GOVERNMENT HOSTEL MANAGEMENT

L.J. college Of Computer Applications

Acknowledge

• It is our great pleasure to acknowledge the

contribution and assistance of a few individuals to this effort. We acknowledge here our debt to those who have contributed significantly to this project.

•We are also indebted to our faculty member and guide **Prof. Parth Joshi** or motivating us and fostering a feeling of belongingness towards our ability. Their helpful solutions and comments enriched by their experience for the betterment of the project. We sincerely acknowledge that without his support this project would not have been feasible.

• Our thank goes to all the faculty members of   L. J. College of Computer Applications and special Thanks goes to **Prof.Muquit Khan Pathan** who provided useful guidance time to time. Finally, we would like to thank everyone who directly or indirectly helped us in the project.

INDEX

PROJECT PROFILE

Type of Industry: Government Department

Problem Id   : SGH071

Project Guide   : Prof. Parth Joshi

Team Id   : SGH002409

Team leader   : Neel Patel

College Code   : 248

College Name   : L.J. College Of Computer Applications

Project Title   : Government Hostel Management

Project Statement : Develop a solution for Government Hostel Management

Team Members

1.Neel Patel

2.Jaineel Shah

3.Yash Rabari

4.Naresh Suthar

5.Mayur Sorathiya

6.Rahul Rawal

7.Shubham Agrawal

8.Aliraza Panjwani

Methodology

Method:

SDLC [System Development Life Cycle]

Existing System:

        Currently there are two online Government centralized system for hostel admission. There are some hostels which are either operated by private organizations or colleges where students have to apply for admission individually due to lack of centralized system. Some hostels have their own online system which provide admission forms (offline) but the problem is, students have to download it and get a physical copy and submit it to the respective hostel manually. Sometimes students fill up wrong information about their academic qualifications which leads to time-consuming process for correction.

In existing system, the verification of documents provided by the student is done manually at hostel, which is a time-consuming process.

Disadvantages of Existing System

- One of the major problem is allocation and deallocation of seats based on merit, category and department wise is not done accurately by all hostels.

- Other major problem is hostels don't have user friendly GUI.

- Hostels need to verify documents submitted by students increases manual work.

- There are few centralized government hostels which is doesn't have User Friendly GUI and they are not fully automated and also don't have proper Security.
  1. https://navjan.org/
  2. https://sje.gujarat.gov.in/

- There's no such way to get latest update. No transparency between all the users and their parents.

- Very Few Online centralized Hostel Management system is available for Government Hostels.

Proposed System

- The proposed system is a centralized system for online merit-based Government hostel admission and Management. It has transparency in entire admission process and also reduces the manual workload of verifying the documents provided by student.

- When students submit all the documents into the collage once. Then they don't need to submit their documents again at the time of hostel registration so there is no issue happen about the fake documents because it's already verified by the collage. This solves the problem of manual workload of document verification at hostel. It also Implements the transparency among college, hostel and student and makes admission process easier.

- System has user friendly GUI so student can The students gets all the information when they login to their account. About the status of profile details , latest updates , fees updates , hostel room details.

Advantages of Proposed System

- The proposed system is user friendly
  Time-saving process as the entire system is online.

- The proposed system is very useful in terms of
  design that user can access it anywhere , anytime
  in desktop or mobile, laptop or tablet.

- The system is Fast and Reliable.

- Easy to maintain data branch wise, area wise..
- The students get notified with each and every
  details regarding to them, their routines ,
  announcements [via email or SMS , or Application
  Notification].

USERS

A System has different kind of users with different access permissions for different purpose of uses.

Some users retrieve data and some back it up.

The Merit Based Online System has following types of users:

ADMIN   HOSTEL   STUDENT   COLLEGE   PARENTS

All the users are the members of the website which are going to use this website. There will be an admin of the website who can view all the information on the website and has the authority to modify, update and delete details as required. The student, college, hostel and Parents will be the end users of the website for whom the website is being prepared.

User Details

1. **<u>Admin:</u>** An admin is the user who will be responsible for maintaining the entire system. Admin maintains the system and also responsible for administrating the database. Admin is responsible to look after system usage and by whom it should be used.

2. **Student:** A student is the user who can select the hostel by entering the college name in search bar. When student enters his/her college name then nearby hostel list is displayed. To apply for admission in hostel, first the student needs to register and log in to his/her account.

3. **Hostel:** Hostel is the user who will register and login to its account. Each hostel can view all its information and also manage its information. Hostel will admit the students based on the given criteria.

4. **College:** College is the user who will register and login to its account. College can view all its information and also manage its information and will have to verify the documents provided by the students.

5.**Parents:** Parents get notified about the events,

Fees, and other information via email or sms.

Module Description

Admin

Login	:	Login to admin account.
Manage Users	:	To manage the user information.
Manage Institute	:	To manage the institute information.
Manage Hostel	:	To manage the hostel information.
Manage Student	:	To manage the student information.
Manage Parent	:	Gives updates about hostel & student.
Manage Forms	:	To manage different category forms.
Manage Report	:	To get the reports.

- Hostel Report

- Student Report

- College Report

- Admission Report

Student

Register   :   Register as student.

Student   :   Search hostels near their college.

Login   :   Login to its account.

Manage Profile   :   To manage profile details like name,

Photo, Fees etc.

Apply for Admission : To apply for admission in hostel.

Check Merit   :   To check the merit list.

Check Status   :   To check the admission status.

DFD:

 A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modelling its process aspects. A DFD is often used as a preliminary step to create an overdview of the system without going into great detail.

A DFD shows what kind of information will be input to and output from the system, how the data will advance through the system, and where the data will be stored.

There are essentially two different types of notations for data flow diagrams (Yourdon & Coad or Gane & Sarson) defining different visual representations for processes, data stores, data flow and external entities.

Here we are using Yourdon & Coad notation for Data Flow Diagram (DFD).

This project includes three levels of Data Flow Diagram (DFD).

- 0th Level (Context Level) DFD

- 1st Level DFD

- 2nd Level DFD

0th level (or context Level)DFD:
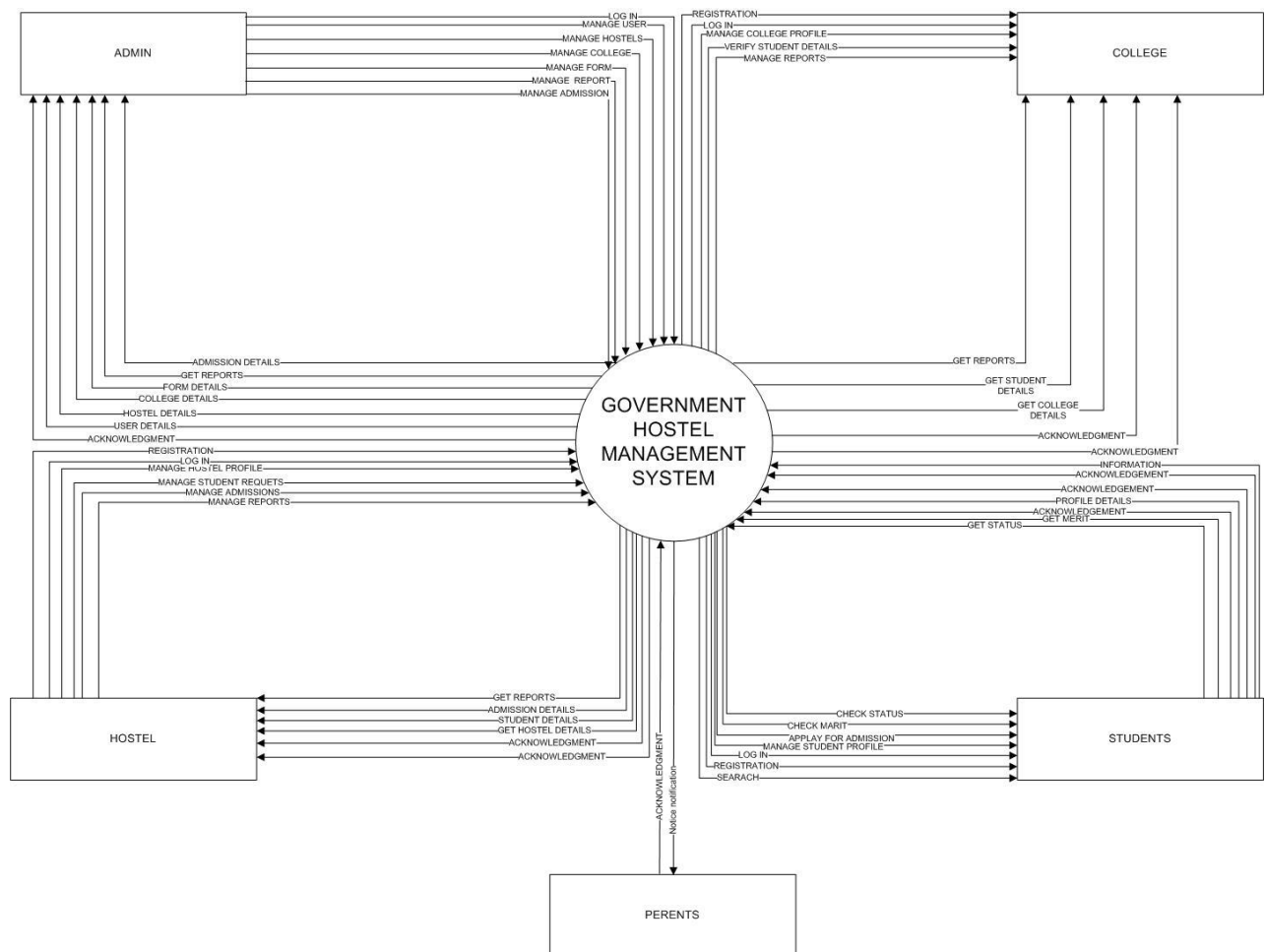
1th level DFD :
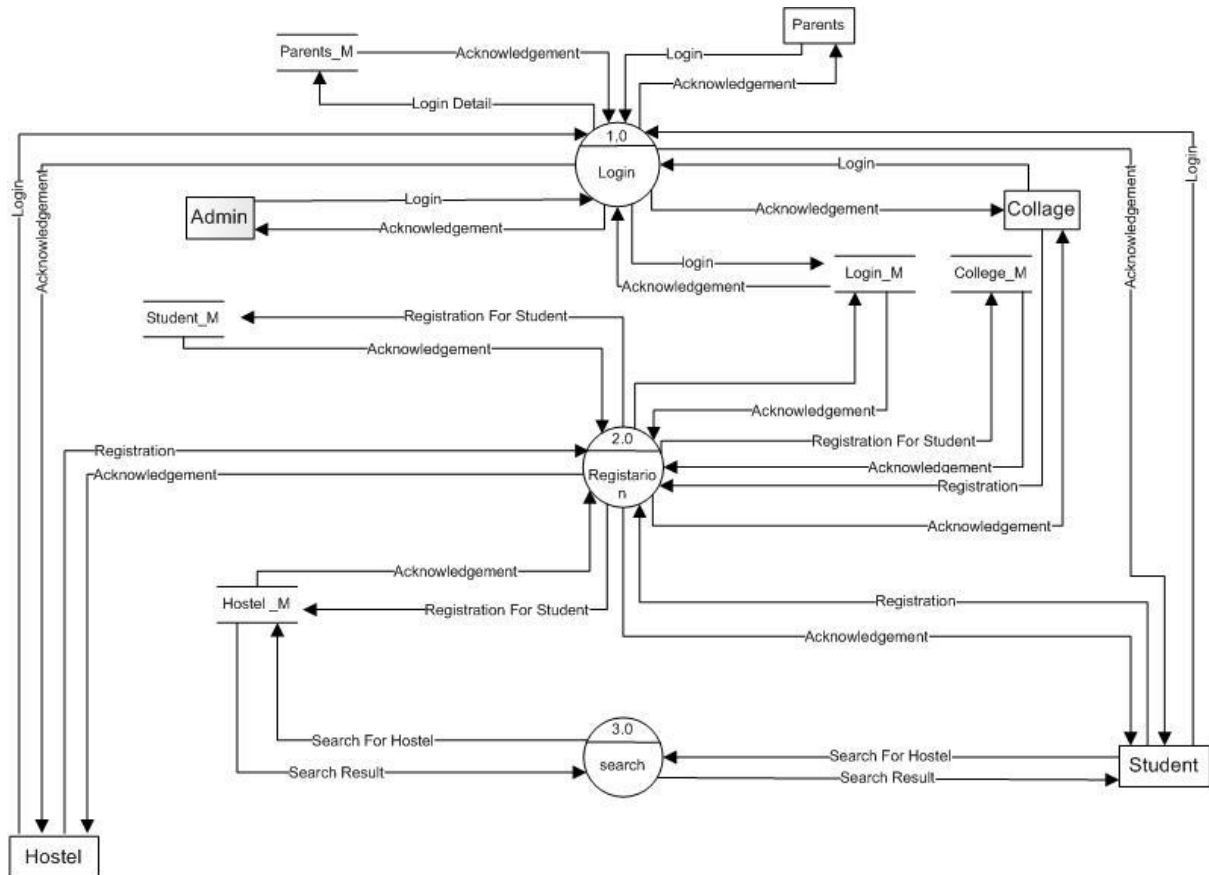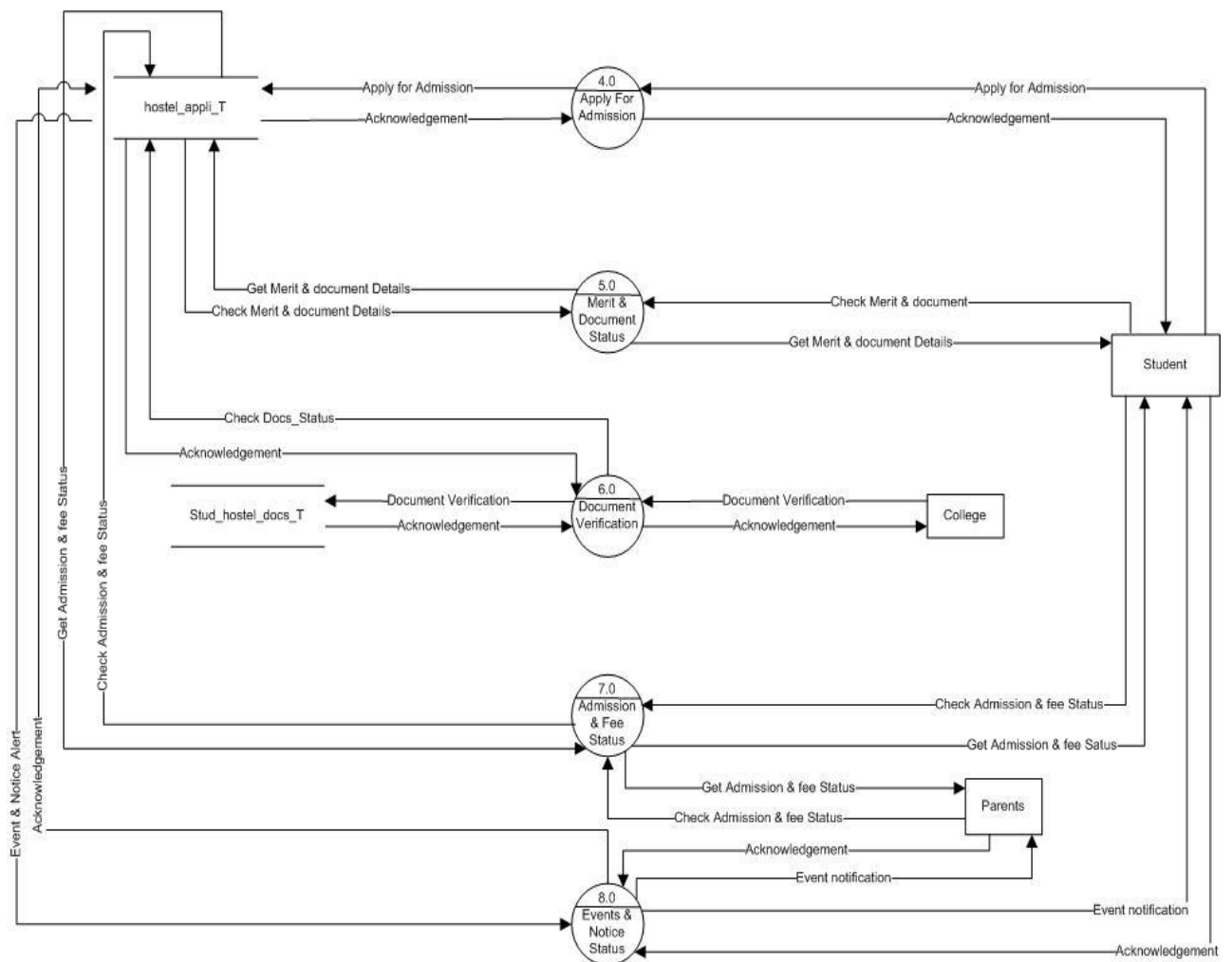
2nd level DFD: (Login Procsess)
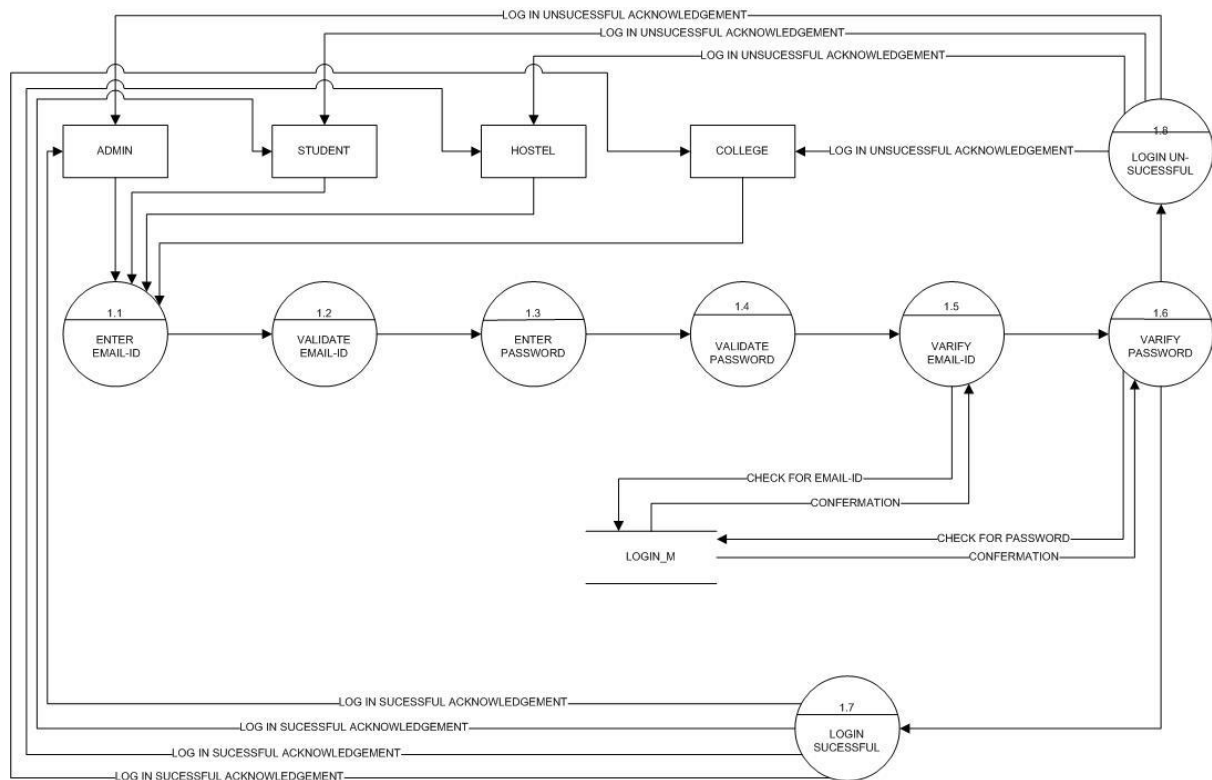
(Apply for Admission Process):
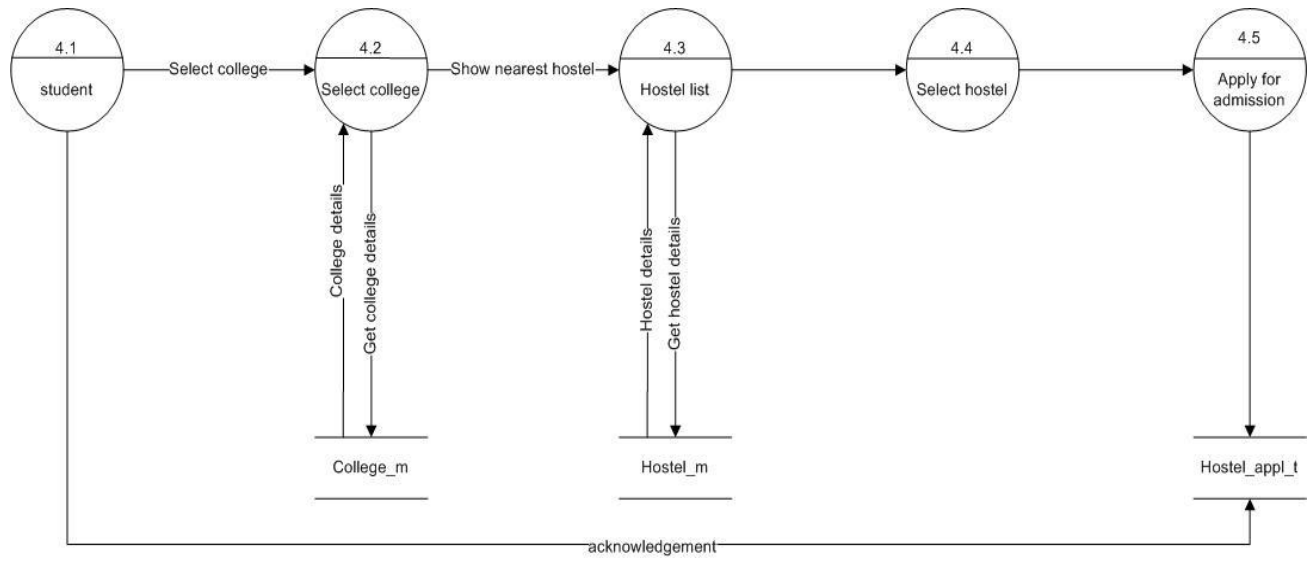
ERD
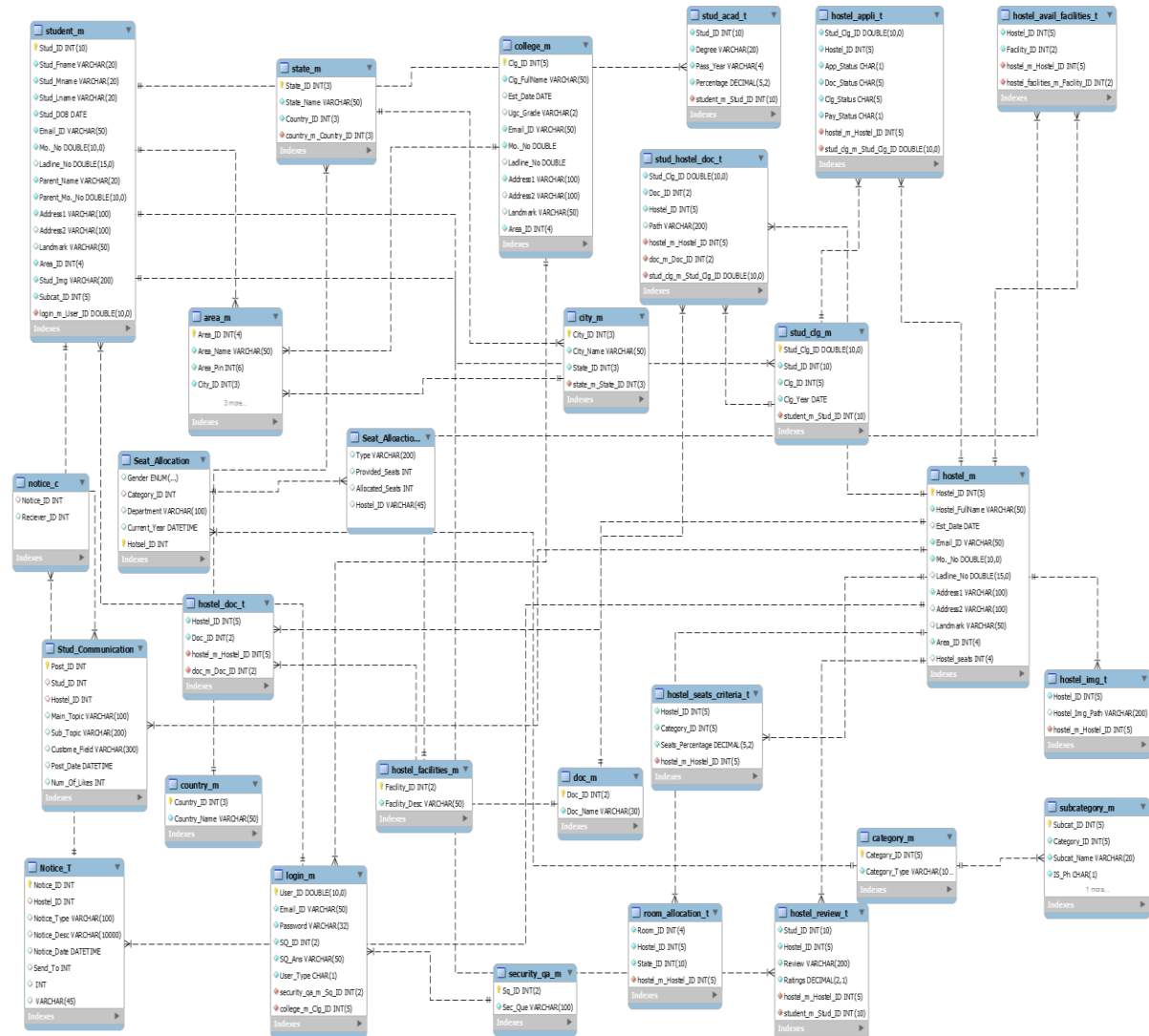
Data Dictionary:

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

The data dictionary is a crucial component of any relational database. Ironically, because of its importance, it is invisible to most database users. Typically, only database administrators interact with the data dictionary.

Data Dictonary Table

Master Table	Transaction Table
country_M	stud_acad_T
state_M	doc_details_T
city_M	hostel_seats_criteria_T
area_M	hostel_doc_T
login_M	hostel_appli_T
hostel_M	hostel_img_T
college_M	hostel_review_T
student_M	hostel_avail_facilities_T
security_qa_M	Stud_com
doc_M	Notice_t
category_M	Room_a
subcategory_M	Seat_a
stud_clg_M	Seat_a_c
hostel_facilities_M	
Notice_c	

country_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	country_id	3	int	PK	Primary Key
2.	country_name	50	varchar	Not null	Cannot be null

state_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	state_id	3	int	PK	Primary Key
2.	state_name	50	varchar	Not null	Cannot be null
3.	country_id	3	int	FK	Foreign Key

City_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	city_id	3	int	PK	Primary Key
2.	city_name	50	varchar	Not null	Cannot be null
3.	state_id	3	int	FK	Foreign Key

area_m

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	area_id	4	int	PK	Primary Key
2.	area_name	50	varchar	Not null	Cannot be null
3.	City_ID	3	int	FK	Foreign Key
4	Pincode	6	Int	Not null	

Login_m

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	user_id	10	double	PK	Primary Key
2.	email_id	50	varchar	Not null	Cannot be null, Unique
3.	password	32	varchar	Not null	Cannot be null
4.	sq_id	2	int	FK	+
5.	sq_ans	50	varchar	Not null	Cannot be null
6.	user_type	1	char	Not null	Cannot be null

college_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	clg_id	5	int	PK	Primary Key
2.	clg_fullname	50	varchar	Not null	Cannot be null
3.	est_date	-	Date	-	-
4.	ugc_grade	2	varchar	-	-
5.	email_id	50	varchar	FK	Foreign Key
6.	mobno	10	double	Not null	Cannot be null
7.	landline_no	15	double	-	-
8.	addressln1	100	varchar	Not null	Cannot be null
9.	addressln2	100	varchar	-	-
10.	landmark	50	varchar	-	-
11.	area_id	4	Int	FK	Foreign Key

Hostel_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	hostel_id	5	int	PK	Primary Key
2.	hostel_fullname	50	varchar	Not null	Cannot be null
3.	est_date	-	date	-	-
4.	email_id	50	varchar	FK	Foreign Key
5.	mobno	10	double	Not null	Cannot be null
6.	landline_no	15	double	-	-
7.	addressln1	100	varchar	Not null	Cannot be null
8.	addressln2	100	varchar	-	-
9.	landmark	50	varchar	-	-
10.	area_id	4	int	FK	Foreign Key
11.	hostel_seats	4	int	-	-

student_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	stud_id	10	double	PK	Primary Key
2.	stud_fname	20	varchar	Not null	Cannot be null
3.	stud_mname	20	varchar	-	-
4.	stud_lname	20	varchar	Not null	Cannot be null
5.	stud_dob	-	date	Not null	Cannot be null
6.	email_id	50	varchar	FK	Foreign Key
7.	mobno	10	double	Not null	Cannot be null
8.	landline_no	15	double	-	-
9.	addressln1	100	varchar	Not null	Cannot be null
10.	addressln2	100	varchar	-	-
11.	landmark	50	varchar	-	-
12.	area_id	4	int	FK	Foreign Key
13.	stud_img	200	varchar	-	-
14.	subcat_id	5	int	FK	Foreign Key

| 15 | Prerent_name | 50 | varchar | Not null | |
| 16 | Parent_conntect | 10 | int | Not null | |

security_qa_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	sq_id	2	int	PK	Primary Key
2.	sec_que	100	varchar	Not null	Cannot be null

doc_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	doc_id	2	int	PK	Primary Key
2.	doc_name	30	varchar	Not null	Cannot be null

category_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	category_id	5	int	PK	Primary Key
2.	category_type	100	varchar	Not null	Cannot be null

subcategory_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	subcat_id	5	int	PK	Primary Key
2.	category_id	5	int	FK	Foreign Key
3.	subcat_name	20	varchar	Not null	Cannot be null
4.	is_ph	1	char	Not null	Cannot be null

stud_clg_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	std_clg_id	10	double	PK	Primary Key
2.	stud_id	10	double	FK	Foreign Key
3.	clg_id	5	int	FK	Foreign Key
4.	clg_year	-	date	Not null	

hostel_facilities_M

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	facility_id	2	int	PK	Primary Key
2.	facility_desc	50	varchar	Not null	Cannot be null

stud_acad_T

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	stud_id	10	double	FK	FK
2.	degree	20	varchar	-	-
3.	pass_year	4	varchar	-	-
4.	percentage	5,2	decimal	-	-

stud_hostel_doc_T

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	std_clg_id	10	double	FK	Foreign Key
2.	doc_id	2	int	FK	Foreign Key
3.	hostel_id	3	int	FK	Foreign Key
4.	path	200	varchar	-	-

hostel_seats_criteria_T

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	hostel_id	5	int	FK	Foreign Key
2.	category_id	5	int	FK	Foreign Key
3.	seats_percentage	5,2	decimal	-	-

hostel_doc_T

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	hostel_id	5	int	FK	Foreign Key
2.	doc_id	2	int	FK	Foreign Key

hostel_appli_T

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	stud_clg_id	10	double	FK	Foreign Key
2.	hostel_id	5	int	FK	Foreign Key
3.	app_status	1	char	Not null	Applied/Merit/Confirm (A/M/C)
4.	doc_status	5	char	Not null	Empty/ok1/ok2/ok
5.	clg_status	5	char	Not null	Empty/sent/A/R/C
6.	pay_status	1	char	Not null	P/U/H

hostel_img_T

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	hostel_id	5	int	FK	Foreign Key
5.	hos_img_path	200	varchar	-	-

hostel_avail_facilities_T

Serial no.	Column Name	Size	Data Type	Constraints	Description
1.	hostel_id	5	int	FK	Foreign Key
2.	facility_id	2	int	FK	Foreign Key

Stud_communication

Serial no.	Column Name	Size	Data Type	Constraints	Description
1	Post_id	11	int	PK	Primary key
2	Hostel_id	11	int	FK	Foreign key
3	Stud_id	11	int	FK	Foreign key
4	Main_topic	100	varchar	Not null	Main problem
5	Sub_topic	200	varchar	Not null	Problem in detail
6	Custom_field	300	varchar	-	-
7	Post_date	-	datetime	Not null	Can not be null
8	No_of_likes	11	int	Not null	Can not be null

Notice_t

Serial no.	Coloum name	Size	Data type	Constaint	discription
1	Notice_id	11	int	Pk	Primary key
2	Notice_Date		Datetime	Not null	
3	Notice_desc	10000	varchar	Not null	
4	Hostel_id	11	Int	Fk	Foreigen key
5	Notice_type	100	Varchar	Not null	
6	Send_to	11	Int	Not null	

Notice_c

Serial no.	Coloum name	size	Data type	constaint	discription
1	Notice_id	11	int	Fk	Foreign key
2	Reciever_id	11	Int	FK	Foreign key

Seat_a

Serial no.	Coloum name	size	Data type	constaint	discription
1	Hostel_id	11	Int	Pk	primary_key
2	Gender		ENUM('M','F')	Not null	
3	Category_id	11	Int	FK	Foreign key
4	Department_id	11	Int	FK	Foreign key
5	Currentyear		DateTime	Not null	
6	Seats	11	Int	Not null	

Seat_a_c

Serial no.	Coloum name	Size	Data type	constaint	discription
1	Hostel_id	11	Int	Fk	Foreign_key
2	Type	200	varchar	Not null	
3	Provided_S	11	Int	FK	Foreign key
4	Allocated_S	11	Int	FK	Foreign key

Room_a

Serial no.	Coloum name	Size	Data type	constaint	discription
1	Hostel_id	11	Int	Fk	primary_key
2	Stud_id	11	Int	FK	Foreign key
3	Room_no	11	Int	Not null	

Development Tools & Technologies
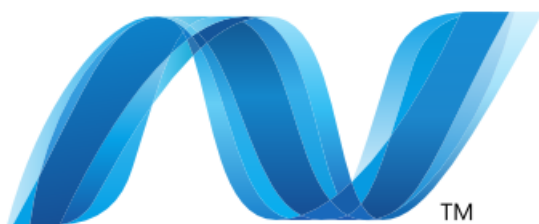
Possible Outcomes

This problem can have this possible outcome:

1. Web Application