CHAPTER-1

INTRODUCTION & OBJECTIVE OF PROJECT

1.1 Introduction of system

1.2 Scope of a system

1.3 Objective of project

1.4 Project overview

1.1 INTRODUCTION OF SYSTEM

This is an android application based on Charutar Vidhya Mandal management. It includes CVM admin login and college admin login. It shows details of faculties and students. It includes list of college and last year cut-off based on courses which can be helpful to students. URL link's of all colleges included in this application. It also shows event held by different colleges. It provides news of colleges as per date and time. It also provides the list of scholarships and its details and student can also apply for the scholarship. If user enter their marks and select the course in particular college then accordingly it shows the college list if they are eligible based on last year cut-off . It provides available seats for student which can be very helpful. This application provides Management Quota Online admission process and payment gateway. It shows placement information.

1.2 SCOPE OF A SYSTEM

To easily search the last year cut-off, details of college, placement details, scholarship and also to reach to a goal of online admission process of management quota with payment facilities.

1.3 OBJECTIVE OF PROJECT

The main objective of this project is to computerized the system and reduce manpower and time consumption.
It provides the following features:

- Maintain information of different colleges and faculty
- Easy and user-friendly interface to the user of the system
- Helpful to a student's in many different ways such as management quota online process, last year cut-off based on colleges and information of colleges like placement, scholarship, events, and details.
- Reduce paper work and increase work efficiency.
- A system which basically keep all records of project.

1.4 PROJECT OVERVIEW

- Each module intended to perform some specific task that provides management facilities.
- The following are the modules of admin management system:
    - Login
    - Cut-off
    - Student details
    - Faculties details
    - Events
    - News as per date
    - Scholarship
    - Management quota online admission process
    - Payment gateway
    - Placement information

- **LOGIN:**

    - This application provides login of CVM admin and college admin. It will have two admin panel. CVM admin have rights to add colleges, intercollege events etc. College admin have rights to add about their college information such as faculty, student's details, cut-off etc.

- **CUT-OFF:**

    - This application provides a module in which students can enter their marks and select the course then it shows the college list if they are eligible based on last year cut-off.

- **EVENTS AND NEWS:**

    - This application shows information of events held in college and intercollege events and also provides news as per key dates such as management online process key date, exam dates etc.

- **SCHOLARSHIP:**

    - This application provides information of scholarship and criteria for it. Also, different types of scholarship and link will be provided.

- **MANAGEMENT QUOTA ONLINE ADMISSION PROCESS:**

  - This application includes management quota online process in which students can fill the form choose the courses based on which mock round and final round will be provided of admission seat.

- **PAYMENT GATEWAY:**

  - This application also provides online payment gateway for management form so students have no need to go for a bank.

- **PLACEMENT INFORMATION:**

  - This application provides information of placement of different college. It shows how many students selected and in which company etc.

CHAPTER-2

TOOL, PLATFORMS AND LANGUAGES

2.1 Hardware requirements

2.2 Software requirements

2.3 Detail description of technology

2.1 HARDWARE REQUIREMENTS:

- Processor Pentium –V or higher
- Processor Speed: 2.3 GHz
- Hard disk space: more than 100 GB
- Ram Memory: Up to 32 GB

2.2 SOFTWARE REQUIREMENT:

- Operating System Windows
- Android Studio
- Database Server MySQL

2.3 DETAILS DESCRIPTION OF TECHNOLOGY:

- Android is a mobile operating system developed by Google. It is based on a modified version of the Linux kernel and other open source software and is designed primarily for touchscreen mobile devices such as smartphones and tablets. Variants of Android are also used on game consoles, digital cameras, PCs and other electronics.

CHAPTER-3

COMPLETE PROJECT STRUCTURE

3.1 E-r diagram

3.2 Data flow diagram

3.3 Use-case diagram

3.4 Process flow diagram

3.5 Sequence diagram

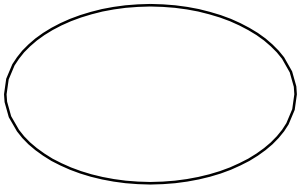
3.6 Data dictionary

3.1 E-R DIAGRAM:

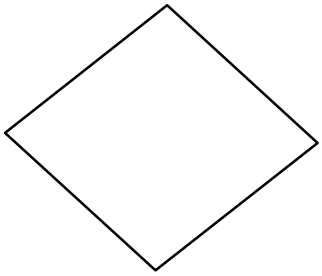
ER-Diagram created to represent these entities, attributes and relationship graphically are called entity relationship diagram. An ER model is typically implemented as a database. In the case of a relational database, which store date in tables, every row of each table represents one instance of an entity.

- **SYMBOLS**

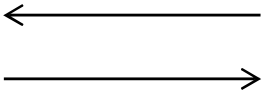
ENTITY



ATTRIBUTE

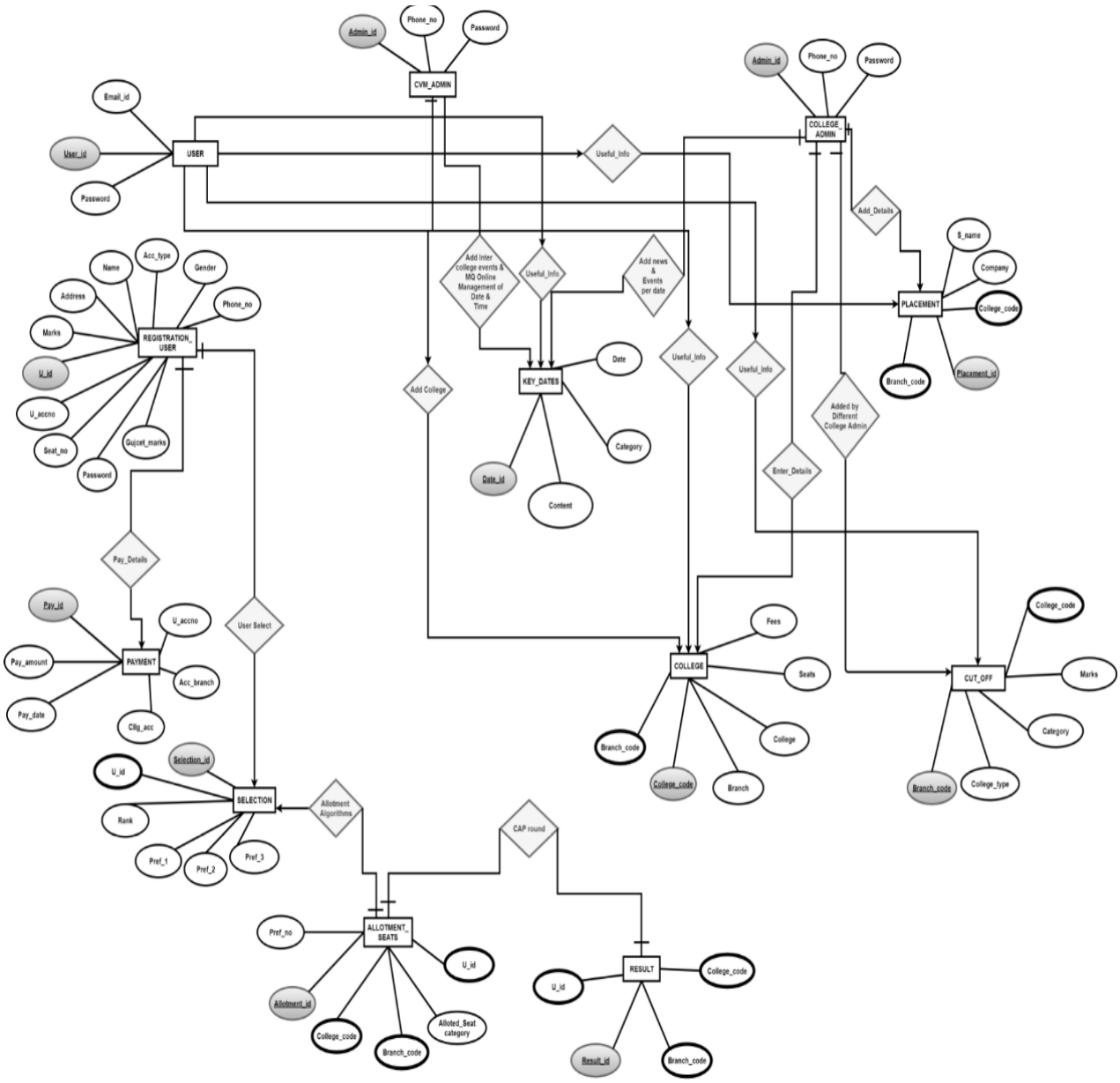


RELATIONSHIP SET



LINE

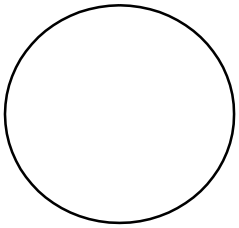
E R DIAGRAM:


Admin_id
Phone_no
Password
CVM_ADMIN
Admin_id
Phone_no
Password
COLLEGE ADMIN
Email_id
User_id
USER
Password
Useful_Info
Add_Details
S_name
Company
College_code
PLACEMENT
Branch_code
Placement_id
Name
Acc_type
Gender
Address
Phone_no
Marks
U_id
U_accno
Seat_no
Quicet_marks
Password
REGISTRATION_ USER
Add Inter college events & MQ Online Management of Date & Time
Useful_Info
Add news & Events per date
Add College
KEY_DATES
Date
Category
Date_id
Content
Useful_Info
Useful_Info
Added by Different College Admin
Enter_Details
Pay_Details
Pay_id
U_accno
Pay_amount
PAYMENT
Acc_branch
Pay_date
Chg_acc
User Select
Selection_id
U_id
Rank
Pref_1
Pref_2
Pref_3
SELECTION
Allotment Algorithms
CAP round
Fees
Seats
College
Branch_code
College_code
Branch
COLLEGE
College_code
Marks
Category
College_type
Branch_code
CUT_OFF
Pref_no
ALLOTMENT_ SEATS
U_id
Allotment_id
College_code
Branch_code
Alloted_Seat category
U_id
RESULT
College_code
Result_id
Branch_code

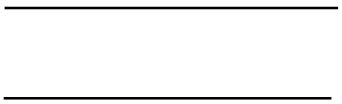
3.2 DATA FLOW DIAGRAM:

A Data Flow Diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its process aspects. A DFD is often used as a preliminary step to create an overview of the system without going into detail, which can later be elaborated.

- **SYMBOLS**

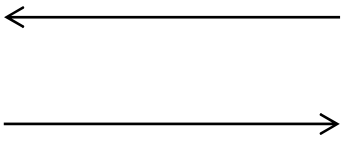


FUNCTION



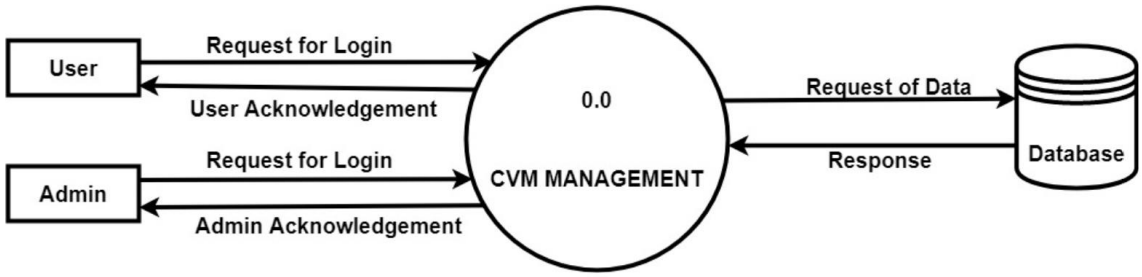
FILE/DATABASE

INPUT/OUTPUT

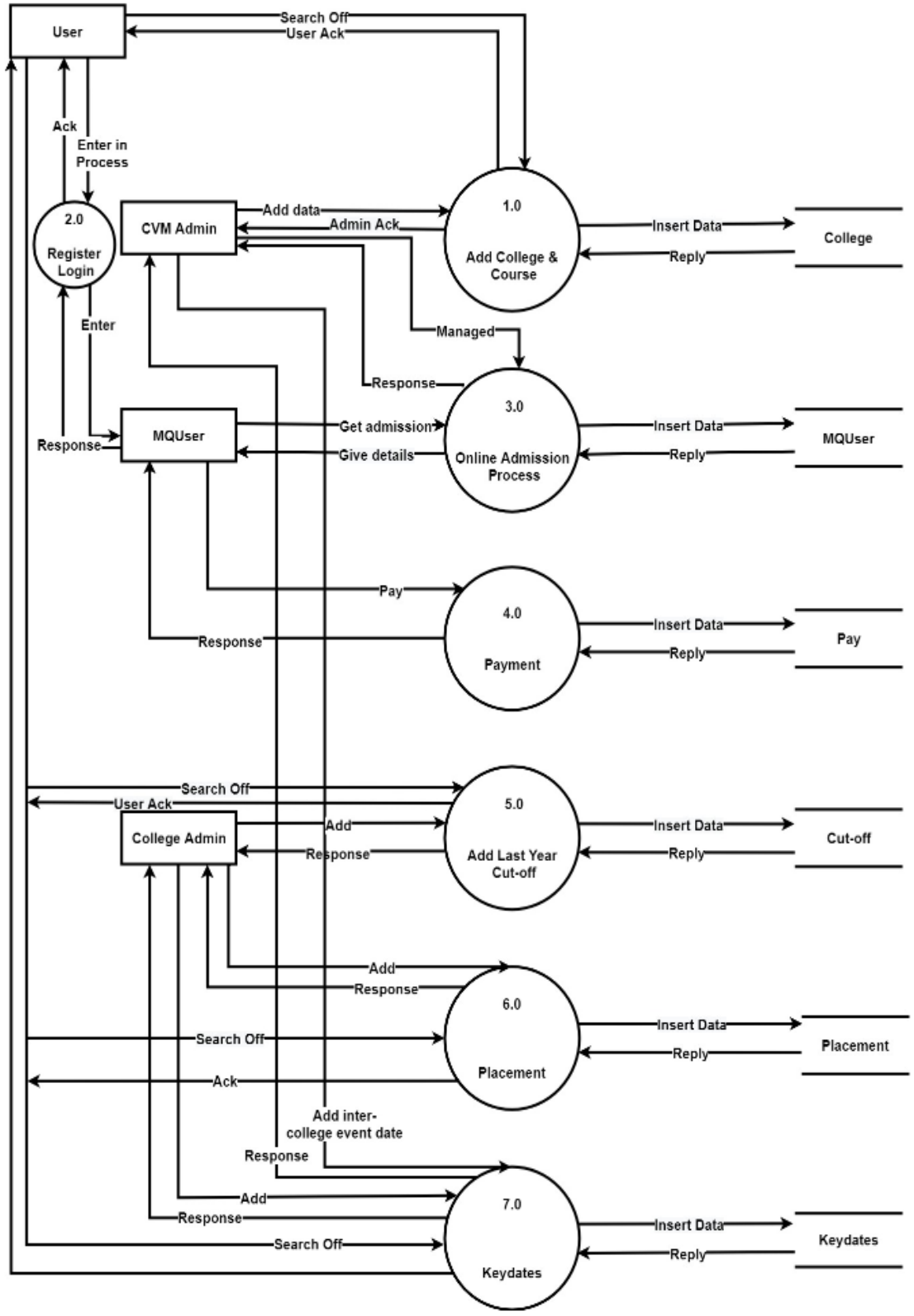


FLOW

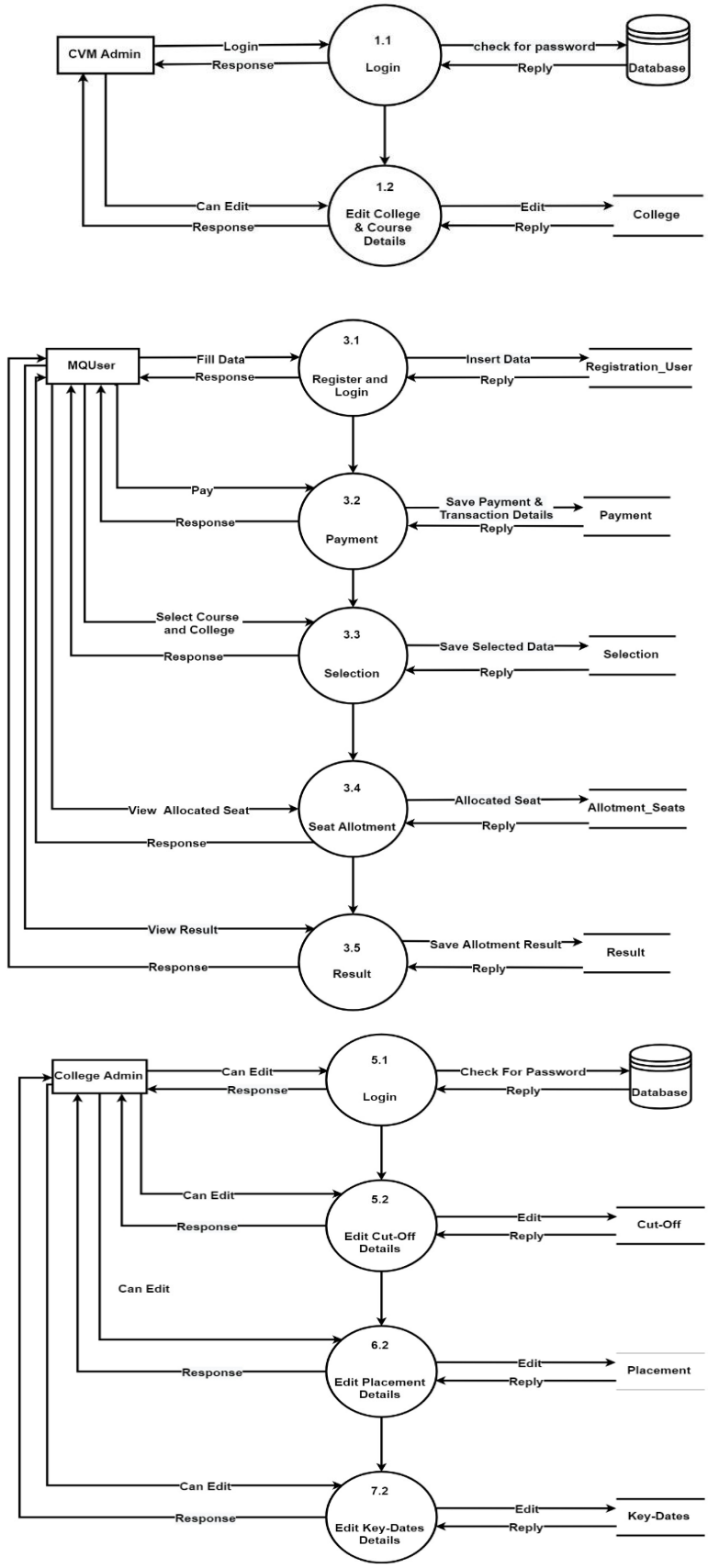
LEVEL 0 DIAGRAM



LEVEL 1


User
Search Off
User Ack
Ack
Enter in Process
2.0
Register Login
Enter
CVM Admin
Add data
Admin Ack
1.0
Add College & Course
Insert Data
Reply
College
Managed
Response
3.0
Online Admission Process
Get admission
Give details
Insert Data
Reply
MQUser
Response
MQUser
Pay
4.0
Payment
Insert Data
Reply
Pay
Response
Search Off
User Ack
College Admin
Add
Response
5.0
Add Last Year Cut-off
Insert Data
Reply
Cut-off
Add
Response
Search Off
Ack
6.0
Placement
Insert Data
Reply
Placement
Add inter-college event date
Response
Add
Response
Search Off
7.0
Keydates
Insert Data
Reply
Keydates

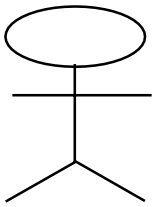
LEVEL 2


CVM Admin
Login
Response
1.1
Login
check for password
Reply
Database
1.2
Edit College & Course Details
Can Edit
Response
Edit
Reply
College
MQUser
Fill Data
Response
3.1
Register and Login
Insert Data
Reply
Registration_User
Pay
Response
3.2
Payment
Save Payment & Transaction Details
Reply
Payment
Select Course and College
Response
3.3
Selection
Save Selected Data
Reply
Selection
View Allocated Seat
Response
3.4
Seat Allotment
Allocated Seat
Reply
Allotment_Seats
View Result
Response
3.5
Result
Save Allotment Result
Reply
Result
College Admin
Can Edit
Response
5.1
Login
Check For Password
Reply
Database
Can Edit
Response
5.2
Edit Cut-Off Details
Edit
Reply
Cut-Off
Can Edit
Response
6.2
Edit Placement Details
Edit
Reply
Placement
Can Edit
Response
7.2
Edit Key-Dates Details
Edit
Reply
Key-Dates

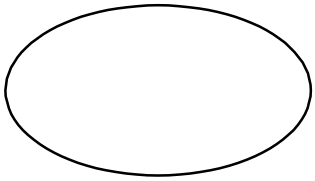
3.3 USE-CASE DIAGRAM

- Use case diagram are usually referred to as behavior diagram used to describe a set of action (use cases) that some system or system (subjects should or can perform in collaboration with one or more external users of the system actors).

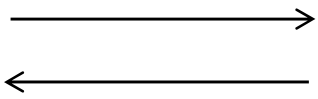
- **SYMBOLS**



ACTOR

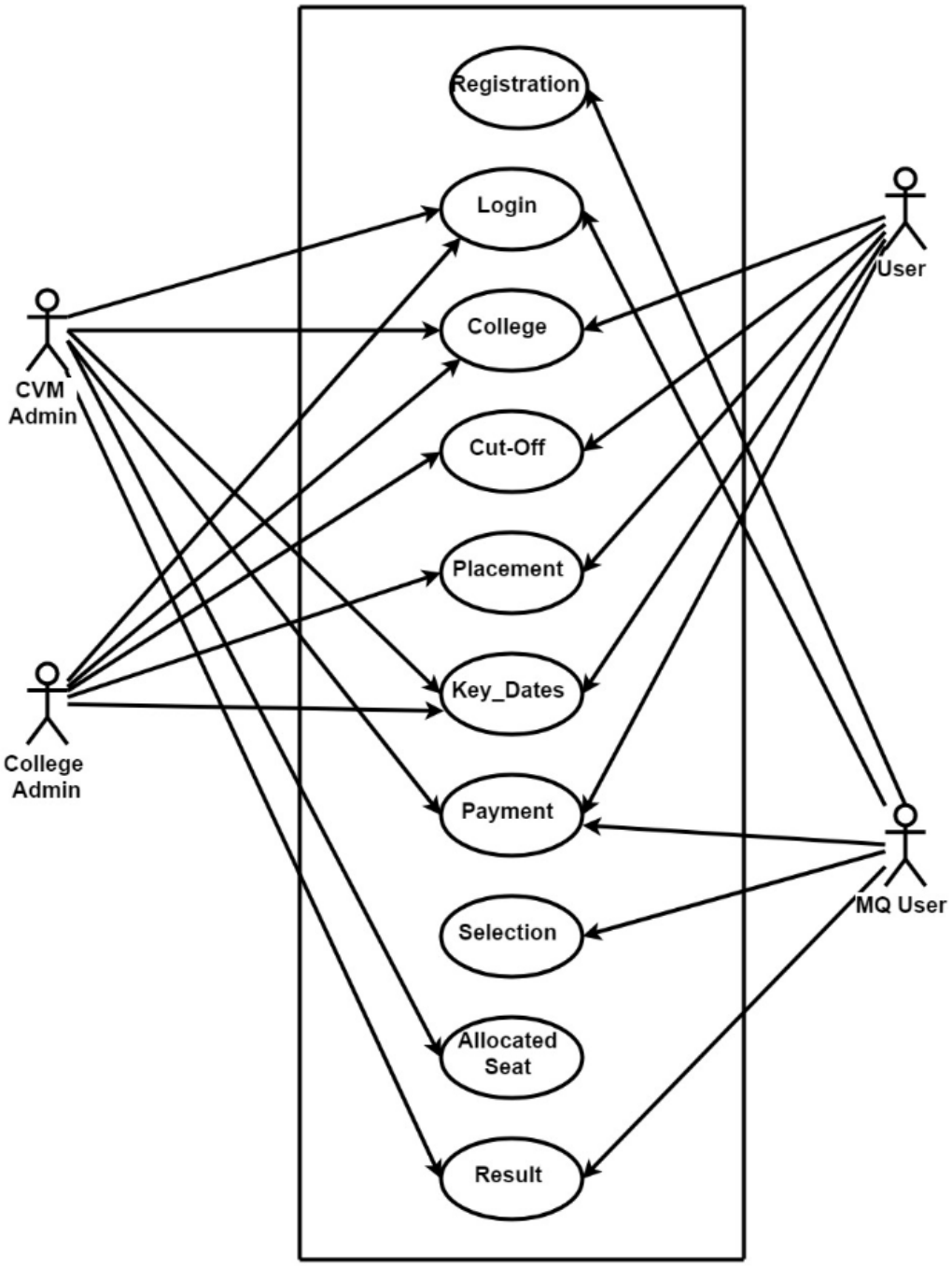


USE CASE



RELATIONSHIP

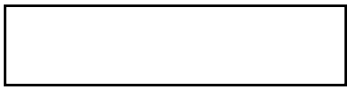
USE-CASE DIAGRAM



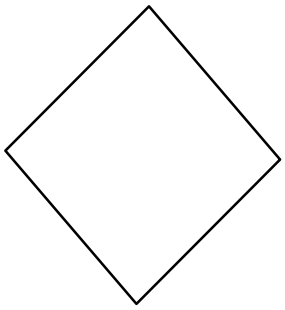
3.4 PROCESS FLOW DIAGRAM

Process flow diagram is the diagram which is used to represent the process of whole system. Diagram represents the flow of input and output in system.

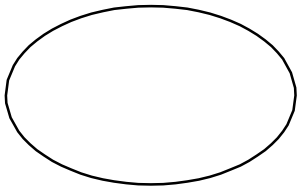
- **SYMBOLS**



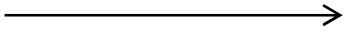
PROCESS



DECISION

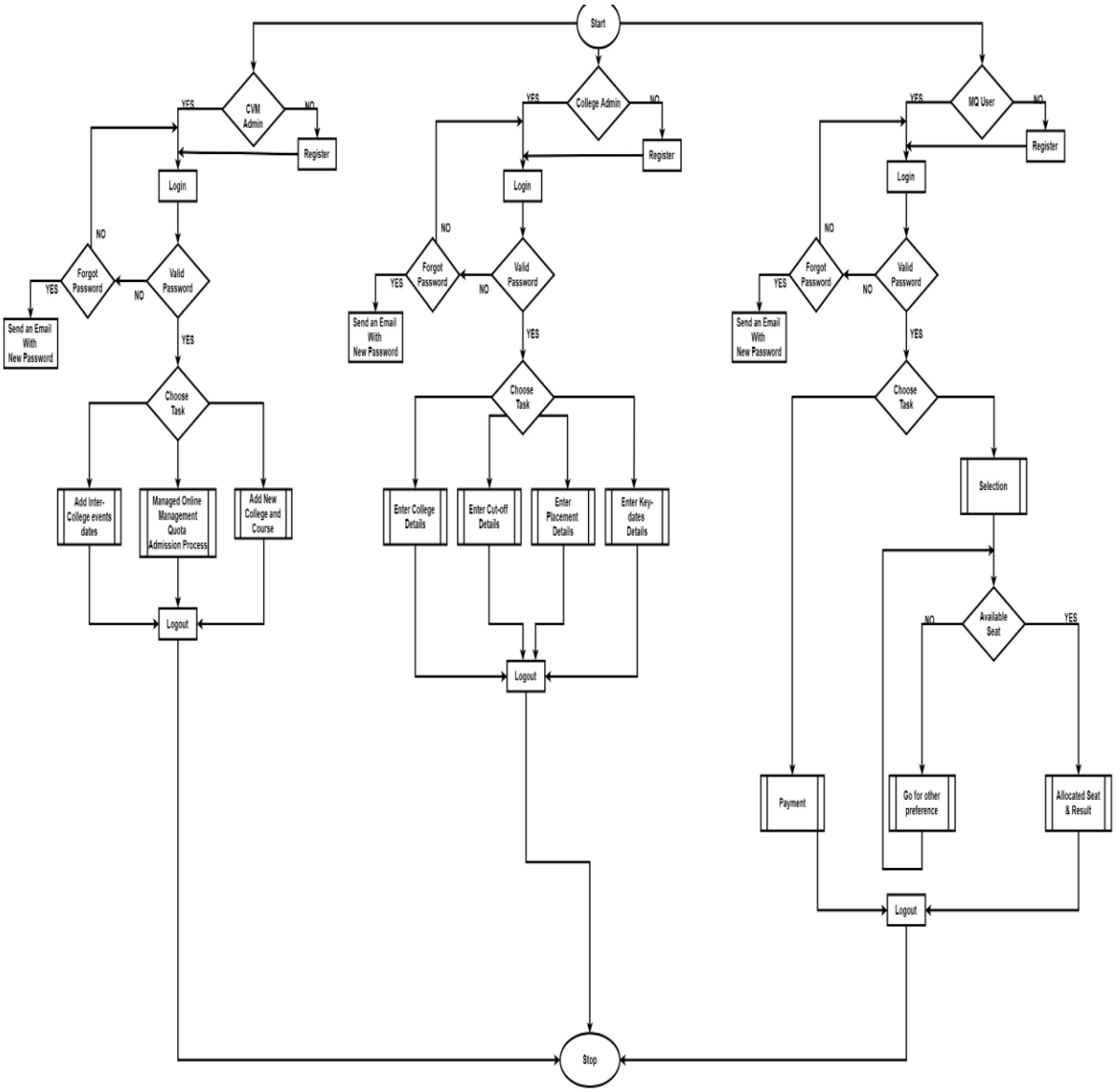


START POINT / END POINT



DIRECTION

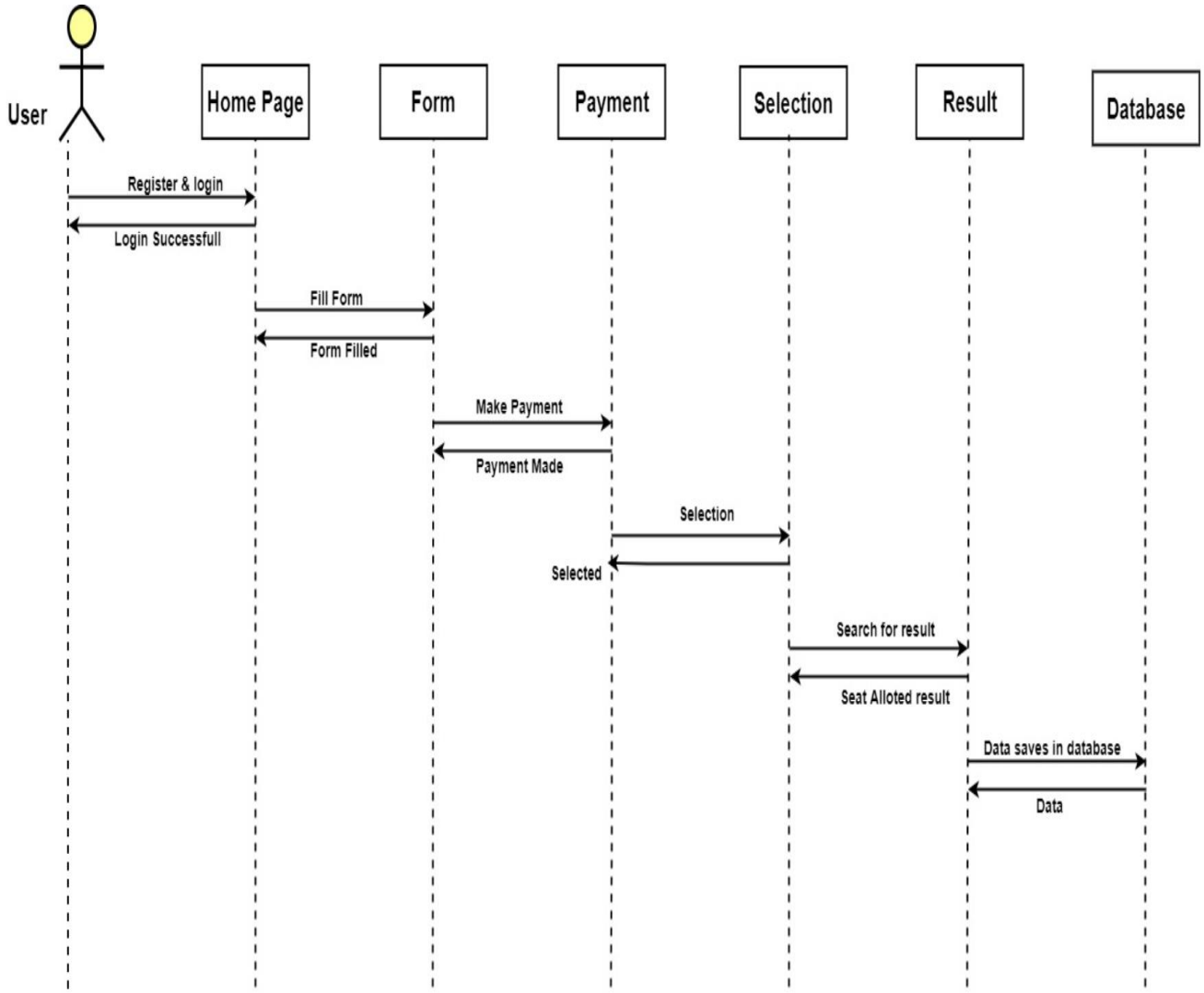
PROCESS FLOW DIAGRAM



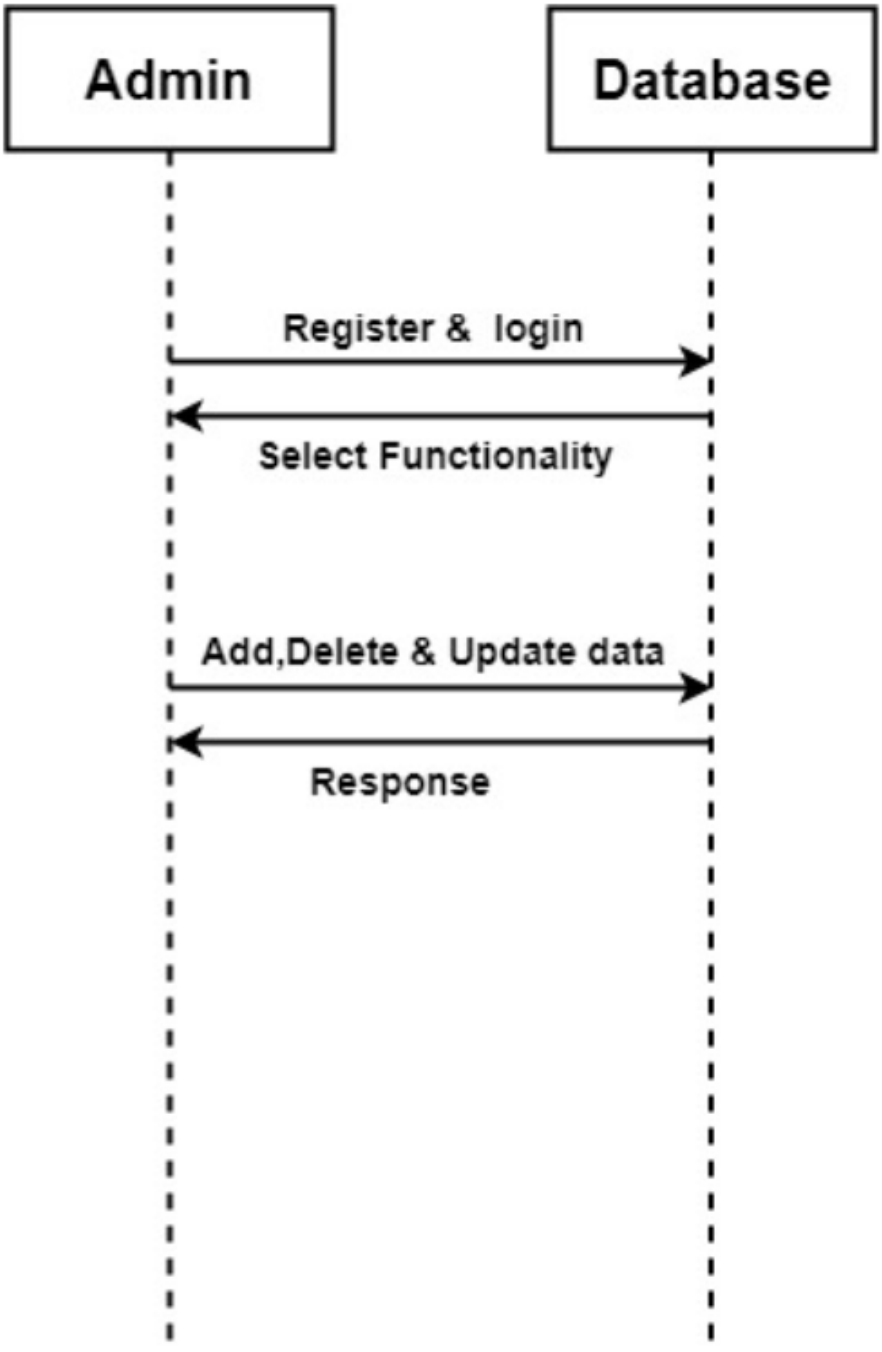
3.5 SEQUENCE DIAGRAM

- **Class:-**Class role describe the way object will because in content the symbol illustrate class roll but not list object attribute.
- **Activation:-**Activation boxes represents the time and object need to complete the task.When an object is busy executing process, or waiting for a replied message use a thin rectangle place vertically on its timeline. Message are arrows that represents communications between objects.

SEQUENCE DIAGRAM FOR USER



SEQUENCE DIAGRAM FOR ADMIN



3.6 DATA DICTIONARY

The second major component of the structured analysis model of the system is the data dictionary. The data dictionary contains formal definitions of all the data items shown in the data-flow diagrams.

A data dictionary is a file or a set of files that contains a database's metadata. The data dictionary contains records about other objects in the database, such as data ownership, data relationships to other objects, and other data.

1. Name:- USER

Primary Key:- User_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	User_id	Varchar	20	Primary Key
2.	Email_id	Varchar	30	-
3.	Password	Varchar	20	-

2. Name:- CVM_ADMIN

Primary Key:- Admin_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	Admin_id	Varchar	20	Primary Key
2.	Phone_no	Big Integer	15	-
3.	Password	Varchar	20	-

3. Name:- COLLEGE_ADMIN

Primary Key:- Admin_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	Admin_id	Varchar	20	Primary Key
2.	Phone_no	Big Integer	15	-
3.	Password	Varchar	20	-

4. Name:- REGISTRATION_USER

Primary Key:- U_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	U_id	Varchar	20	Primary Key
2.	Name	Varchar	30	-
3.	Gender	Varchar	8	-
4.	Address	Varchar	50	-
5.	Phone_no	Big Integer	15	-
6.	Seat_no	Varchar	20	-
7.	Marks	Integer	5	-
8.	Gujcet_marks	Integer	5	-
9.	U_accno	Big Integer	20	-
10.	Acc_type	Varchar	10	-
11.	Password	Varchar	20	-

5. **Name:- KEY_DATES**

   Primary Key:- Date_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	Date_id	Varchar	20	Primary Key
2.	Date	Date	-	-
3.	Category	Varchar	20	-
4.	Content	Varchar	50	-

6. **Name:- PLACEMENT**

   Primary Key:- Placement_id

   Foreign Key:- College_code , Branch_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	Placement_id	Varchar	20	Primary Key
2.	College_code	Varchar	20	Foreign Key
3.	Branch_code	Varchar	20	Foreign Key
4.	S_name	Varchar	20	-
5.	Company	Varchar	20	-

7. **Name:- COLLEGE**

   Primary Key:- College_code

   Foreign Key:- Branch_code

Sr. no	Field Name	Field Type	Size	Constraints
1.	College_code	Varchar	20	Primary Key
2.	College	Varchar	40	-
3.	Branch_code	Varchar	20	Foreign Key
4.	Branch	Varchar	40	-
5.	Seats	Integer	5	-
6.	Fees	Integer	7	-

8. **Name:- CUT-OFF**

   Primary Key:- Branch_code

   Forign Key:- College_code

Sr. no	Field Name	Field Type	Size	Constraints
1.	Branch_code	Varchar	20	Primary Key
2.	College_code	Varchar	20	Foreign Key
3.	College_type	Varchar	10	-
4.	Category	Varchar	10	-

5.	Marks	Integer	5	-

9. Name:- PAYMENT

Primary Key:- Pay_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	Pay_id	Varchar	20	Primary Key
2.	Pay_amount	Integer	5	-
3.	Pay_date	Date	-	-
4.	U_accno	Big Integer	20	-
5.	Cllg_acc	Big Integer	20	-
6.	Acc_branch	Varchar	30	-

10.Name:- SELECTION

Primary Key:- Selection_id

Foreign Key:- U_id

Sr. no	Field Name	Field Type	Size	Constraints
1.	Selection_id	Varchar	20	Primary Key
2.	U_id	Varchar	20	Foreign Key
3.	Rank	Integer	5	-
4.	Pref_1	Varchar	40	-
5.	Pref_2	Varchar	40	-
6.	Pref_3	Varchar	40	-

11.Name:- ALLOTMENT_SEATS

Primary Key:- Allotment_id

Foreign Key:- U_id , College_code , Branch_code

Sr. no	Field Name	Field Type	Size	Constraints
1.	Allotment_id	Varchar	20	Primary Key
2.	U_id	Varchar	20	Foreign Key
3.	College_code	Integer	20	Foreign Key
4.	Branch_code	Varchar	20	Foreign Key
5.	Pref_no	Varchar	40	-
6.	Alloted_seatcategory	Varchar	30	-

12.Name:- RESULT

Primary Key:- Result_id

Foreign Key:- U_id , Branch_code , College_code

Sr. no	Field Name	Field Type	Size	Constraints
1.	Result_id	Varchar	20	Primary Key
2.	U_id	Varchar	20	Foreign Key
3.	Branch_code	Vrachar	20	Foreign Key
4.	College_code	Varchar	20	Foreign Key

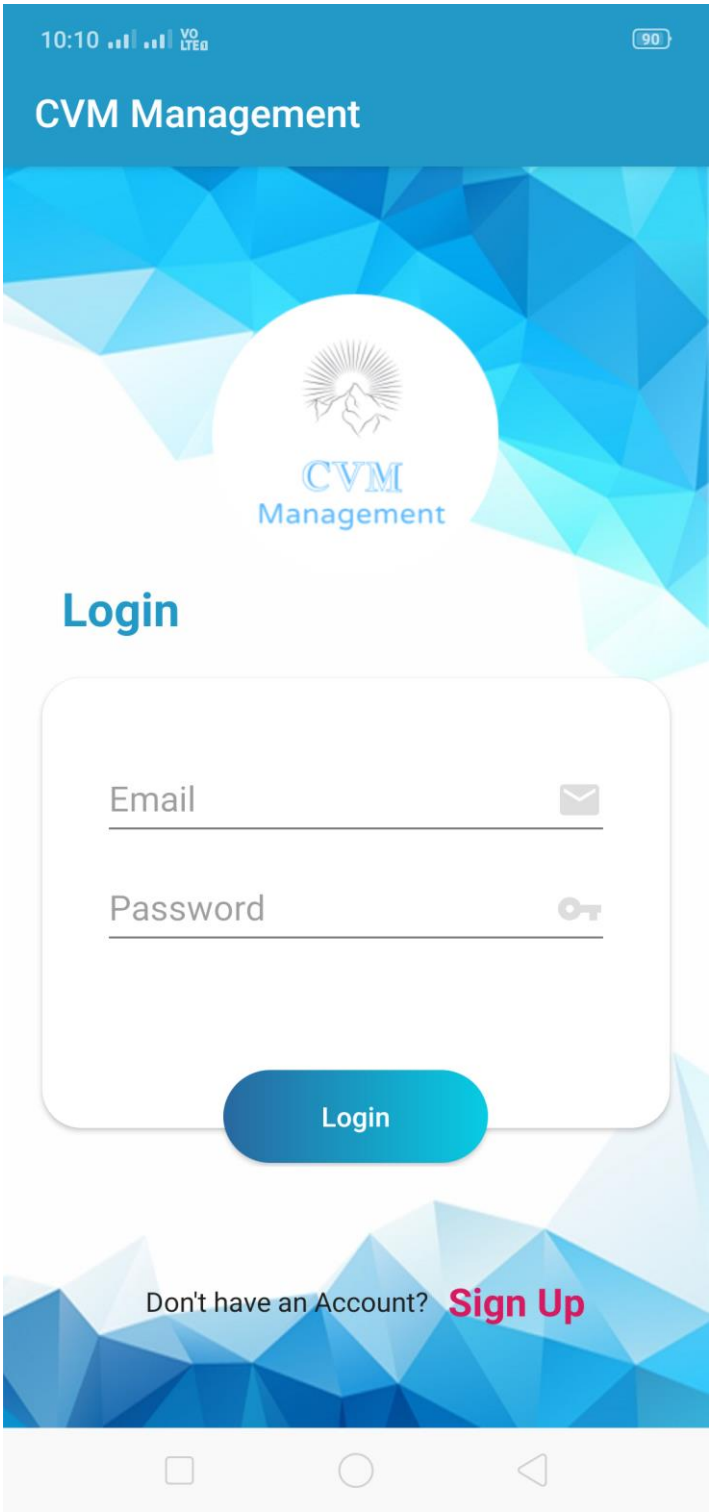
CHAPTER 4

SNAPSHOTS

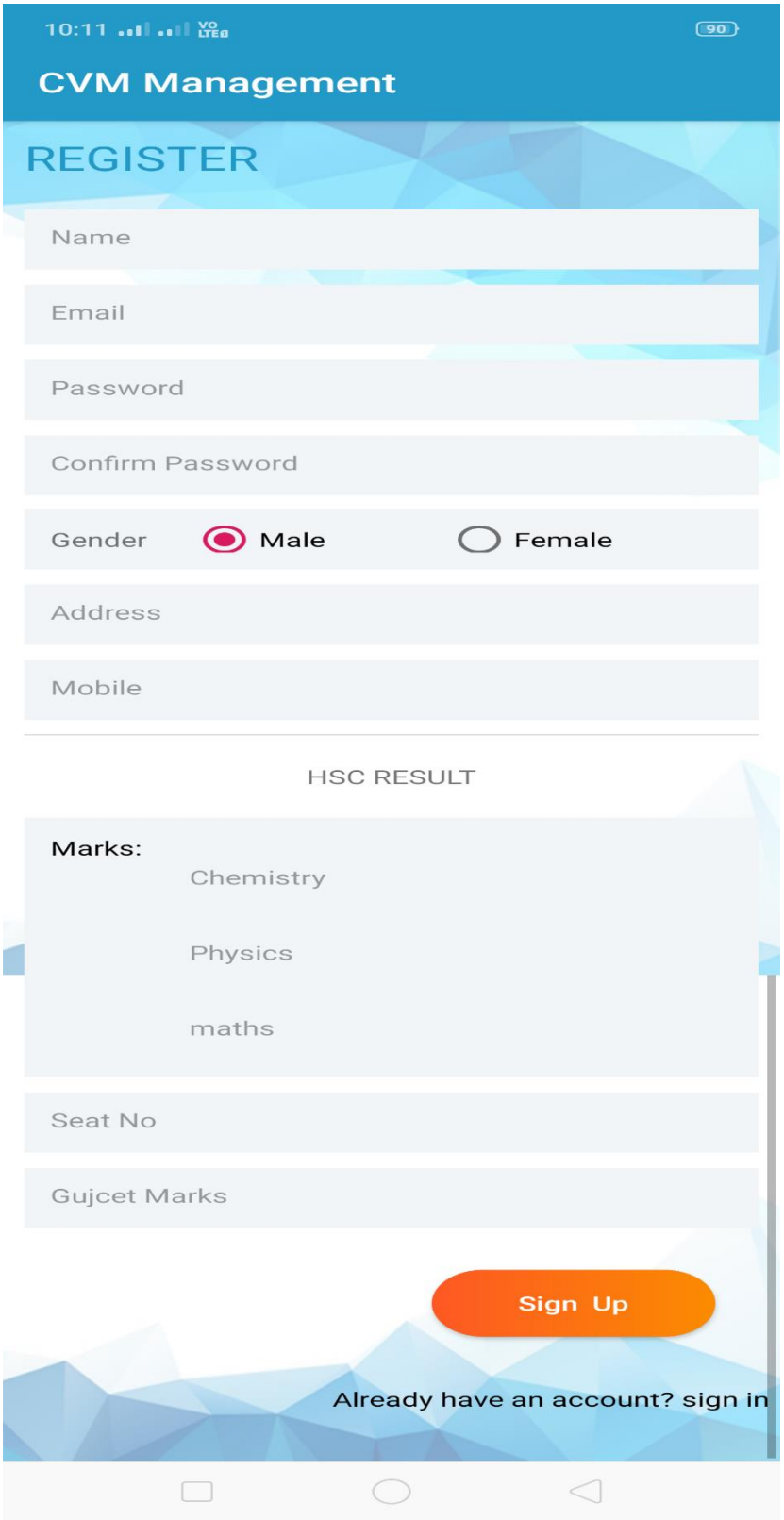
SNAPSHOTS

1. App Page:

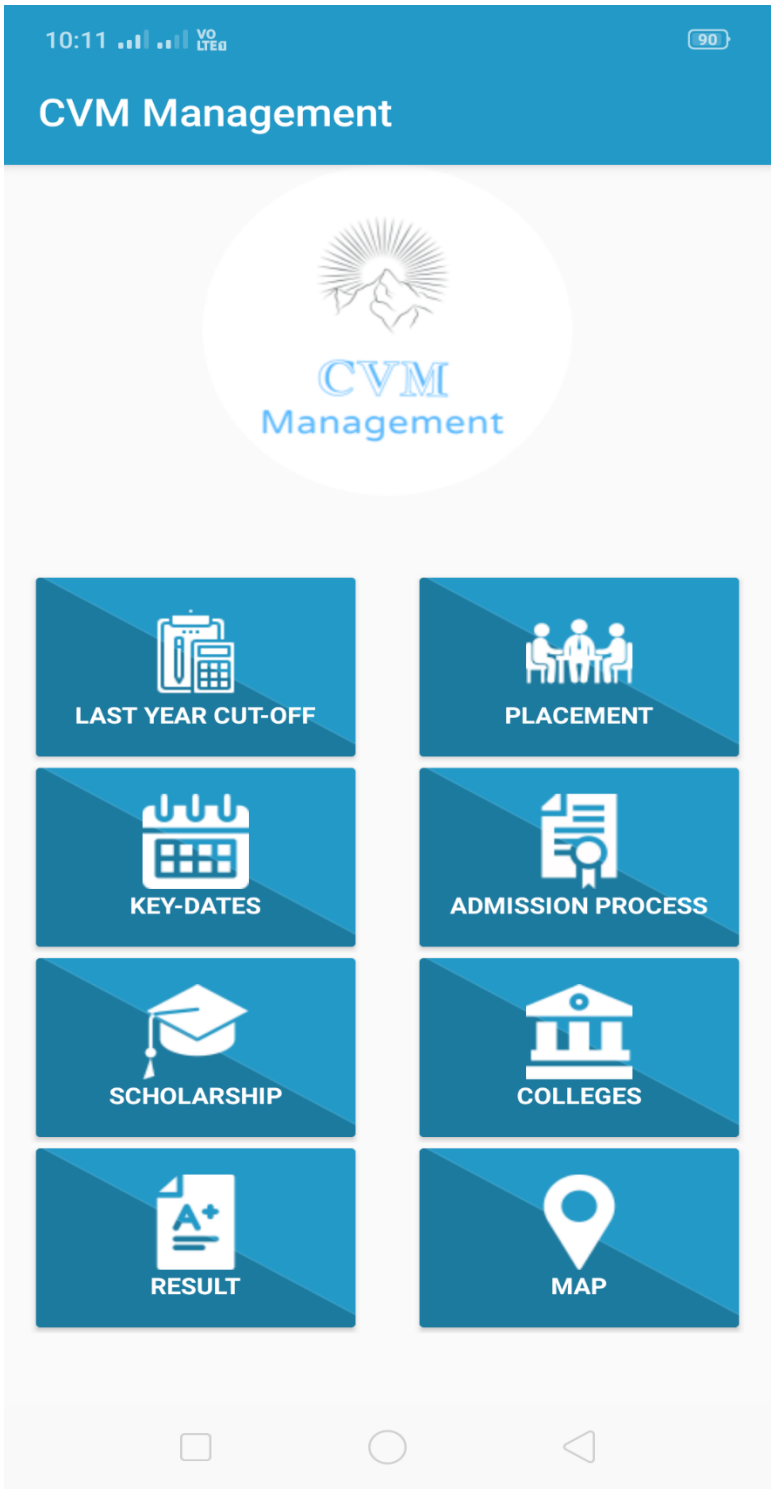
2. Login Page:


10:10
CVM Management
CVM
Management
Login
Email
Password
Login
Don't have an Account? Sign Up

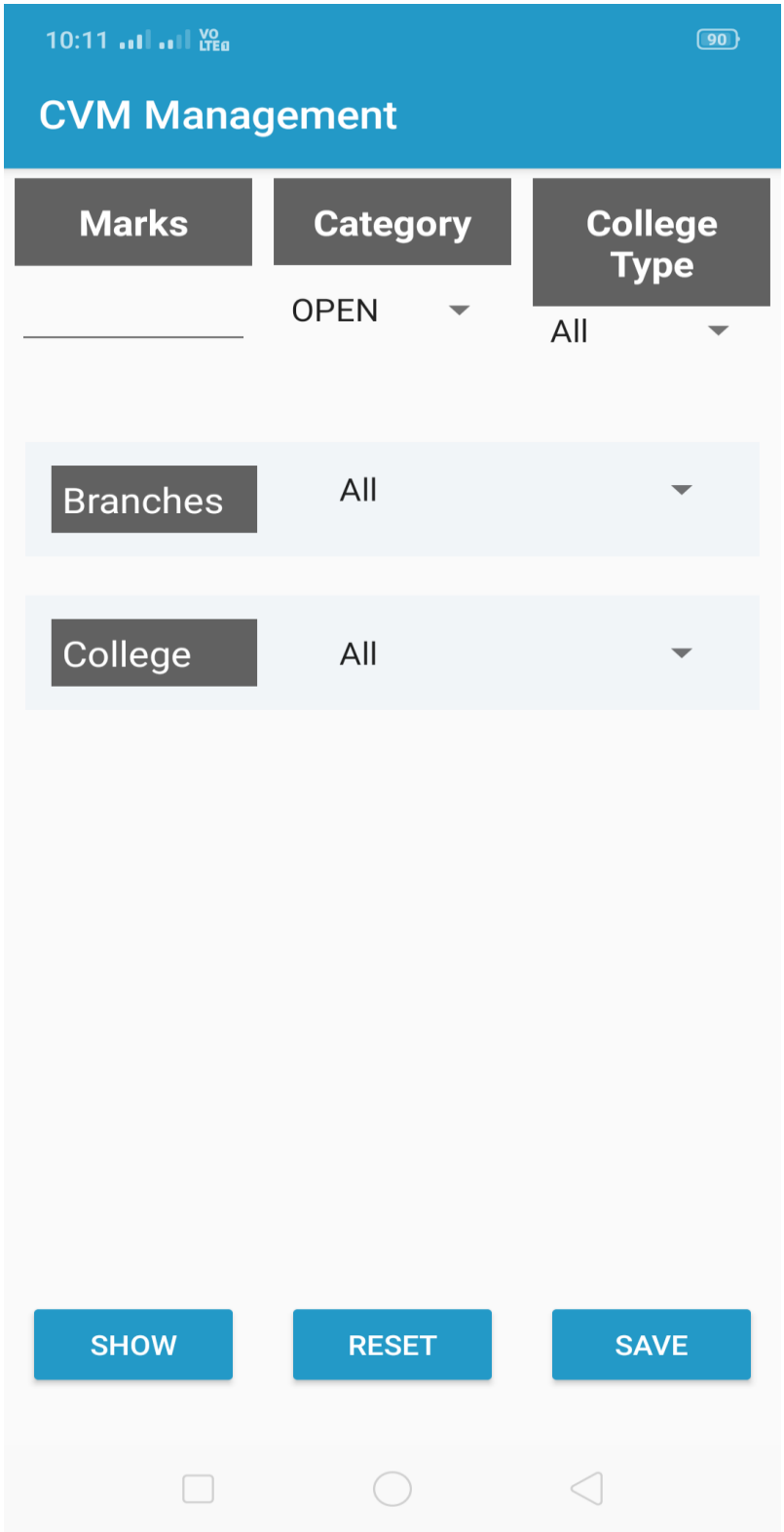
3. Signup Page:



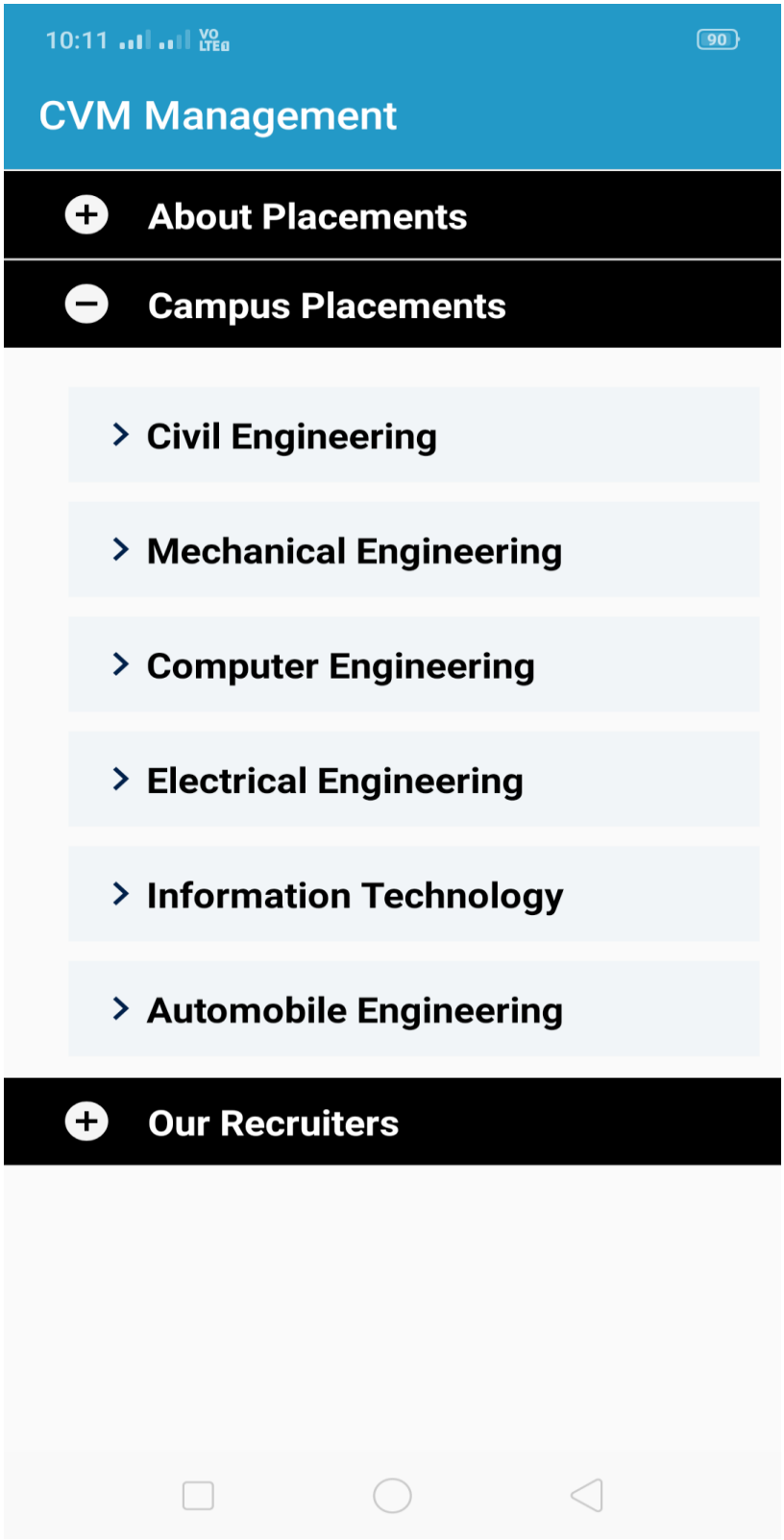
4. Home Page:


10:11
CVM Management
CVM
Management
LAST YEAR CUT-OFF
PLACEMENT
KEY-DATES
ADMISSION PROCESS
SCHOLARSHIP
COLLEGES
RESULT
MAP

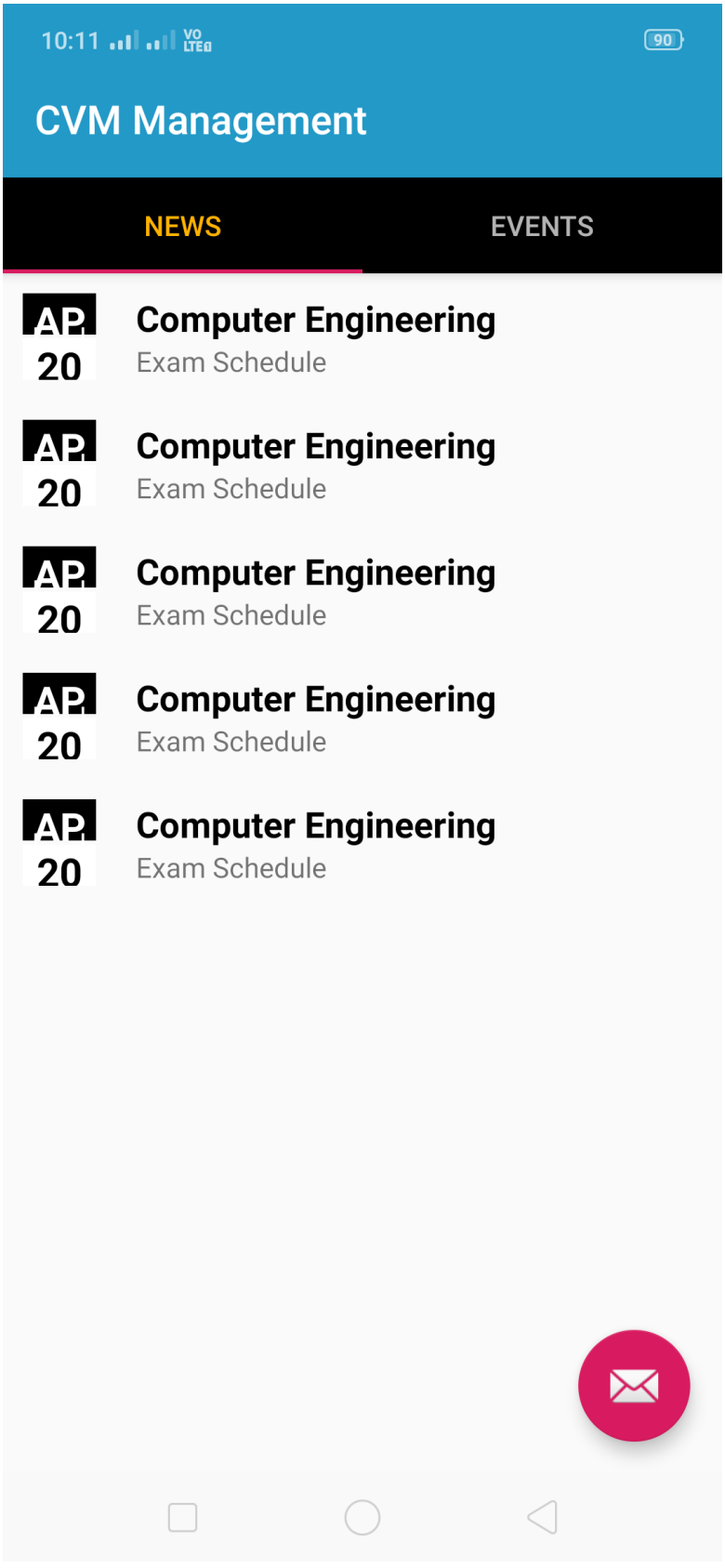
5. Cutoff Page:



6. Placement Page:



7. Key-Dates Page:



CHAPTER 5

FUTURE ENHANCEMENT

FUTURE ENHANCEMENT

- This Application is under construction. It will be ready in next semester for the perfect usage.
- We are trying to add Features to enhance our project.
- In additional, we can add as many Features according to Requirements.
- Just for now our project is limited to state level, so Forward we are trying to get Online Admission process in Management Quota.
- This application includes Payment Module for Online Admission in Management Quota.
- If we can extend this project, we will provide more details of all colleges like subject, course, marks, materials for student of particular colleges.

CHAPTER 6

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