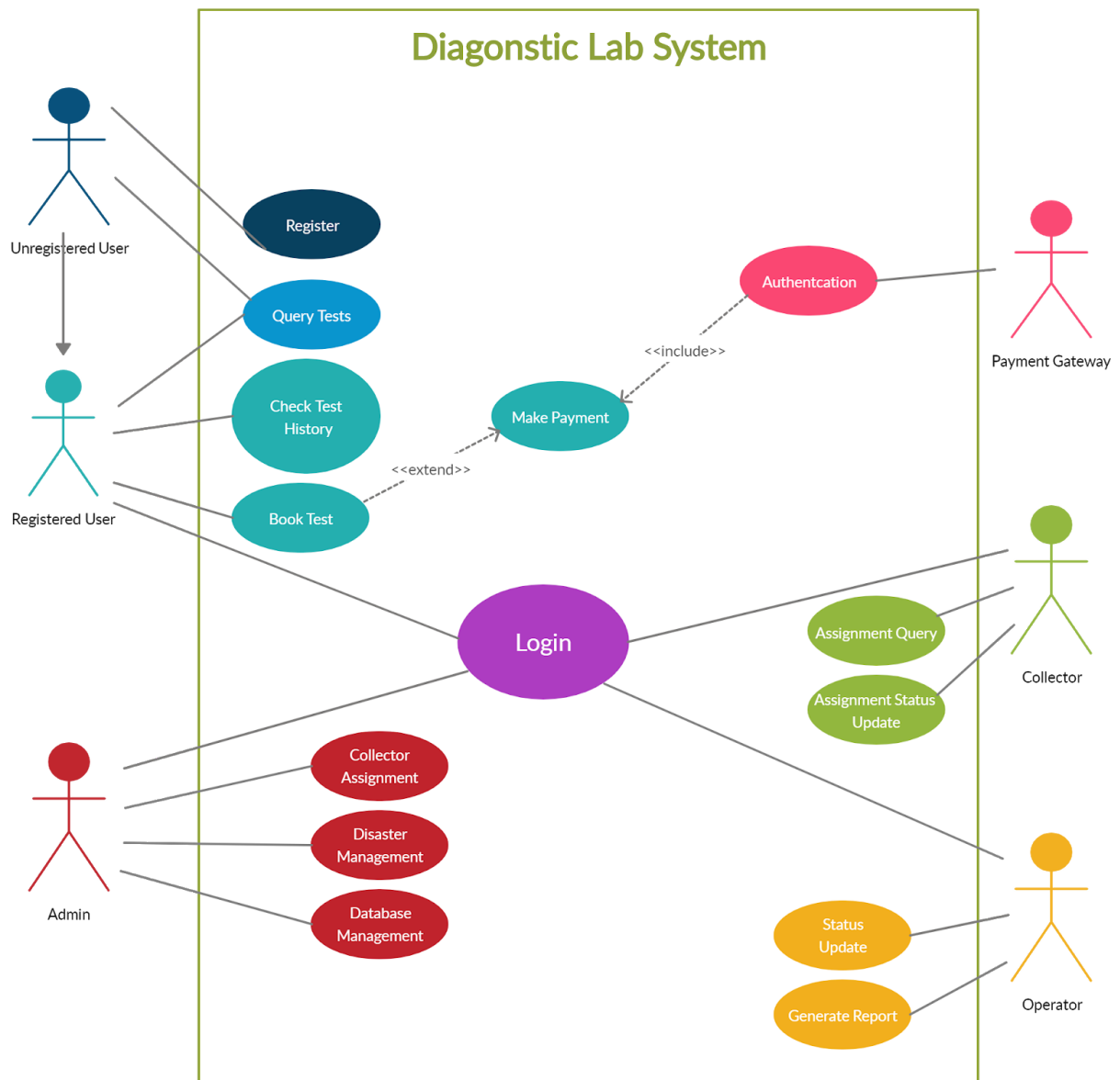


Online Diagnostic Lab Report Generating System



Use Case Diagram

Actors:

Actors are external entities that interact with the system. System here refers to the **Online Diagnostic Lab Report Generating System** and the actors that are using the system are :

1. **Admin** : Admin is a person with highest available privilege in the system. They can make any and all kinds of changes to the system, and are responsible for correctness and stability of the system. They have the following activities in the system :
 - a. *Assign* a collector to collect culture sample for a particular booking, if home collection is possible
 - b. *Handle back-end database*, which involves adding new tests that can be availed by customers, decommissioning some tests, adding or removing Collectors, update prices of tests, setting availability of particular tests, etc.
 - c. *Manage disastrous situations* which may occur due to unexpected events like damaging of collected sample, breakdown of vital testing machines/analysers, breakout of epidemics, etc. which cause delay or cancellation of report generation. This functionality will allow the admin to inform customers and take necessary steps.
 - d. *Submit various queries* to the operator to generate various reports required by the company.
2. **Unregistered user** : Unregistered users can perform the following limited functionality in the system :
 - a. They have the option to *register* into the system with their appropriate details.

- b. They can *query* the various types of tests provided by the center with their price details.
3. **Registered User** : Registered users are those who were already signed up into the system. They can perform a variety of activities in the system. Their activities are listed below :
 - a. They are able to *query* the various types of tests along with their corresponding price. They also can see how much time it will be required for getting the report.
 - b. They also can *check their test history*.
 - c. They can *book a test* and make payment corresponding to that test.
4. **Collector** : A collector is a person who collects the samples from users who have booked a test. Not all tests can be sample-collected from the specific place mentioned by the patient. Some tests require physical presence of the patient in a testing center. Collectors are concerned with the following :
 - a. *Checking the details* of their remaining assignments
 - b. *Updating the status* of their assignments once done
5. **Operator** : An operator is a person who inputs the result of day to day operations of the lab to the database, and in extent, to the online portal. The operator is also responsible for generating reports of all kinds. The following are the jobs of an operator :
 - a. *Updating the status* of ongoing tests, lab equipment etc.
 - b. *Generating various types of reports*

6. **Payment Gateway** : Payment gateway is used to perform the payment while booking. The only function of payment gateway is the following :

a. *Authenticate* an ongoing payment

Assumptions:

- Except for unregistered users, all other actors are required to log in to the system, which defines their roles, and presents the contextual interface to them.
- Registered user is a specialization of unregistered user.
- Payment gateway internally transfers the money from the patient's account to the account of the diagnostic lab.
- Booking is automatically confirmed after the gateway confirms the payment.
- Registered users can check the status of the current test by accessing the "Check Test History" use case.
- Confirmation of booking is done by entering the booking details in the database, and scheduling a test appointment automatically by the system.
- The operator is responsible for generating all types of reports including test report for patients when the tests are complete as well as sales reports required at the admin's end
- The operator is responsible for updation of the statuses of everything concerning the lab and its patients like equipments, availability, test result etc