SE (IT632)

Documentation

G3: College Assistance and Preparation

Group Leader	**Jay Chevli**	**202312049**
Group Member	**Vishal Thadani**	**202312097**
Group Member	**Shivam Javiya**	**202312029**
Group Member	**Parth Vaghasiya**	**202312045**

Index

Software Requirements Specification..... 8
- 1. Introduction:..... 9
- 2. Definition:..... 9
- 3. Scope:..... 10
- 4. User Stories:..... 11
- 5. Use Cases:..... 15
- 6. Functional Requirements:..... 26
- 7. Non-Functional Requirements:..... 32

Data Flow Diagram (DFD)..... 34
- Level - 0 DFD:..... 35
- Level - 1 DFD:..... 36
- Level - 2 DFD:..... 39

Decision Tree and Decision Table..... 46
- Decision Tree:..... 47
- Decision Table:..... 48

UML Diagrams..... 52
- Class Diagram:..... 53
- Use Case Diagram:..... 54
- Sequence Diagram:..... 55
- Activity Diagram:..... 59

Software Requirements Specification

1. Introduction:

This Software Requirements Specification (SRS) document aims to comprehensively outline the requirements for the interactive College Assistance and Preparation System. The system is designed to assist students in navigating their career paths, exploring degree programs, preparing for entrance exams, and facilitating alumni interaction.

The purpose of this document is to delineate the scope and specifications of the College Assistance and Preparation System, serving as a blueprint approved by the client and utilized by the development team. It provides a clear understanding of the functionalities required, guiding the software design, development, and testing phases.

In addition to detailing system functionality, this SRS also encapsulates non-functional requirements, design constraints, and other pertinent factors essential for the successful implementation and operation of the College Assistance and Preparation System.

2. Definition:

Below is an alphabetically arranged glossary encompassing terms, acronyms, and abbreviations essential for comprehending and interpreting the software requirements and its intended application.

Term, Acronym, or Abbreviation	Definition
CA	Career Assessment
MT	Mock Test
MTST	Mock Test Sets
DP	Degree Program
EE	Entrance Exam

3. Scope:

The Interactive CA and Preparation System is designed to help students navigate their career paths. Accessible via the web, the system caters to students, alumni, and administrators.

Key features include user authentication, registration, and password management. Users can explore careers through interactive assessments, leading to suggested DP. Detailed program descriptions and institutions offering each program are provided. MT functionalities allow users to view, purchase, and take tests.

Alumni can engage through an inbox for queries. Administrators have access to user and query lists for effective management. The system aims to simplify career exploration, foster alumni engagement, and support lifelong learning.

4. User Stories:

Epic: Login

1. As a user, I want to login using my credentials so that I can access my account.
2. As a user, I want to reset my password if I forgot it so that I can regain access to my account.

Epic : Sign Up as a Student

3. As a student, I want to sign up by providing my basic information like name, password, state, educational qualification so that I can access the features.
4. As a student, I want to see a confirmation message after signing up so that I know it was successful.

Epic : Sign Up as an Alumni

5. As an alumni, I want to sign up by providing my basic details and degree certificate so that I can access the features.
6. As an alumni, I want to see a confirmation message after signing up so that I know it was successful.
7. As an alumni, I want to see a totally new website interface so that I can access the features.

Epic: Interactive CA

8. As a student, I want to take an interactive CA test, so that I can explore career options based on my interests, skills, and personality traits.

   8.1 As a student, I want to answer a series of questions about my interests, skills, and personality traits, so that the app can generate a list of potential DP I may enroll into.

   8.2 As a student, I want to view a list of suggested DP, so that I can choose to explore these courses.

Epic: Explore Degree Program

9. As a student, I want to see a brief description about a degree program, so I can know more about the degree program.
10. As a student, I want to see a list of institutions in India that run the degree program, so that it helps me to plan for getting into one of those institutes.

Epic: Degree Program Institute Information

11. As a student, I want to see detailed information about degree program institutes, so that it helps me to make a decision on which institute I should join.

    11.1 As a student, I want to see the location of the institute.

    11.2 As a student, I want to see the EE for that institute, so that I can plan to prepare for that EE.

    11.3 As a student I want to see alumni review about that institute, so that I can get to know about the institute from his point of view.

Epic: EE Information

12. As a student, I want to see detailed information about institute EEs, so that it helps me to decide what and how to prepare for the exam.

    12.1 As a student, I want to see the syllabus for the EE.

    12.2As a student, I want to see the question paper pattern for the EE.

    12.3 As a student I want to see interview articles by people who cracked that EE.

Epic: Purchase MTST

13. As a student, I want to view available MTST so that I can choose the one that best fits my needs.
14. As a student, I want to add a MTST to my cart so that I can purchase it later.
15. As a student, I want to view and manage my cart so that I can review my selections before purchasing.
16. As a student, I want to pay for the MTST in my cart so that I can complete the purchase

Epic: View Purchased MTST

17. As a student, I want to view the MTST I purchased so that I can access the study material and resources.
18. As a student, I want to see the name of each purchased course so that I can easily identify it.
19. As a student, I want to view MTs available in a purchased set, so that I can take a test online.

Epic: Query

20. As a user, I want to make a query to the Admin, so that I can clear all my general doubts.
21. As a user, I want to make a query to the Alumni, so that I can clear all my doubts related to the course/institute.

Epic: MT

22. As a student, I want to take a timer-based MT, so that I can take the test in time bound conditions.
23. As a student, I want to view the results of a MT taken, so that I can see my performance.
24. As a student, I want to see the answer key of the MT, so that I can know the correct answers.

Epic : Alumni Inbox

25. As an alumni, I want to see a list of query messages in my inbox so that I can answer the queries.
26. As an alumni, I want to see the number of queries which are pending for the response so that I can respond to it.
27. As an alumni, I want to see the pending queries so that I can respond to it.
28. As an alumni, I want to give the response to any queries asked by the student.

Epic : Admin Access

29. As an admin, I want to access the list of all users so that I can manage them.
30. As an admin, I want to access the list of all queries so that I can answer them.
31. As an admin, I want to see the number of queries which are pending for the response so that I can respond to it.

32. As an admin, I want to see the pending queries so that I can respond to it.

Epic: Logout

33. As a user, I want to logout of the system after my work is over so that my account remains secure.
34. As a user, I want to see a confirmation message after logging out so that I know it was successful.

5. Use Cases:

Use Case 1: User Login

Actor: User

Description: The user wants to log in using their credentials to access their account.

Preconditions: The user has valid login credentials.

Basic Flow:

- User navigates to the login page.
- User enters their username and password.
- System validates the credentials.
- If valid, the system logs the user in and redirects to the user's account.

Alternate Flow:

- If the credentials are invalid, the system displays an error message, and the user is prompted to enter the correct information.

Exceptional Flow:

- If the user exceeds the allowed number of login attempts, the account is temporarily locked.

Use Case 2: Password Reset

Actor: User

Description: The user wants to reset their password if forgotten.

Preconditions: The user has forgotten their password.

Basic Flow:

- User clicks on the "Forgot Password" link.

- User provides necessary information for verification.
- System validates the information.
- If valid, the system allows the user to reset their password.

Alternate Flow:

- If the provided information is invalid, the system prompts the user to enter correct details.

Exceptional Flow:

- If the user faces issues during the password reset process, they can contact support for assistance.

Use Case 3: Student Sign Up

Actor: Student

Description: The student wants to sign up by providing basic information.

Preconditions: The student has not yet registered on the platform.

Basic Flow:

- Students navigate to the sign-up page.
- Students provide basic information (name, password, state, educational qualification).
- System validates the information.
- If valid, the system creates a new student account.

Alternate Flow:

- If the provided information is incomplete or invalid, the system prompts the student to correct it.

Exceptional Flow:

- If there are technical issues during sign-up, the student is prompted to try again later.

Use Case 4: Alumni Sign Up

Actor: Alumni

Description: The alumni want to sign up by providing basic details and a degree certificate.

Preconditions: The alumni has not yet registered on the platform.

Basic Flow:

- Alumni navigate to the sign-up page.
- Alumni provides basic details and uploads a degree certificate.
- System validates the information.
- If valid, the system creates a new alumni account.

Alternate Flow:

- If the provided information is incomplete or invalid, the system prompts the alumni to correct it.

Exceptional Flow:

- If there are technical issues during sign-up, the alumni are prompted to try again later.

Use Case 5: Interactive CA

Actor: Student

Description: The student wants to take an interactive CA test.

Preconditions: The student is logged into their account.

Basic Flow:

- Students select the "CA" option.

- Students answer a series of questions about interests, skills, and personality traits.
- System generates a list of potential DP.

Alternate Flow:

- If there is an interruption during the assessment, the system allows the student to resume later.

Exceptional Flow:

- If there is a technical issue, the student can contact support for assistance.

Use Case 6: Explore DP

Actor: Student

Description: The student wants to see a brief description of a DP and a list of institutions in India offering it.

Preconditions: The student is logged into their account.

Basic Flow:

- Student selects a DP.
- Students view a brief description of the DP.
- Student sees a list of institutions in India offering the DP.

Alternate Flow:

- If the selected program is not found, the system informs the student and suggests alternative programs.

Exceptional Flow:

- If there are technical issues, the student can contact support for assistance.

Use Case 7: DP Institute Information

Actor: Student

Description: The student wants detailed information about a DP institute.

Preconditions: The student is logged into their account.

Basic Flow:

- Students select an institute within a DP.
- Students view information about the institute, including location and EE details.
- Students see alumni reviews about the institute.

Alternate Flow:

- If the selected institute information is not available, the system informs the student.

Exceptional Flow:

- If there are technical issues, the student can contact support for assistance.

Use Case 8: EE Information

Actor: Student

Description: The student wants detailed information about an institute's EEs.

Preconditions: The student is logged into their account.

Basic Flow:

- Students select an EE.
- Students view information about the EE, including syllabus, question paper pattern, and success stories.

Alternate Flow:

- If the selected EE information is not available, the system informs the student.

Exceptional Flow:

- If there are technical issues, the student can contact support for assistance.

Use Case 9: Purchase MTST

Actor: Student

Description: The student wants to view, add, and purchase MTST.

Preconditions: The student is logged into their account.

Basic Flow:

- Student browses available MTST.
- Students add a MTST to the cart.
- Students view and manage the cart.
- Students proceed to pay for the MTST.

Alternate Flow:

- If there is an issue adding items to the cart, the system informs the student.

Exceptional Flow:

- If there are technical issues during the purchase process, the student can contact support for assistance.

Use Case 10: View Purchased MTST

Actor: Student

Description: The student wants to view the purchased MTST.

Preconditions: The student has purchased MTST.

Basic Flow:

- Student navigates to the "Purchased MTST" section.
- Students view the names of purchased MT.
- Student views MT available in a purchased set.

Alternate Flow:

- If there are no purchased MTST, the system informs the student.

Exceptional Flow:

- If there are technical issues, the student can contact support for assistance.

Use Case 11: Take MT

Actor: Student

Description: The student wants to take a timer-based MT.

Preconditions: The student has selected a MT.

Basic Flow:

- Students select a MT.
- Students take the timer-based MT.
- Students view the results and answer keys after completing the test.

Alternate Flow:

- If there is an interruption during the test, the system allows the student to resume.

Exceptional Flow:

- If there are technical issues during the test, the student can contact support for assistance.

Use Case 12: Query to Admin

Actor: Student

Description: The student intends to submit a query to an administrator for assistance or information.

Preconditions: The student is logged into their account.

Basic Flow:

- Students navigate to Contact us.
- Student navigates to the query form.
- Students enter the query details, including the subject and its description.
- Student submits the query.
- System records the query and sends it to the administrator.

Alternate Flow:

- If the query submission encounters an error, an error message is displayed, and the student can retry the submission.

Use Case 13: Query to Alumni

Actor: Student

Description: The student wishes to submit a query to an alumni for guidance or information.

Preconditions: The student is logged into their account.

Basic Flow:

- Students navigate to the institute details section of a required institute.
- Students select the option to query an alumni of that institute.
- Students enter the query details, including the subject and description.
- Student submits the query.
- System records the query and sends it to the selected alumni.

Alternate Flow:

- If the query submission encounters an error, an error message is displayed, and the student can retry the submission.

Use Case 14: Alumni Inbox

Actor: Alumni

Description: The alumni want to manage queries in their inbox.

Preconditions: The alumni are logged into their account.

Basic Flow:

- Alumni navigate to the inbox.
- Alumni view a list of query messages.
- Alumni sees the number of pending queries.
- Alumni views and responds to pending queries.

Alternate Flow:

- If there are no queries, the system informs the alumni.

Exceptional Flow:

- If there are technical issues, the alumni can contact support for assistance.

Use Case 15: Admin Access

Actor: Admin

Description: The admin wants to manage users and queries.

Preconditions: The admin is logged into their admin account.

Basic Flow:

- Admin accesses the list of all users.
- Admin accesses the list of all queries.
- Admin views the number of pending queries.
- Admin views and responds to pending queries.

Alternate Flow:

- If there are no queries or users, the system informs the admin.

Exceptional Flow:

- If there are technical issues, the admin can seek technical support.

Use Case 16: User Logout

Actor: User

Description: The user wants to log out of the system.

Preconditions: The user is logged into their account.

Basic Flow:

- User clicks on the logout button.
- System logs the user out.

Alternate Flow:

- If the user tries to log out without saving work, the system may prompt the user to confirm.

Exceptional Flow:

- If there are technical issues during the logout process, the user can contact support for assistance.

6. Functional Requirements:

Req. No.	Title	Description
FR01	User Authentication	Users must be able to register, login, and logout securely using their credentials.
FR01.1	Registration	Users should be able to register by providing necessary information and creating a username/password.
FR01.2	Login	Registered users should be able to login securely using their credentials.
FR01.3	Logout	Users should be able to securely logout of the system to end their session.
FR01.4	Password Reset	Users should be able to reset their password if forgotten through a secure verification process.
FR02	User Profile Management	Users should be able to update their profiles, including basic information and contact details.
FR02.1	Profile Update	Users should be able to update their profile information such as name, email, and contact details.
FR03	Role-Based Access Control	Different user roles (e.g., admin, student, alumni) should have different access levels and permissions.

FR03.1	**Admin Role Management**	**Admins should be able to assign, update, and remove admin roles to/from users.**
FR03.2	**Student Role Management**	**Admins should be able to assign, update, and remove student roles to/from users.**
FR03.3	**Alumni Role Management**	**Admins should be able to assign, update, and remove alumni roles to/from users.**
FR04	**Query Submission**	**Students should be able to submit queries to administrators or alumni for assistance or information.**
FR04.1	**Query to Admin Form**	**Users should have access to a query form where they can enter their query details for the admin.**
FR04.2	**Query to Alumni Form**	**Users should have access to a query form where they can enter their query details for the alumni.**
FR05	**Query Response**	**Administrators should be able to respond to queries submitted by students.**
FR05.1	**Admin Side Query Management**	**Admins should have access to a dashboard to manage and respond to queries.**
FR05.2	**Admin Side Response Form**	**Admins should have access to a response form to reply to user queries.**

FR06	**Course Management**	**Admins should be able to add, update, and delete courses offered by the platform.**
FR06.1	**Course Creation**	**Admins should have access to a form to create new courses with relevant details.**
FR06.2	**Course Update**	**Admins should be able to modify existing course details such as name, description.**
FR06.3	**Course Deletion**	**Admins should be able to remove outdated or irrelevant courses from the platform.**
FR07	**Test Management**	**Admins should be able to add, update, and delete MT available for students.**
FR07.1	**Test Creation**	**Admins should have access to a form to create new MT with relevant details.**
FR07.2	**Test Update**	**Admins should be able to modify existing MT details such as name, duration, or questions.**
FR07.3	**Test Deletion**	**Admins should be able to remove outdated or irrelevant MT from the platform.**
FR08	**CA**	**Students should be able to take an interactive CA test to explore career options.**

FR08.1	**Assessment Test**	**Students should have access to a series of questions related to interests, skills, and personality.**
FR08.2	**Result Generation**	**The system should generate a list of potential DP based on the assessment results.**
FR09	**DP Exploration**	**Students should be able to explore detailed information about DP and institutes.**
FR09.1	**Program Description**	**Students should have access to detailed descriptions of DP, including curriculum and faculty.**
FR09.2	**Institute Information**	**Students should be able to view information about institutes offering the selected DP.**
FR09.3	**EE Details**	**Students should have access to details about EE required for admission to institutes.**
FR10	**MT Purchase**	**Students should be able to view and purchase MTST available on the platform.**
FR10.1	**MT Catalog**	**Students should have access to a catalog displaying available MTST with relevant details.**
FR10.2	**Cart Management**	**Students should be able to add, remove, and manage MTST in their shopping cart.**

FR10.3	**Payment Integration**	**The system should integrate with payment gateways to facilitate secure transactions for MT purchases.**
FR11	**MT Access**	**Students who have purchased MTST should be able to access the tests online.**
FR12	**Take MT**	**Students must be able to take the purchased MTs online.**
FR12.1	**Start MT**	**Students should be able to start the MT they have purchased.**
FR12.2	**End MT**	**Students should be able to end the MT they have started.**
FR12.3	**See Result MT**	**Students should be able to see the result of the MT they took.**
FR13	**Alumni Inbox Management**	**Alumni should be able to view, manage, and respond to queries received from students.**
FR13.1	**Query Viewing**	**Alumni should have access to a dashboard to view queries received from students.**
FR13.2	**Query Response**	**Alumni should be able to respond to queries submitted by students.**
FR14	**Admin Dashboard**	**Admins should have access to a dashboard displaying registered users, course, institute, query, etc.**

FR14.1	**Dashboard Overview**	**Admins should have an overview of key system metrics and performance indicators on the dashboard.**
FR14.2	**Query Management**	**Admins should be able to view and respond to queries submitted by students from the dashboard.**
FR15	**User Management**	**Admins should be able to manage user accounts, including adding, updating, and deleting users.**
FR15.1	**User Registration**	**Admins should have access to a form to register new users with relevant details.**
FR15.2	**User Update**	**Admins should be able to modify existing user details such as role, permissions, or contact information.**
FR15.3	**User Deletion**	**Admins should be able to remove inactive or unauthorized users from the system.**

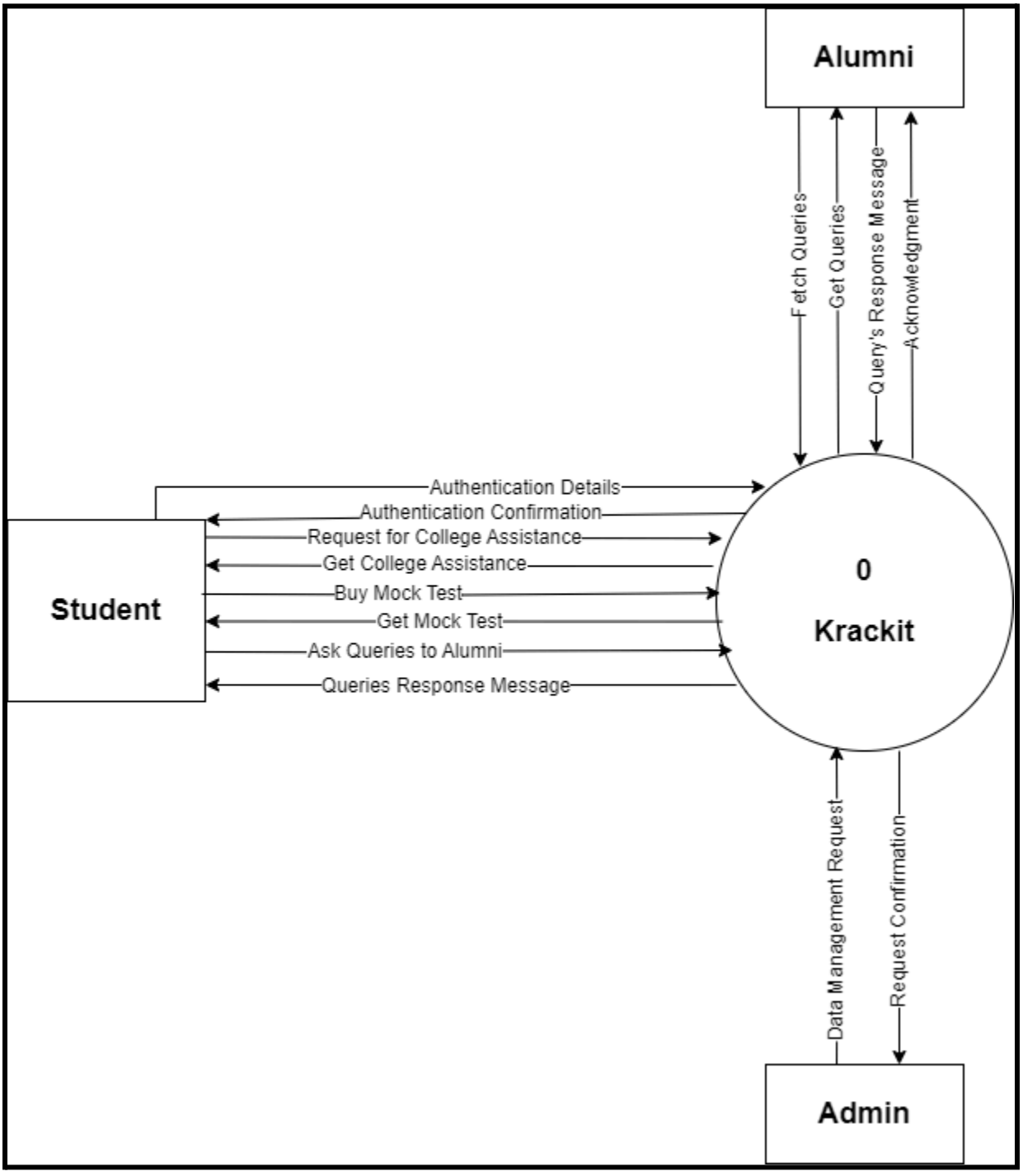
7. Non-Functional Requirements:

Req. No.	Title	Requirement
NF01	**Usability**	**The system should have a clean user interface for ease of use by students and alumni.**
		Navigation should be straightforward, with clear labels and instructions provided where necessary.
NF02	**Performance**	**The system should provide fast response times for all operations, including loading pages, generating recommendations, and processing transactions.**
		Response times should be optimized to ensure a seamless user experience even during peak usage periods.
NF03	**Security**	**User authentication and data transmission should be encrypted to ensure the security of user data.**
		Passwords should be securely stored using encryption.
		Access to sensitive information, such as user details and transaction data, should be restricted to authorized users only.
NF04	**Reliability**	**The system should have a high level of reliability, with minimal downtime and system failures.**
		Regular maintenance and monitoring should be performed to identify and address any issues promptly.
NF05	**Compatibility**	**The system should be compatible with a wide range of web browsers and devices to accommodate users with different preferences and technology configurations.**
		Compatibility testing should be conducted to ensure consistent performance across various platforms.

NF06	**Accessibility**	**The system should adhere to accessibility standards to ensure access for all users, including those with disabilities.**
		Features such as alternative text for images, keyboard navigation, and screen reader compatibility should be implemented.
NF07	**Privacy**	**The system should comply with privacy regulations and standards to protect the confidentiality of user information.**
		User consent should be obtained for the collection and use of personal data, and data handling practices should be transparent and secure.
NF08	**Documentation**	**Comprehensive documentation should be provided for system users, administrators, and developers to facilitate understanding and usage of the system.**
		Documentation should include user manuals, admin guides, API documentation, and system architecture diagrams.

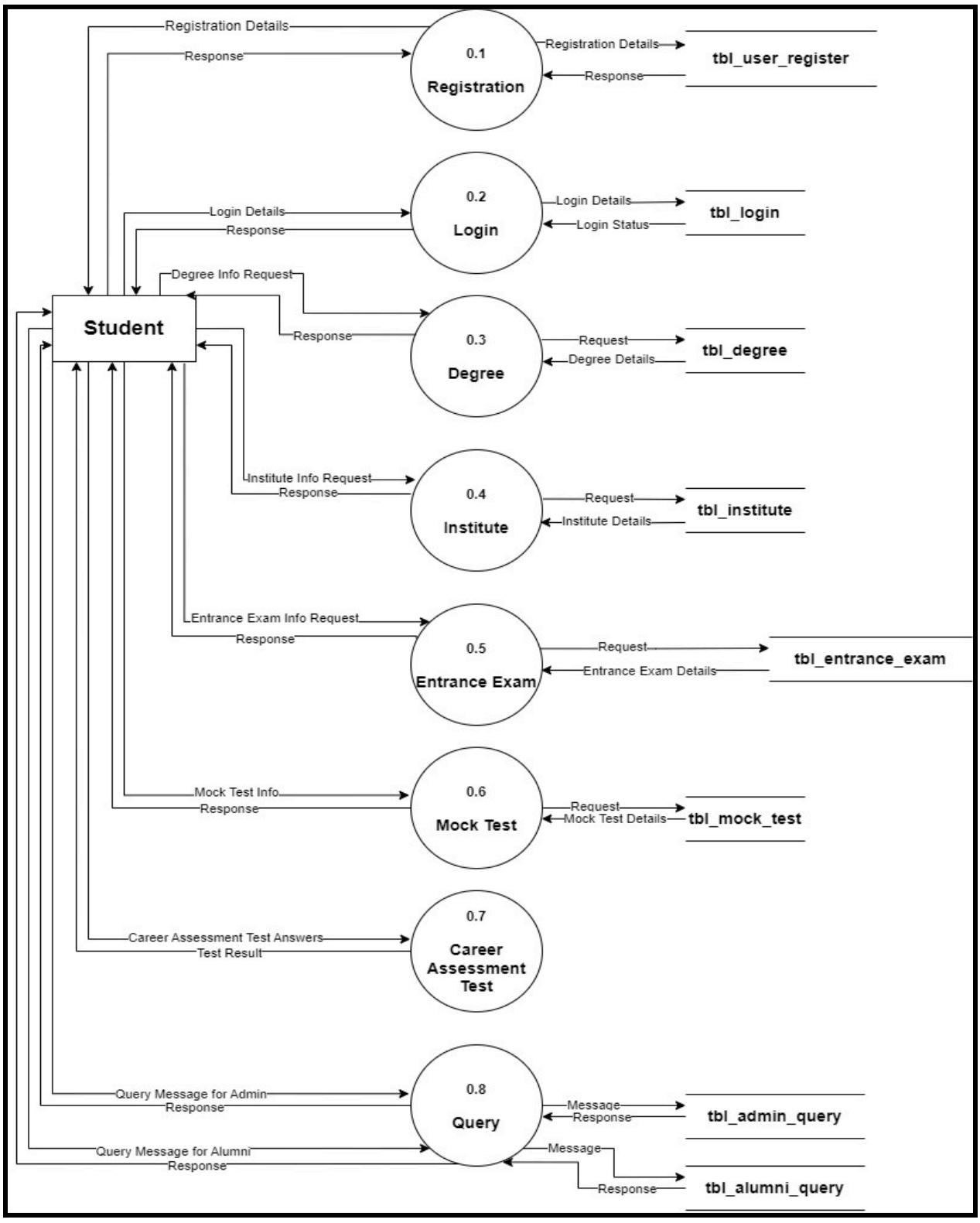
Data Flow Diagram (DFD)

Level - 0 DFD:

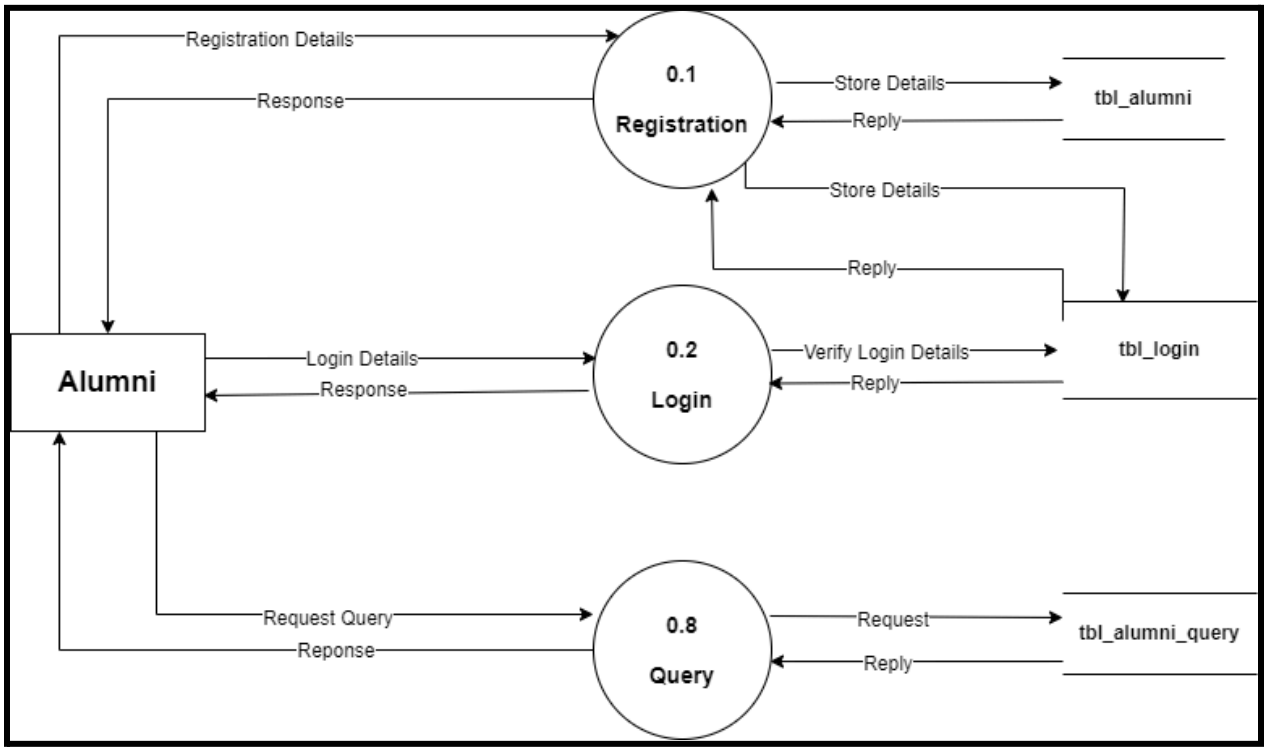

Alumni
Fetch Queries
Get Queries
Query's Response Message
Acknowledgment
Authentication Details
Authentication Confirmation
Request for College Assistance
Get College Assistance
Buy Mock Test
Get Mock Test
Ask Queries to Alumni
Queries Response Message
Student
0
Krackit
Data Management Request
Request Confirmation
Admin

Level - 1 DFD:

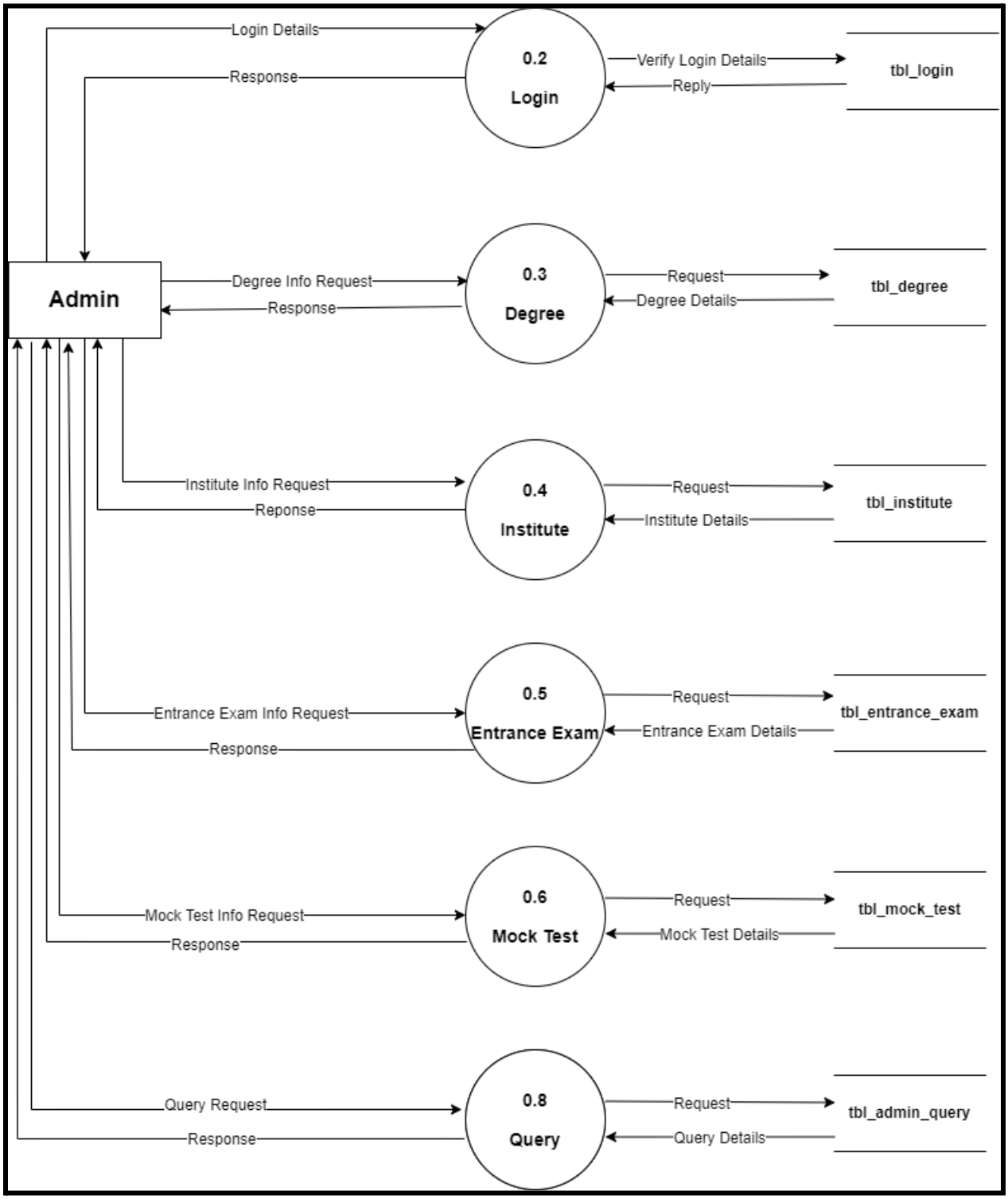
Student:



Alumni:

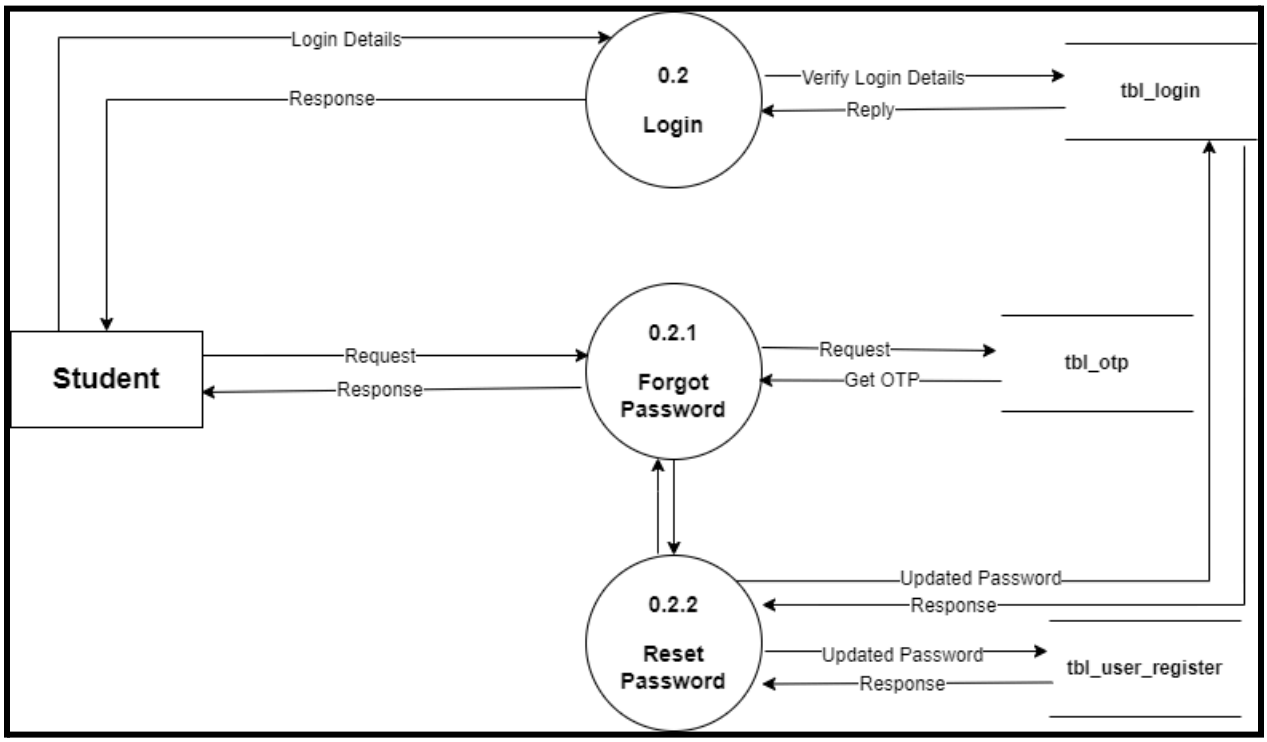

Registration Details
Response
0.1
Registration
Store Details
Reply
tbl_alumni
Store Details
Reply
tbl_login
Alumni
Login Details
Response
0.2
Login
Verify Login Details
Reply
Request Query
Reponse
0.8
Query
Request
Reply
tbl_alumni_query

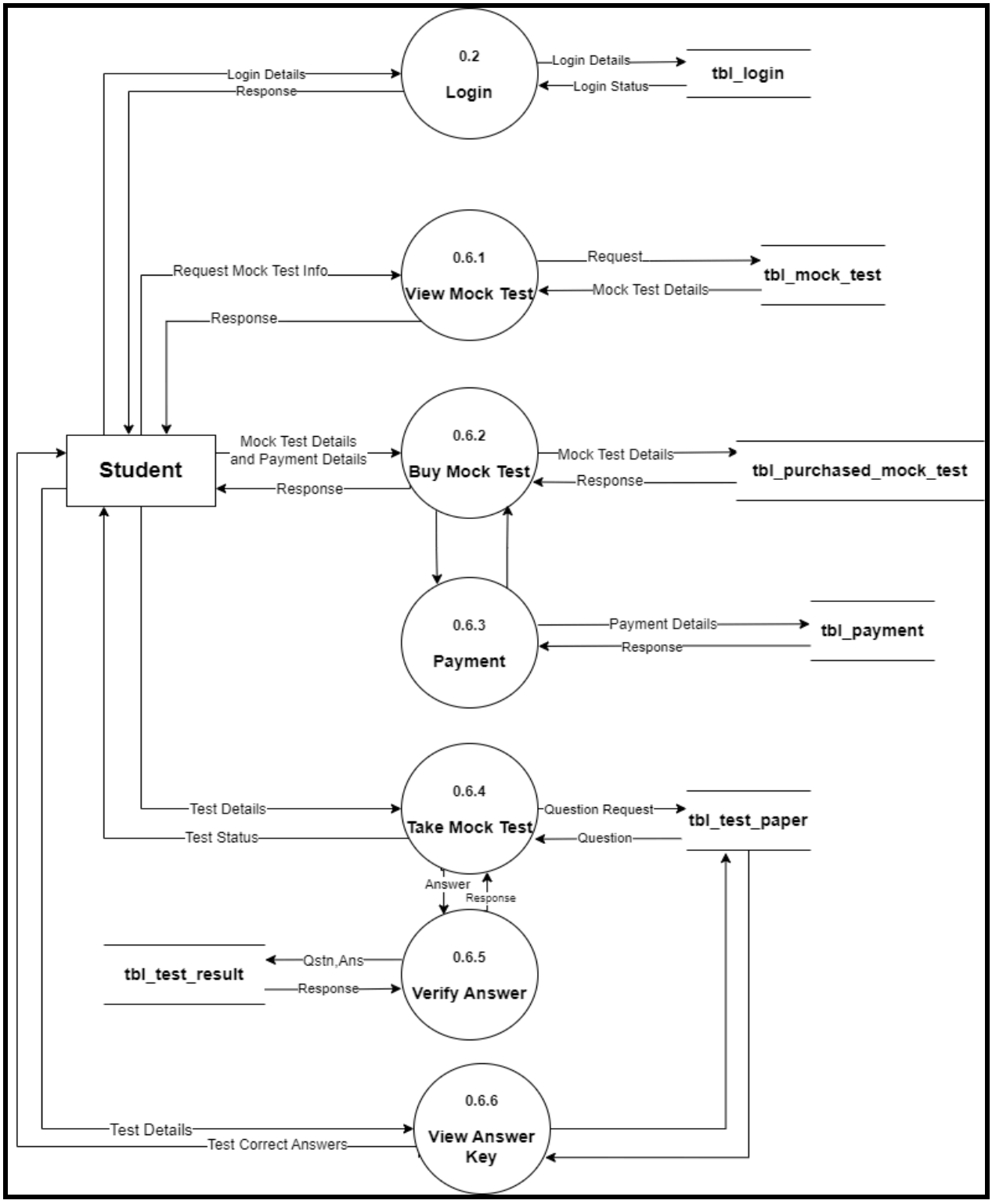
Admin:

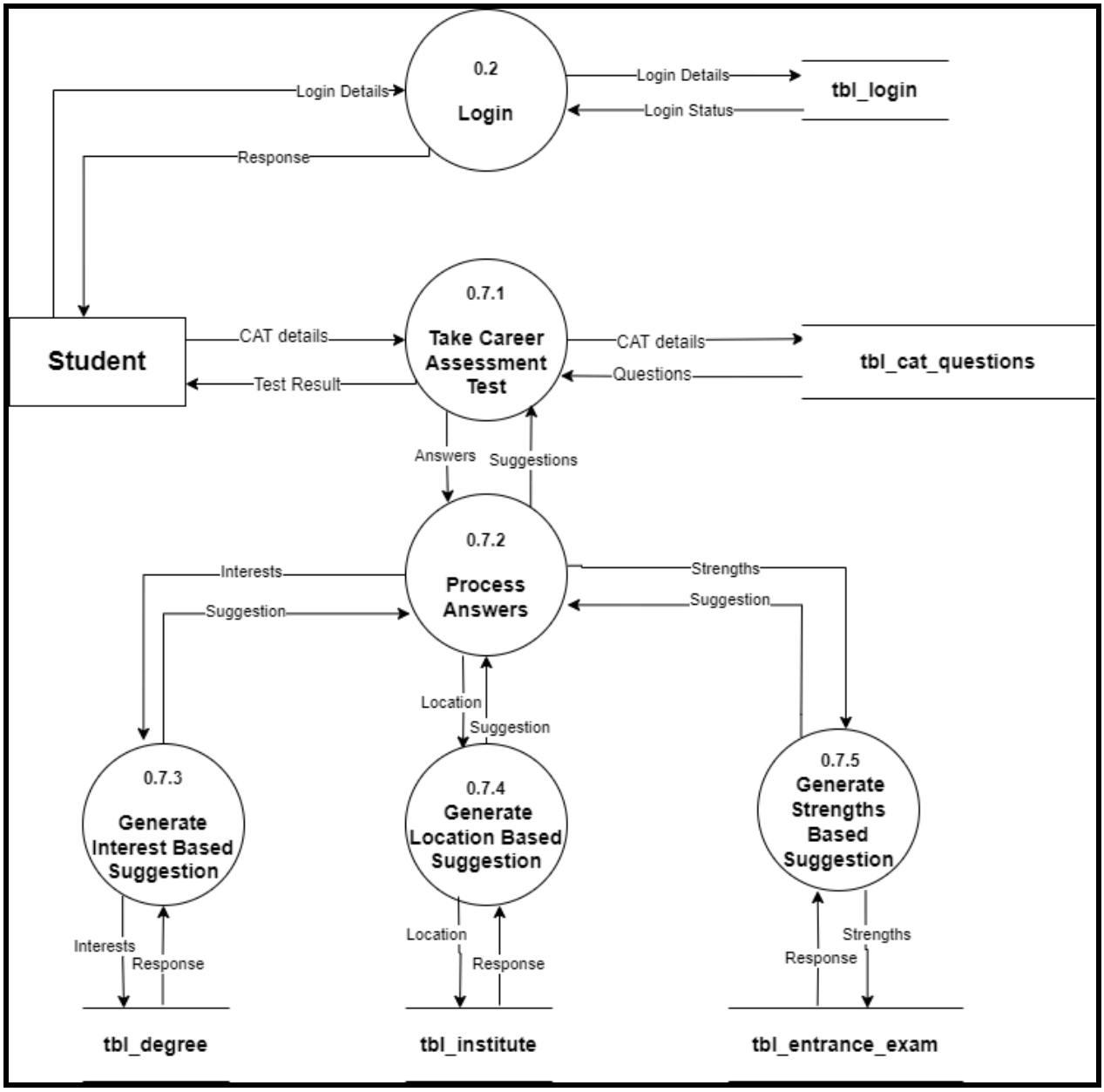

Admin
Login Details
Response
0.2
Login
Verify Login Details
Reply
tbl_login
Degree Info Request
Response
0.3
Degree
Request
Degree Details
tbl_degree
Institute Info Request
Reponse
0.4
Institute
Request
Institute Details
tbl_institute
Entrance Exam Info Request
Response
0.5
Entrance Exam
Request
Entrance Exam Details
tbl_entrance_exam
Mock Test Info Request
Response
0.6
Mock Test
Request
Mock Test Details
tbl_mock_test
Query Request
Response
0.8
Query
Request
Query Details
tbl_admin_query

Level - 2 DFD:

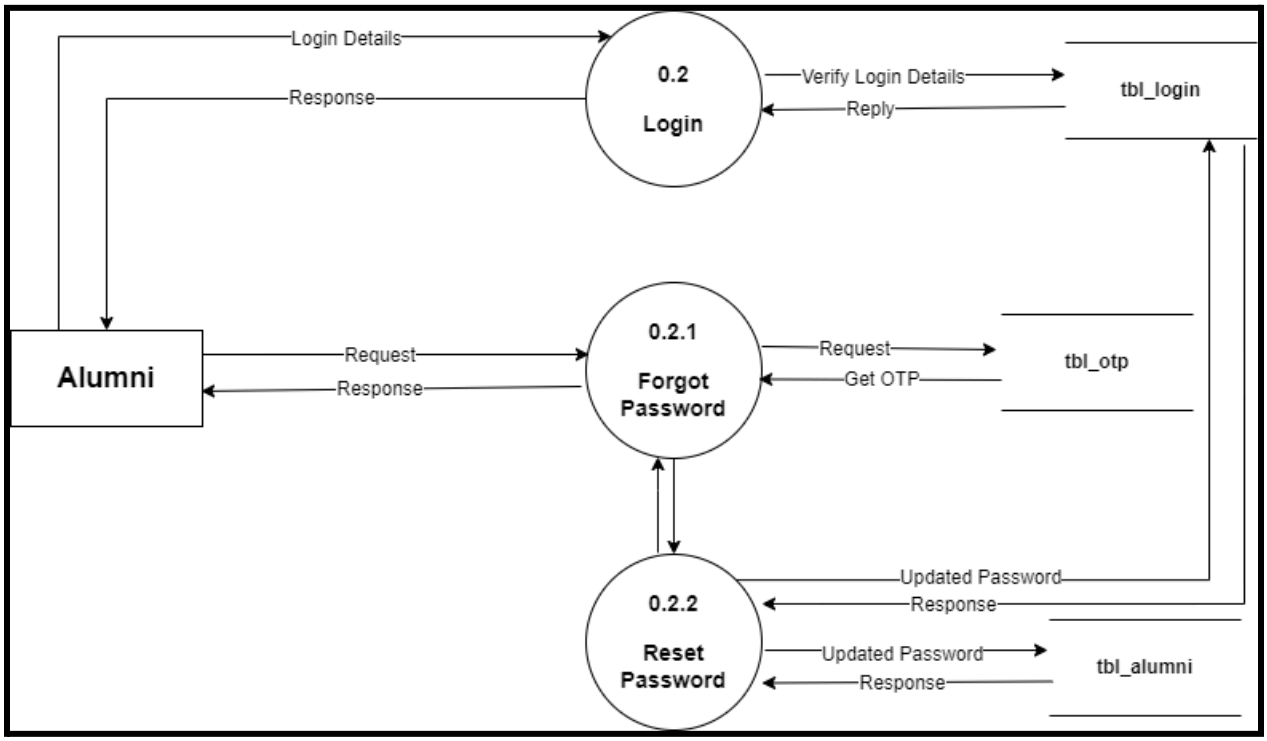
Student:

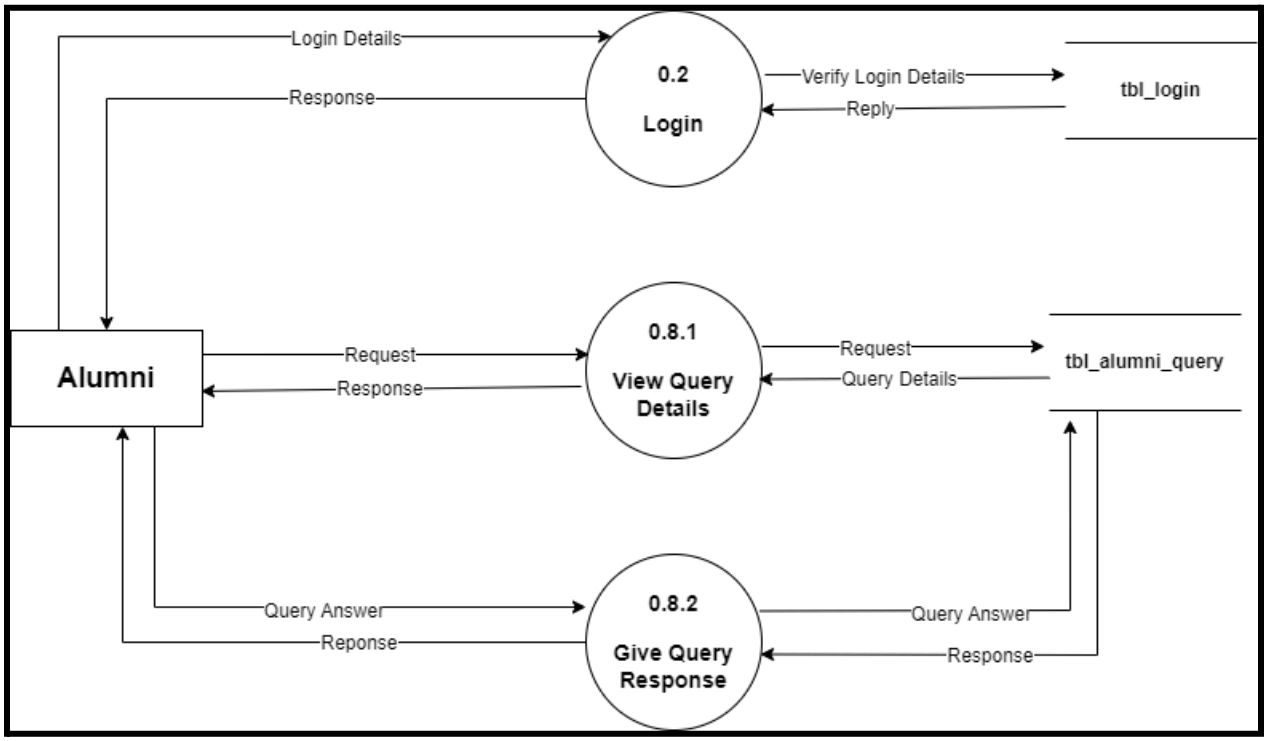



0.2
Login
Login Details
Response
Login Details
Login Status
tbl_login
0.6.1
View Mock Test
Request Mock Test Info
Response
Request
Mock Test Details
tbl_mock_test
Student
0.6.2
Buy Mock Test
Mock Test Details and Payment Details
Response
Mock Test Details
Response
tbl_purchased_mock_test
0.6.3
Payment
Payment Details
Response
tbl_payment
0.6.4
Take Mock Test
Test Details
Test Status
Question Request
Question
tbl_test_paper
Answer
Response
0.6.5
Verify Answer
tbl_test_result
Qstn,Ans
Response
0.6.6
View Answer Key
Test Details
Test Correct Answers

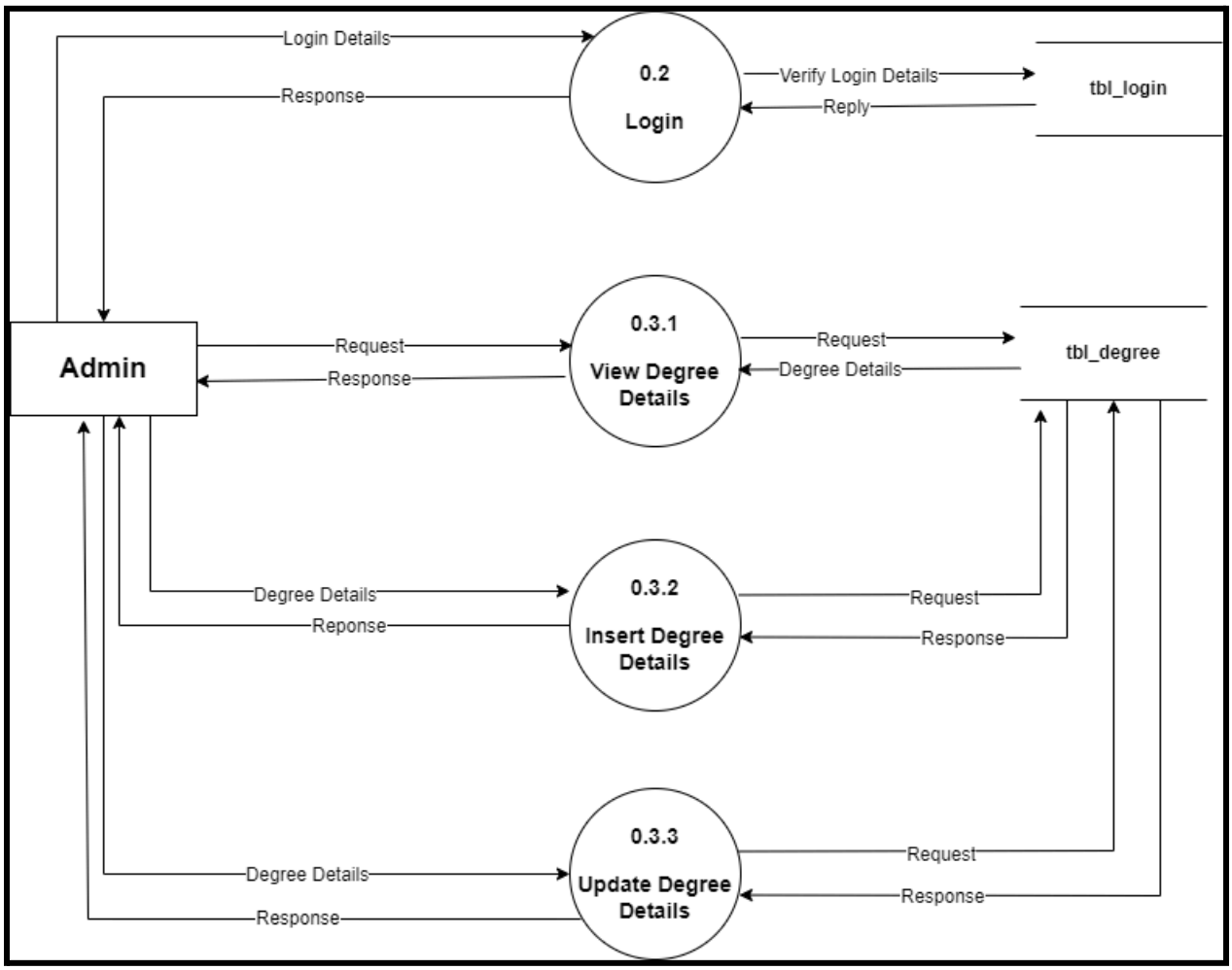

0.2
Login
Login Details
Login Status
tbl_login
Login Details
Response
Student
0.7.1
Take Career Assessment Test
CAT details
Test Result
CAT details
Questions
tbl_cat_questions
Answers
Suggestions
0.7.2
Process Answers
Interests
Suggestion
Strengths
Suggestion
Location
Suggestion
0.7.3
Generate Interest Based Suggestion
0.7.4
Generate Location Based Suggestion
0.7.5
Generate Strengths Based Suggestion
Interests
Response
Location
Response
Response
Strengths
tbl_degree
tbl_institute
tbl_entrance_exam

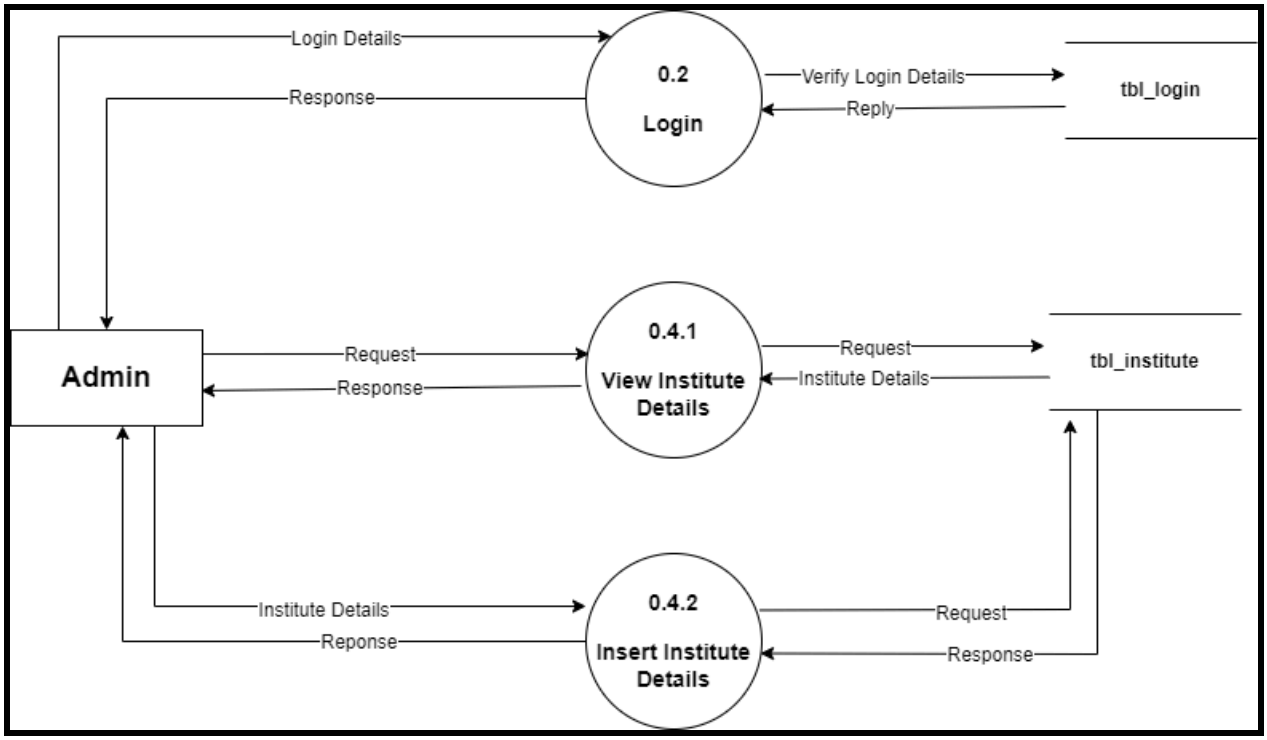
Alumni:

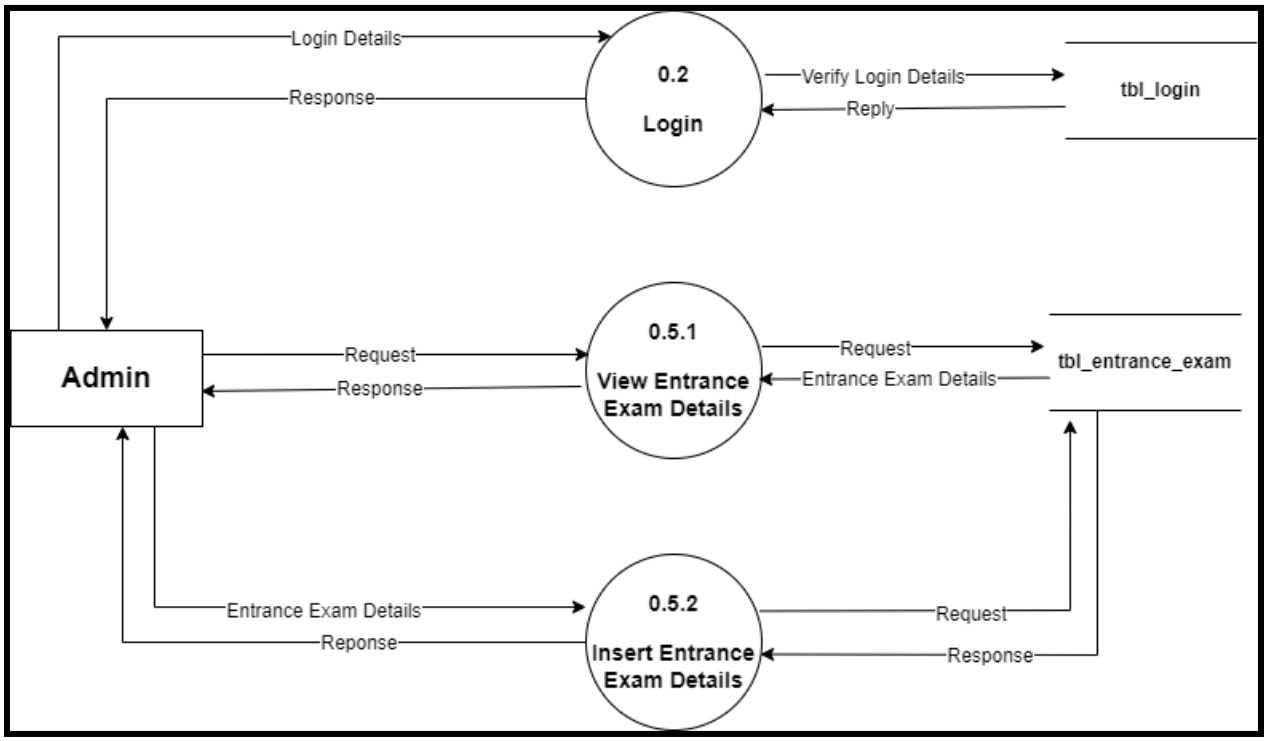

Login Details
Response
0.2
Login
Verify Login Details
Reply
tbl_login
Alumni
Request
Response
0.2.1
Forgot Password
Request
Get OTP
tbl_otp
Updated Password
Response
0.2.2
Reset Password
Updated Password
Response
tbl_alumni

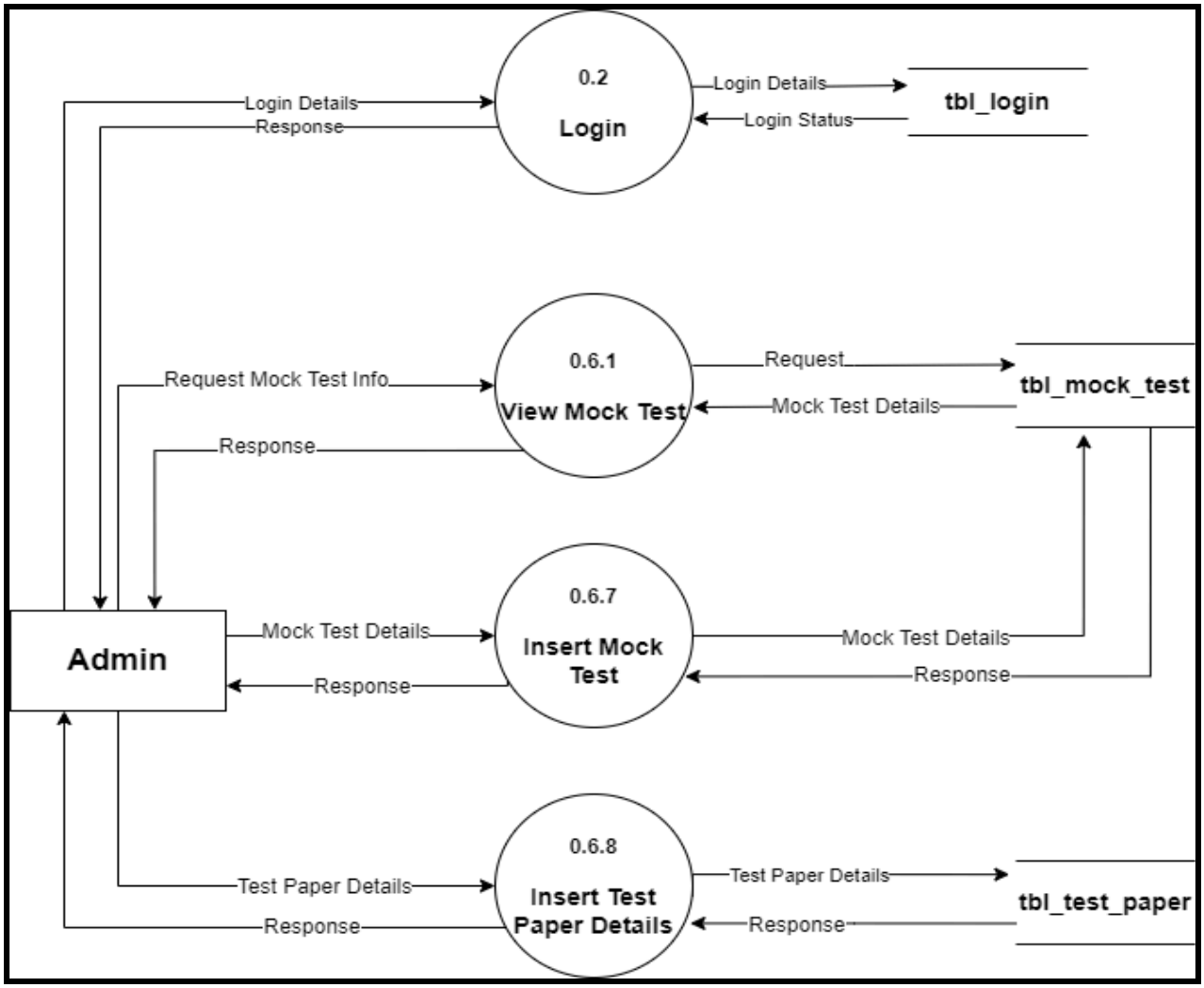

Login Details
Response
0.2
Login
Verify Login Details
Reply
tbl_login
Alumni
Request
Response
0.8.1
View Query Details
Request
Query Details
tbl_alumni_query
Query Answer
Reponse
0.8.2
Give Query Response
Query Answer
Response

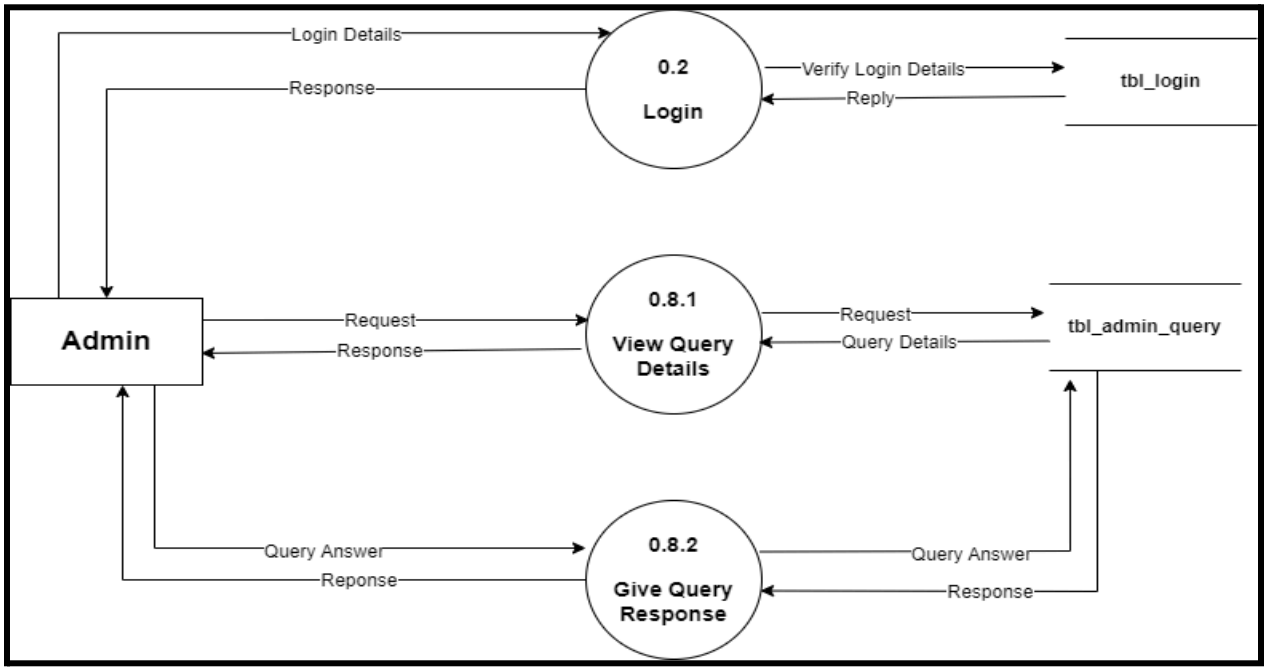
Admin:


Login Details
Response
0.2
Login
Verify Login Details
Reply
tbl_login
Admin
Request
Response
0.3.1
View Degree Details
Request
Degree Details
tbl_degree
Degree Details
Reponse
0.3.2
Insert Degree Details
Request
Response
0.3.3
Update Degree Details
Degree Details
Response
Request
Response


Login Details
Response
0.2
Login
Verify Login Details
Reply
tbl_login
Admin
Request
Response
0.4.1
View Institute Details
Request
Institute Details
tbl_institute
Institute Details
Reponse
0.4.2
Insert Institute Details
Request
Response

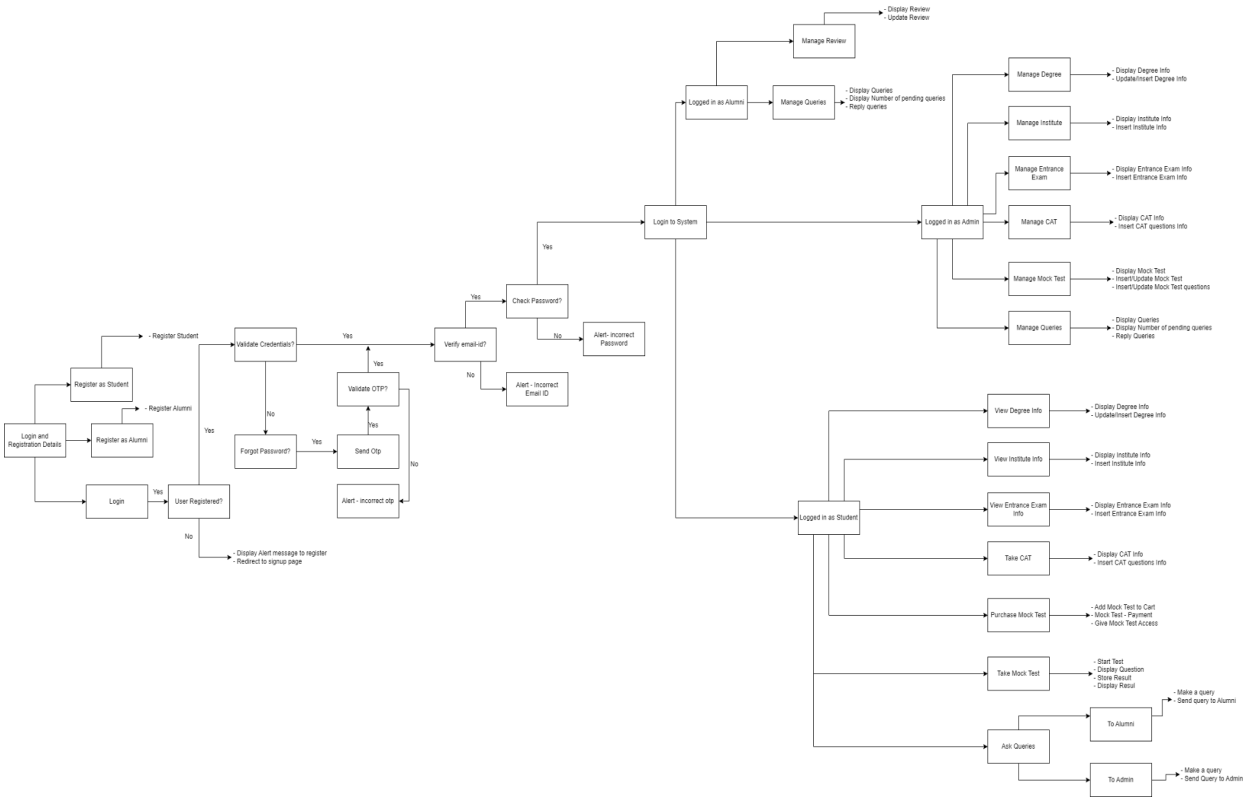

Login Details
Response
0.2
Login
Verify Login Details
Reply
tbl_login
Admin
Request
Response
0.5.1
View Entrance Exam Details
Request
Entrance Exam Details
tbl_entrance_exam
Entrance Exam Details
Reponse
0.5.2
Insert Entrance Exam Details
Request
Response


0.2
Login
Login Details
Login Status
tbl_login
Login Details
Response
0.6.1
View Mock Test
Request
Mock Test Details
tbl_mock_test
Request Mock Test Info
Response
0.6.7
Insert Mock Test
Mock Test Details
Mock Test Details
Response
Response
Admin
0.6.8
Insert Test Paper Details
Test Paper Details
Test Paper Details
Response
Response
tbl_test_paper


Login Details
Response
0.2
Login
Verify Login Details
Reply
tbl_login
Admin
Request
Response
0.8.1
View Query Details
Request
Query Details
tbl_admin_query
Query Answer
Reponse
0.8.2
Give Query Response
Query Answer
Response

Decision Tree and Decision Table

Decision Tree:



Decision Table:

Login				
Condition	Rule1	Rule2	Rule3	Rule4
Username	NO	NO	YES	YES
Password	NO	YES	NO	YES
Action	Error	Error	Error	Login

Forgot Password				
Conditions	Rule 1	Rule 2	Rule 3	Rule 4
Input Username or Email	YES	YES	YES	YES
Username or Email Exists	YES	NO	YES	YES
OTP Correct	-	-	YES	NO
Action	Allow Password Reset	Error	Reset Password	Error
	Send OTP			

Check User Type			
Condition			
Admin	YES	NO	NO
Alumni	NO	YES	NO
Student	NO	NO	YES

Action	Display Admin Panel	Display Alumni Panel	Display Student Home Page

Admin Panel						
Condition	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6
Manage Degree	YES	NO	NO	NO	NO	NO
Manage Institute	NO	YES	NO	NO	NO	NO
Manage Entrance Exam	NO	NO	YES	NO	NO	NO
Manage CAT	NO	NO	NO	YES	NO	NO
Manage Mock Test	NO	NO	NO	NO	YES	NO
Manage Queries	NO	NO	NO	NO	NO	YES
Action	- Display Degree Info	- Display Institute Info	- Display Entrance Exam Info	- Display CAT Info	- Display Mock Test	- Display Queries
	- Update/Insert Degree Info	- Insert Institute Info	- Insert Entrance Exam Info	- Insert CAT questions Info	- Insert/Update Mock Test	- Display Number of pending queries
					- Insert/Update Mock Test questions	- Reply Queries

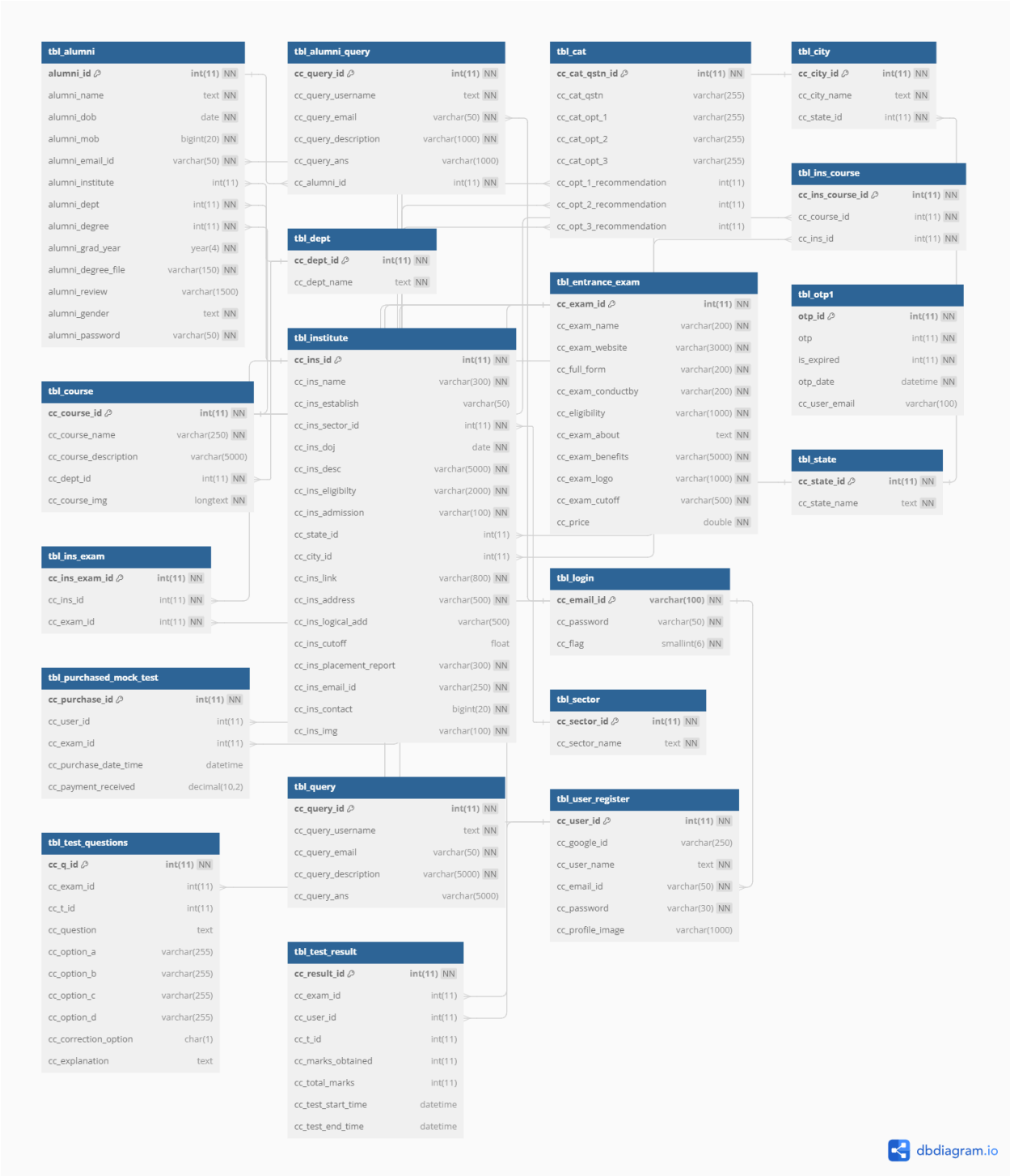
Student Panel								
Condition	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Rule 7	

View Degree Info	YES	NO	NO	NO	NO	NO	NO	NO
View Institute Info	NO	YES	NO	NO	NO	NO	NO	NO
View Entrance Exam Info	NO	NO	YES	NO	NO	NO	NO	NO
Take CAT	NO	NO	NO	YES	NO	NO	NO	NO
Purchase Mock Test	NO	NO	NO	NO	YES	NO	NO	NO
Take Mock Test	NO	NO	NO	NO	NO	YES	NO	NO
Ask Queries	NO	NO	NO	NO	NO	NO	YES	YES
Query To Alumni	NO	NO	NO	NO	NO	NO	YES	NO
Query To Admin	NO	NO	NO	NO	NO	NO	NO	YES
Action	- Display Degree Info	- Display Institute Info	- Display Entrance Exam Info	- Display CAT Info	- Add Mock Test to Cart	- Start Test	- Make a query	- Make a query
	- Insert Degree Info	- Insert Institute Info	- Insert Entrance Exam Info	- Insert CAT questions Info	- Mock Test - Payment	- Display Question	- Send query to Alumni	- Send Query to Admin
					- Give Mock Test Access	- Store Result		
						- Display Resul		

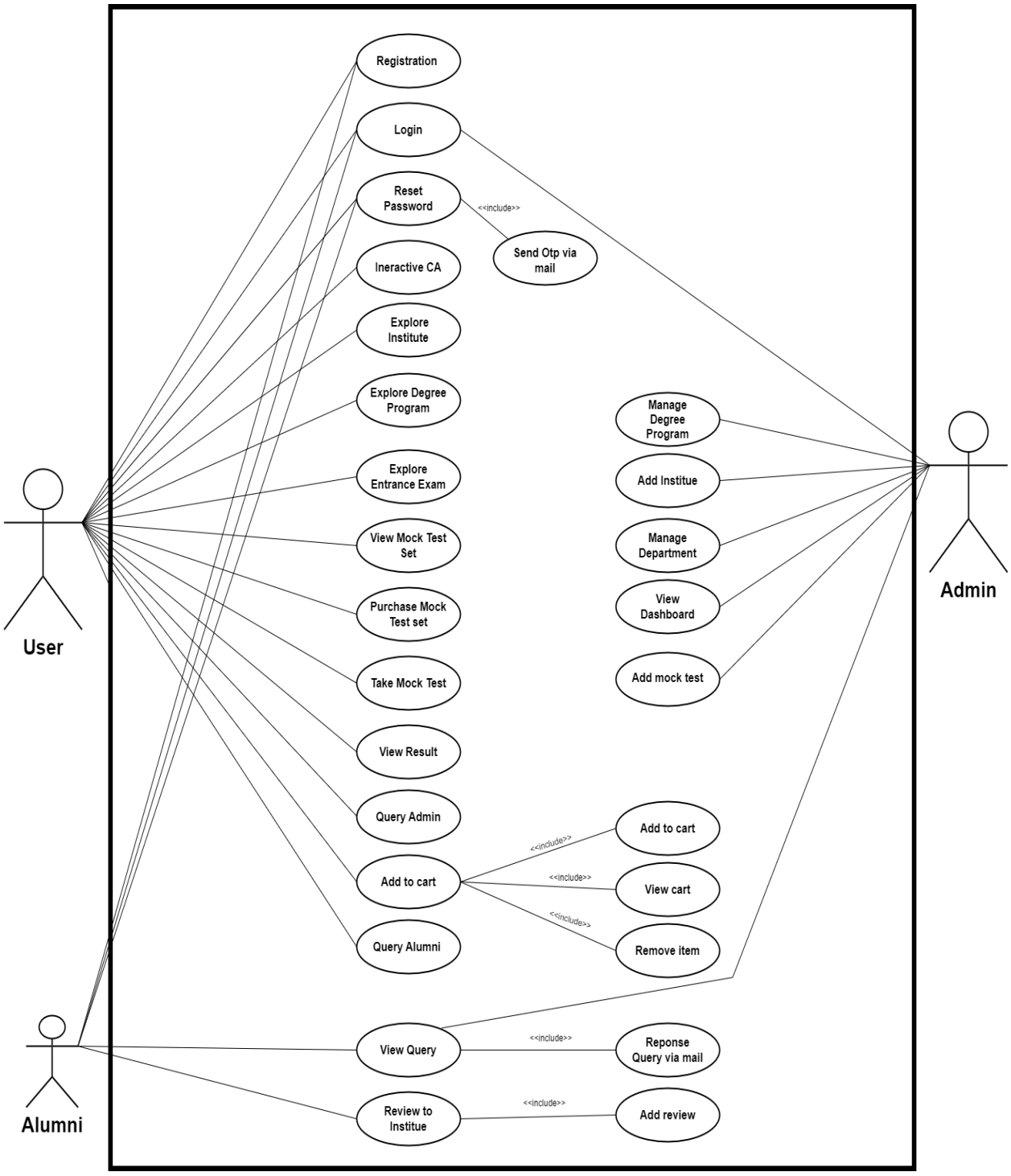
Alumni Panel		
Condition	Rule 1	Rule 2
Manage Review	YES	NO
Manage Queries	NO	YES
Action	- Display Review	- Display Queries
	- Update Review	- Display Number of pending queries
		- Reply queries

UML Diagrams

Class Diagram:

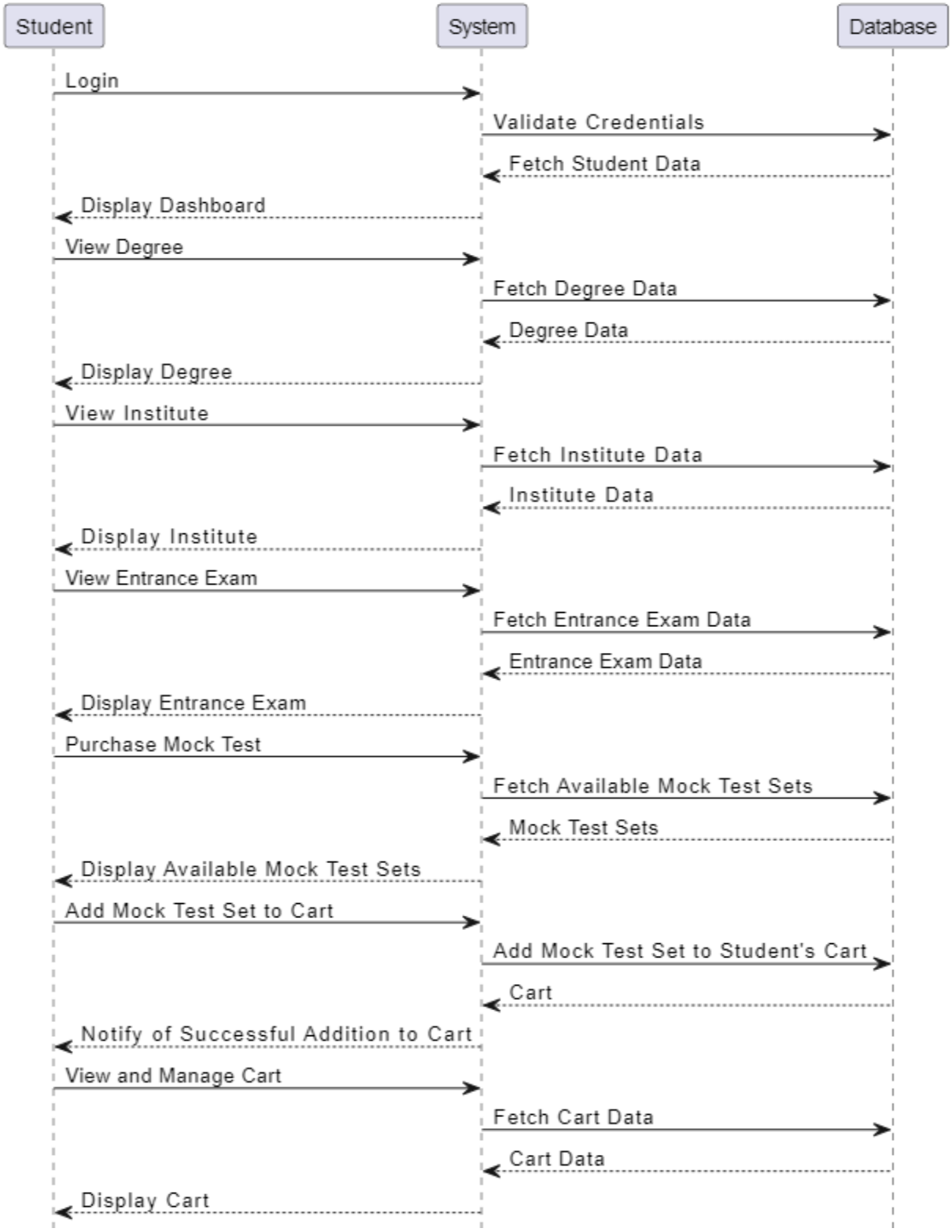


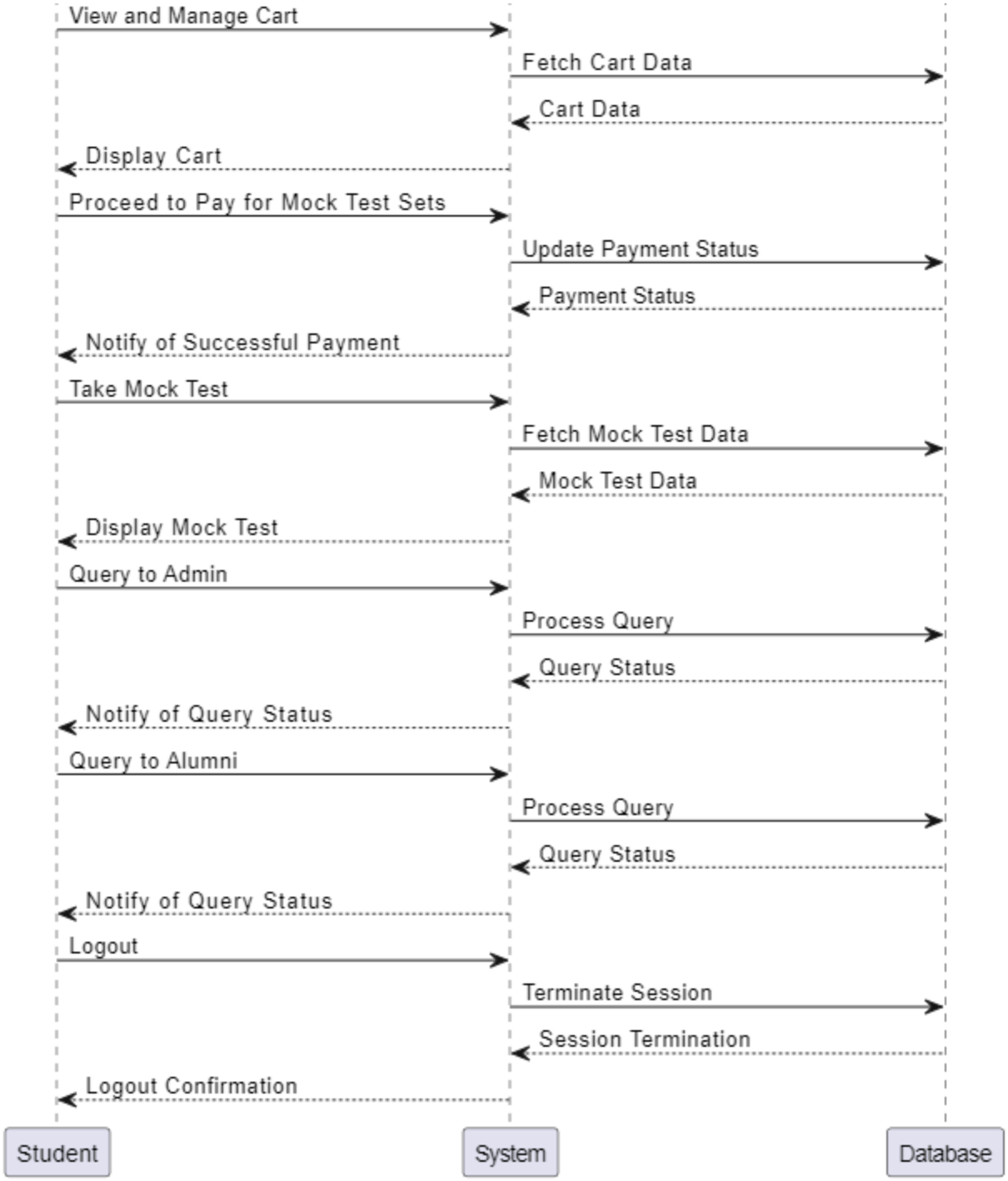
Use Case Diagram:



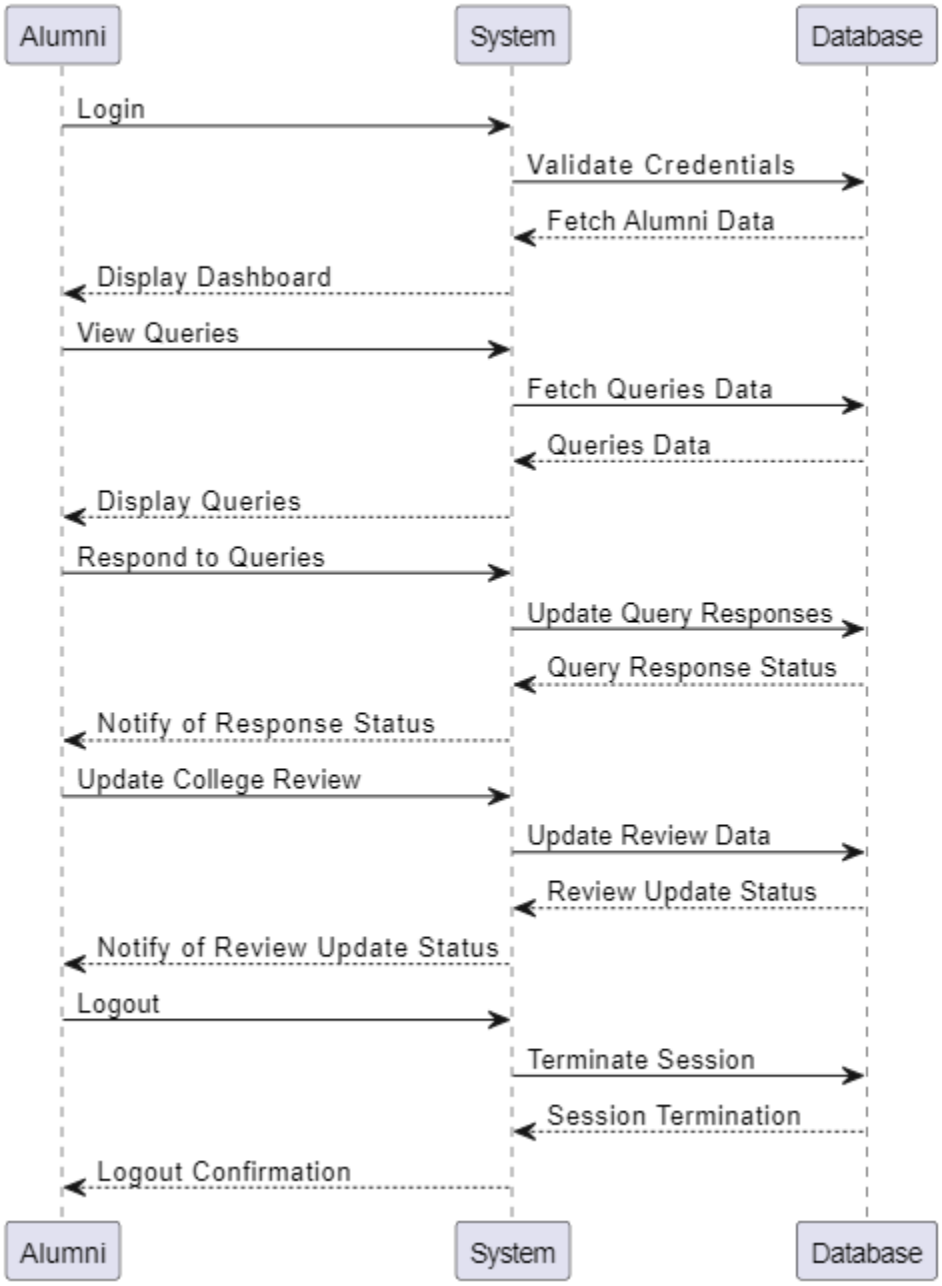
Sequence Diagram:

User:

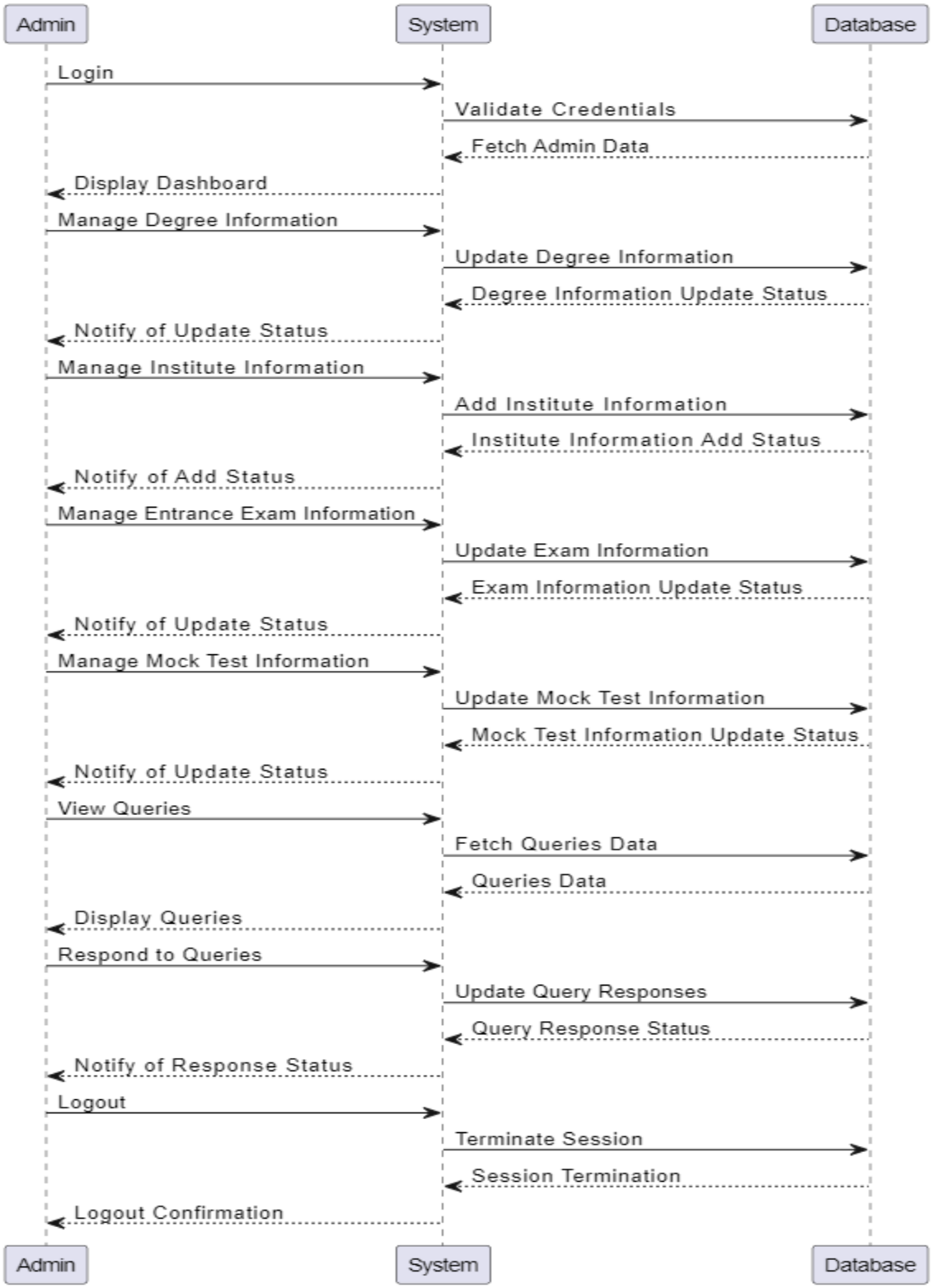



View and Manage Cart
Fetch Cart Data
Cart Data
Display Cart
Proceed to Pay for Mock Test Sets
Update Payment Status
Payment Status
Notify of Successful Payment
Take Mock Test
Fetch Mock Test Data
Mock Test Data
Display Mock Test
Query to Admin
Process Query
Query Status
Notify of Query Status
Query to Alumni
Process Query
Query Status
Notify of Query Status
Logout
Terminate Session
Session Termination
Logout Confirmation
Student
System
Database

Alumni:

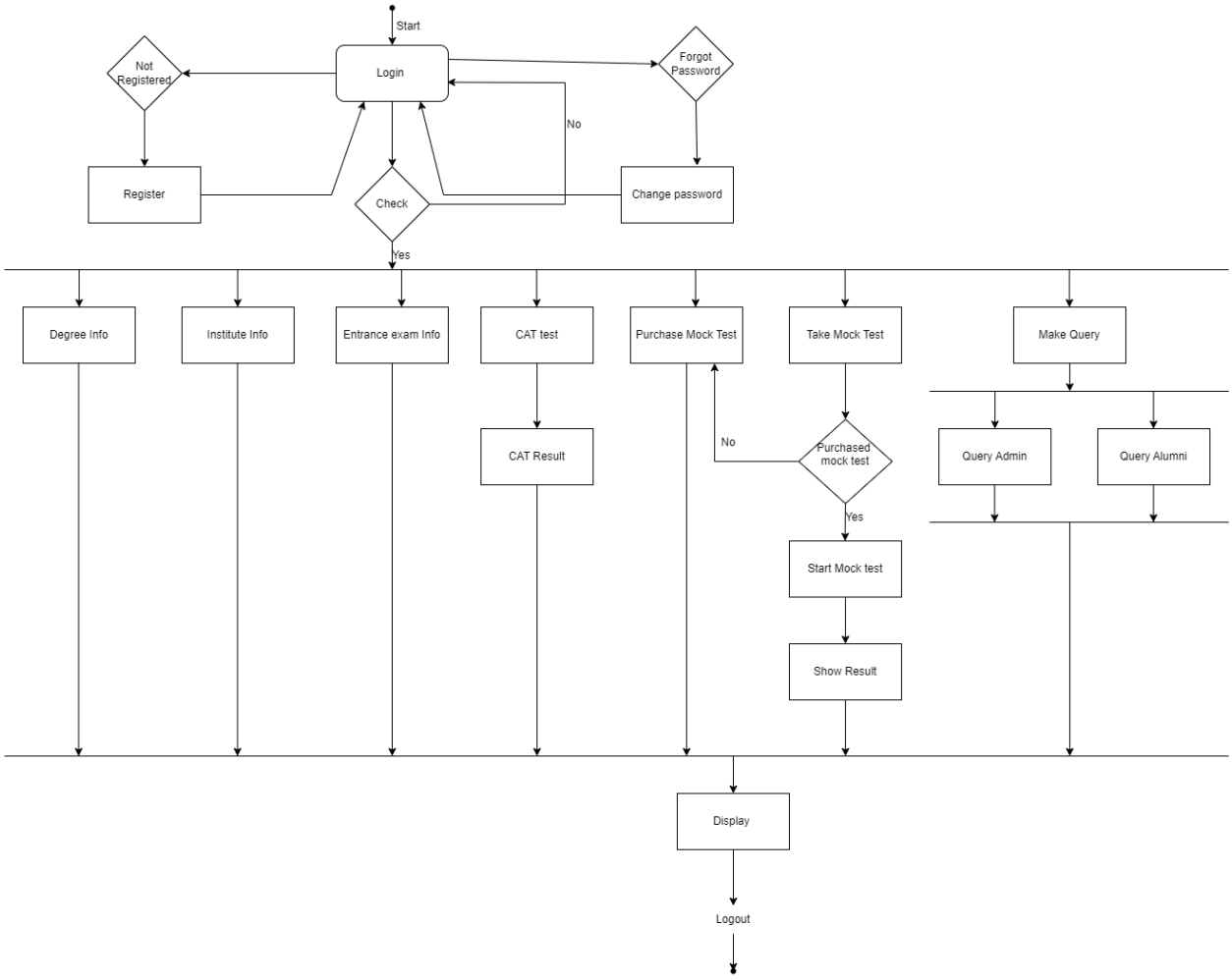

Alumni
System
Database
Login
Validate Credentials
Fetch Alumni Data
Display Dashboard
View Queries
Fetch Queries Data
Queries Data
Display Queries
Respond to Queries
Update Query Responses
Query Response Status
Notify of Response Status
Update College Review
Update Review Data
Review Update Status
Notify of Review Update Status
Logout
Terminate Session
Session Termination
Logout Confirmation
Alumni
System
Database

Admin:

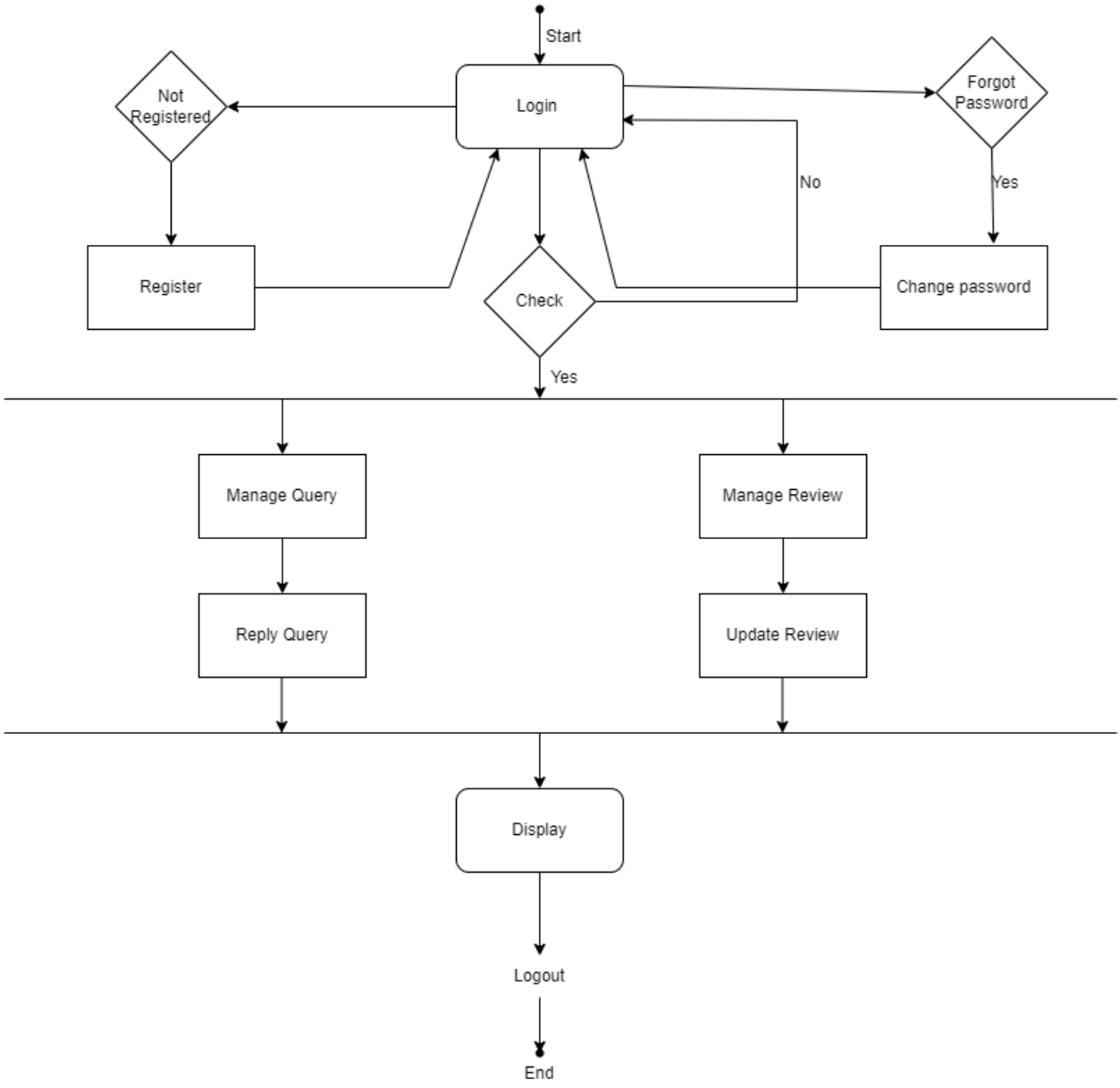

Admin
System
Database
Login
Validate Credentials
Fetch Admin Data
Display Dashboard
Manage Degree Information
Update Degree Information
Degree Information Update Status
Notify of Update Status
Manage Institute Information
Add Institute Information
Institute Information Add Status
Notify of Add Status
Manage Entrance Exam Information
Update Exam Information
Exam Information Update Status
Notify of Update Status
Manage Mock Test Information
Update Mock Test Information
Mock Test Information Update Status
Notify of Update Status
View Queries
Fetch Queries Data
Queries Data
Display Queries
Respond to Queries
Update Query Responses
Query Response Status
Notify of Response Status
Logout
Terminate Session
Session Termination
Logout Confirmation
Admin
System
Database

Activity Diagram:

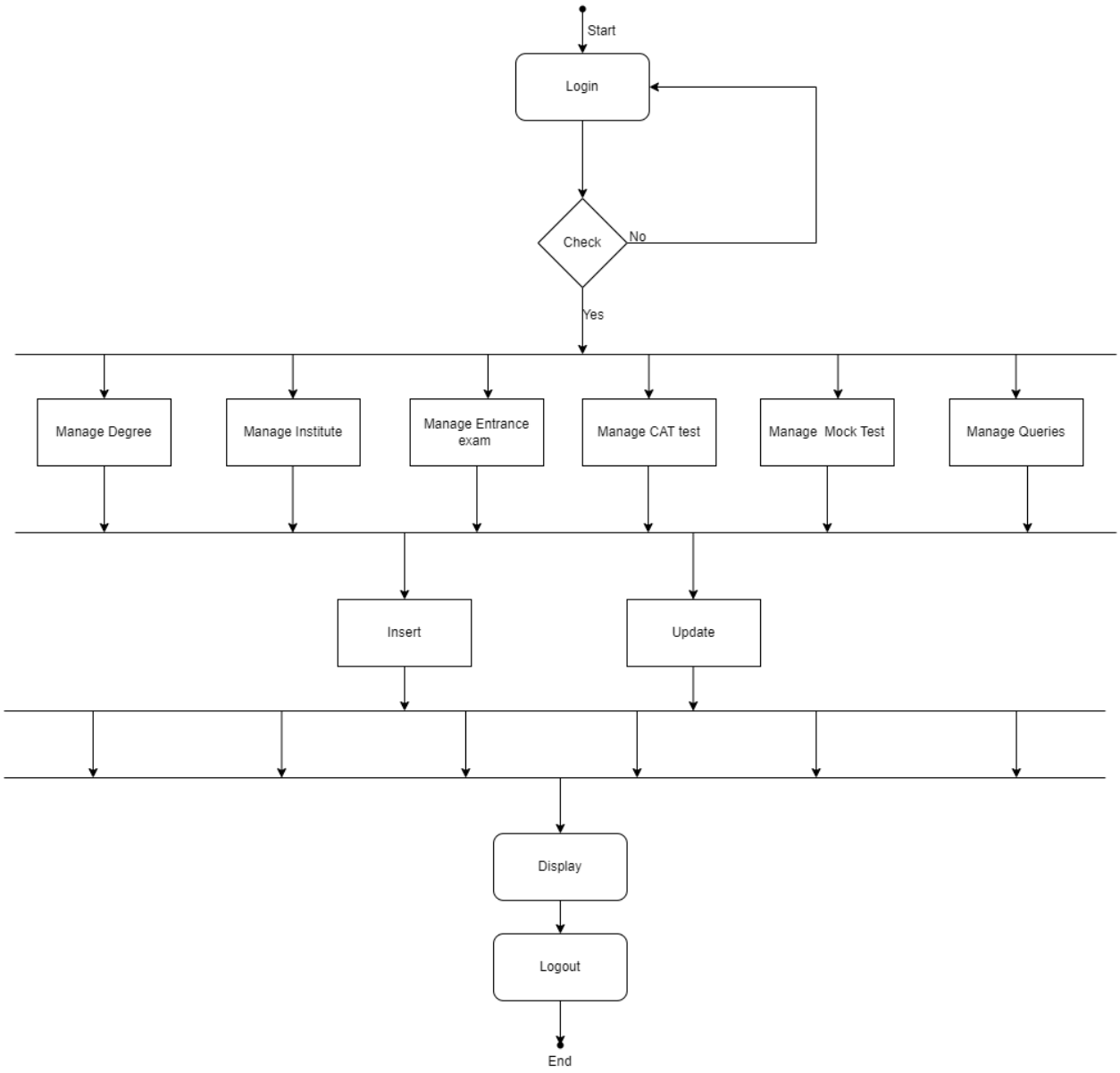
User:



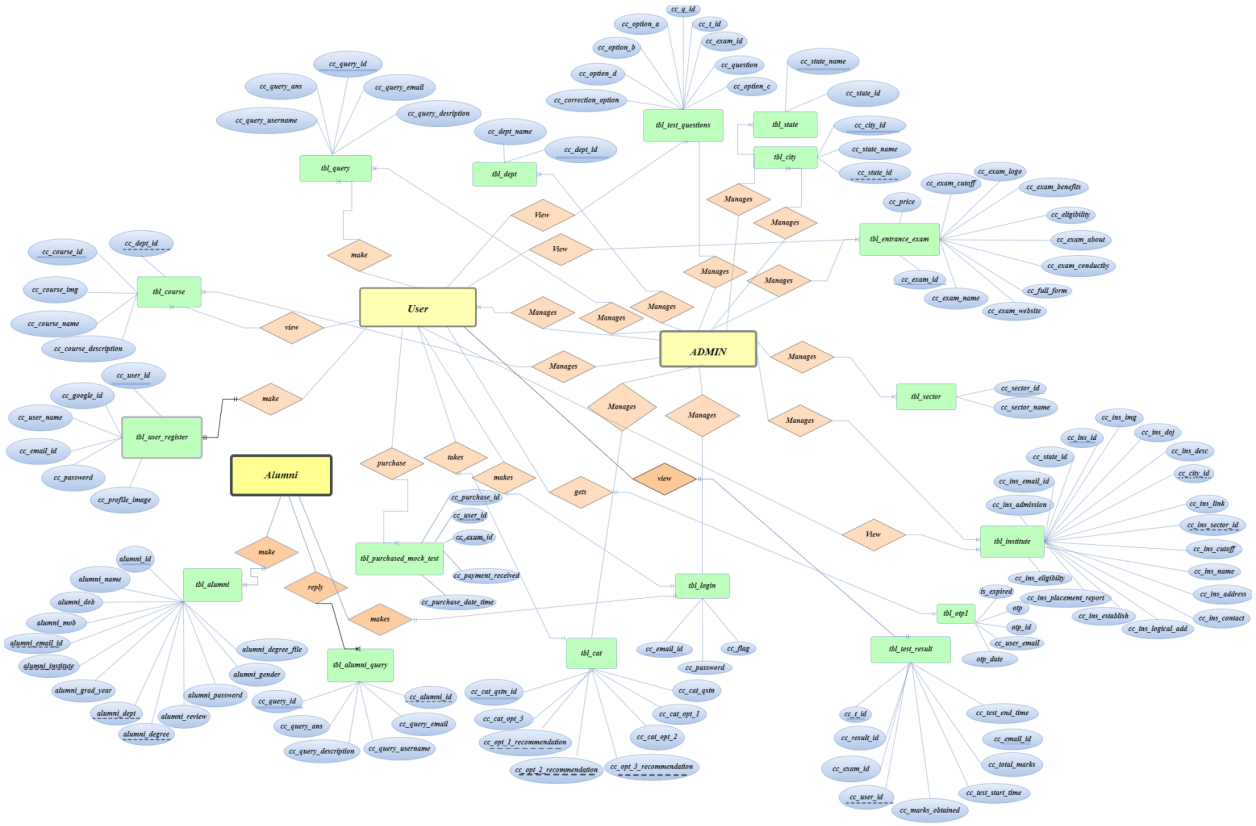
Alumni:


Start
Login
Not Registered
Forgot Password
No
Yes
Register
Check
Change password
Yes
Manage Query
Manage Review
Reply Query
Update Review
Display
Logout
End

Admin:


Start
Login
Check
No
Yes
Manage Degree
Manage Institute
Manage Entrance exam
Manage CAT test
Manage Mock Test
Manage Queries
Insert
Update
Display
Logout
End

ER Diagram:


User
ADMIN
Alumni
tbl_course
tbl_user_register
tbl_alumni
tbl_query
tbl_dept
tbl_test_questions
tbl_state
tbl_city
tbl_entrance_exam
tbl_sector
tbl_institute
tbl_purchased_mock_test
tbl_alumni_query
tbl_login
tbl_cat
tbl_otp1
tbl_test_result
make
view
Manages
View
purchase
takes
makes
gets
reply