.AppointmentID
Billing.PatientID	Patient.PatientID
Billing.AppointmentID	Appointment.AppointmentID
Billing.AdmissionID	Admission.AdmissionID

Billing.PaymentStatus	PaymentStatusLookup.PaymentStatus
-----------------------	-----------------------------------