

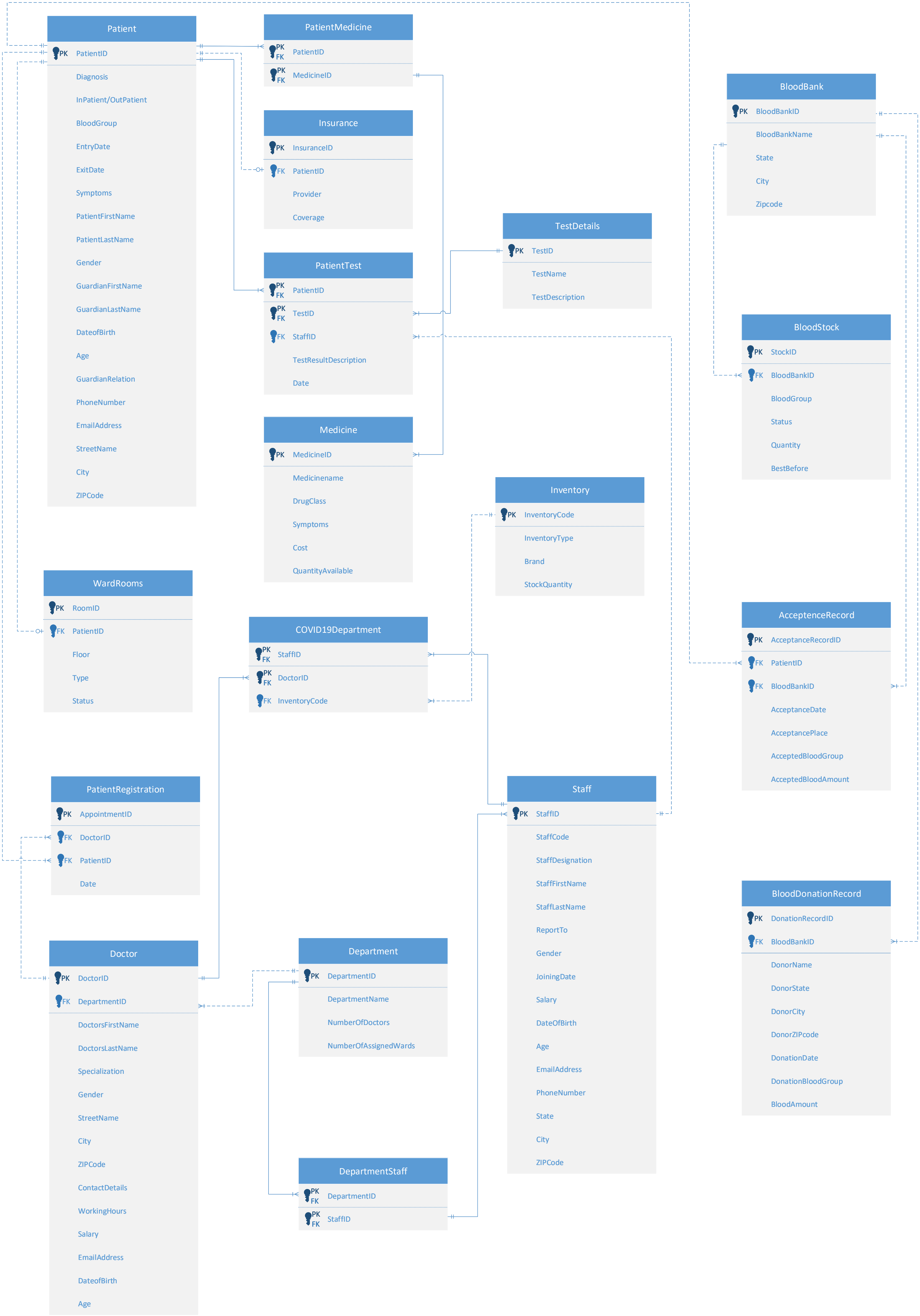
PROJECT GROUP – 10

INFO 6210: HOSPITAL MANAGEMENT SYSTEM

Final ERD

Team Members:

- Anjali Sajeevan
- Deepika Kumari Jha
- Madhurima Chatterjee
- Sayali Nitin Chaudhary
- Shreya Uppalapati
- Pooja Singh Kumari



Updates made to Initial ERD

Added Schemas:

1. BloodBank
 - a. AcceptanceRecord
 - b. BloodBank
 - c. BloodDonationRecord
 - d. BloodStock
2. COVID
 - a. COVID19Department
 - b. Inventory
 - c. View 1: COVID_Patient
3. Departments
 - a. Department
 - b. DepartmentStaff
 - c. Staff
 - d. View 2: StaffAllocations
4. Doctors
 - a. Doctor
5. Medicine
 - a. Medicine
 - b. Patient Medicine
6. Patient:
 - a. Insurance
 - b. Patient
 - c. PatientRegistration
 - d. PatientTest
 - e. WardRooms
7. Test
 - a. TestDetails

Modified Entities:

1. The relationship connecting lines were updated to point to the attributes in each entity that were used to form the relationship.
2. PatientTest, TestResult and TestAdministrator were combined to form the PatientTest Entity.
3. PatientRegistration and PatientDoctor were combined as a single entity PatientRegistration.
4. AdminStaff was removed.
5. BloodBankID attribute has been added to BloodStock, AcceptanceRecord and BloodDonationRecord entities.

Changed relationship multiplicity:

1. The relationship multiplicity between Patient and PatientRegistration was changed to one-to-many, with many on PatientRegistration. A patient may have several appointments.
2. The one-to-many relationship between Department and DepartmentStaff was reversed, with many on DepartmentStaff.
3. The relationship multiplicity between Patient and AcceptanceRecord was changed to one-to-many, with many on AcceptanceRecord as a patient may have several blood donation acceptance records.
4. The relationship multiplicity between BloodBank and BloodStock was changed to one to many, many on the BloodStock side.

Changed to non-identifying relationship between:

1. Doctor and Department
2. Doctor and PatientRegistration
3. Patient and PatientRegistration
4. Patient and Insurance
5. Patient and WardRooms
6. COVID19Department and Inventory
7. PatientTest and Staff
8. BloodBank and BloodStock
9. BloodBank and AcceptanceRecord
10. BloodBank and BloodDonationRecord

Added/Deleted/Modified Attributes/Columns:

1. All Foreign Keys placed right below the primary keys for ease of reference.
2. RoomID, DoctorID and AppointmentID were removed from Patient Entity and Symptoms was added.
3. A computed column (Age) was added to Doctor, Staff and Patient Entities.
4. PatientID attribute was added to the PatientRegistration entity as a Foreign Key and removed from the Patient entity.
5. DepartmentID attribute was removed from the Staff entity.
6. DonorID attribute was removed from the BloodBank entity.
7. Merged DonationDate and DonationTime in BloodDonationRecord entity to DonationDate to show both Date and Time.
8. Columns State, City and Zip Code were added to BloodBank entity.
9. Merged AcceptanceDate and AcceptanceTime in AcceptanceRecord entity to AcceptanceDate to show both Date and Time.