



MARATHWADA MITRA MANDAL'S COLLEGE OF COMMERCE

BACHELOR OF COMPUTER APPLICATION

302/A, Deccan Gymkhana, PUNE-411004

CERTIFICATE

(TO WHOMSOEVER IT MAY CONCERN)

This is to certify that the following students

Shivraj Jadhav

Swayambhu Dhuri

Have completed the project entitled

Covid-19 Tracker

In a particular fulfillment for the award of

BACHELOR OF COMPUTER APPLICATION

UNIVERSITY OF PUNE

In the academic year 2020-2021

This work has been carried out by them under my supervision and Guidance

Prof. Nita Patil

Submitted by:

Shivraj Jadhav

Swayambhu Dhuri

Prof. Nita Patil

(Guide)

Dr. Sandip Anpat

(HOD)

Dr. Devidas Golhar

(Principal)

External Examiner

ACKNOWLEDGEMENT

I am overwhelmed in all humbleness and gratefulness to acknowledge my depth to all those who have helped me to put these ideas, well above the level of simplicity and into something concrete.

I would like to express my special thanks of gratitude to my teacher **Prof. Nita Patil** as well as our Principal **Dr.Devidas Golhar** and our HOD **Dr.Sandip Anpat**

who gave me the opportunity to do this wonderful project on the topic "**COVID-19 Tracker**", which also helped me in doing a lot of Research and I came to know about so many new things.

I am really thankful to them.

Any attempt at any level can 't be satisfactorily completed without the support and guidance of my friends Aniruddha Joshi, Shivam Mahajan.

also, a special thanks to Prof. **Geeta Patil** who helped me a lot in gathering different information, collecting data and guiding me from time to time in making this project, despite of their busy schedules, they gave me different ideas in making this project unique.

For all these efforts I am really grateful. Thank You

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INTRODUCTION

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 caused by severe acute respiratory syndrome coronavirus 2. The virus was first identified in December 2019 in Wuhan, China. The World Health Organization declared a Public Health Emergency of International Concern regarding COVID-19 on 30 January 2020, and later declared a pandemic on 11 March 2020. As of 20 April 2021, more than 141 million cases have been confirmed, with more than 3.02 million deaths attributed to COVID-19, making it one of the deadliest pandemics in history. Symptoms of COVID-19 are highly variable, ranging from none to life-threatening illness. The virus spreads mainly through the air when people are near each other. It leaves an infected person as they breathe, cough, sneeze, or speak and enters another person via their mouth, nose, or eyes. It may also spread via contaminated surfaces.

regarding this situation there are many national-international programs and protocols are undertaken. India alongside with few countries had begun the vaccination drives for the covid19. as we are moving forward, the authorities are still facing many issues like keeping track of the data. because data is the only source through which they can track records, it is important to keep tracking record

by concerning this issue, I believe this project will work in many aspects regarding keeping the correct information in concerned manner.

SCOPE OF PROJECT:

1. A data entry for patients
2. A data entry about many hospitals
3. A data entry for covid-19 vaccines
4. A data entry for managing supply of vaccines to hospitals
5. Generates registration reports for vaccinations
6. To either print or view the same.
7. The system is fast in working and accurate in getting information.
8. Various reports generated by the system are designed according to the hospital needs.
9. Quick reports are generated as and when required.
10. Accuracy is maintained.
11. Privacy of data is maintained.
12. This document defined the need and requirement of the Covid-19 Tracker and the different area of application where it could be implemented.
13. For the development of project Visual Basic 6.0 & MS Access are used.

PROPOSE SYSTEM:

The existing non computerized system requires maintenance of a large number of big registers including information about patient's details.

-The main objective of proposed system is to reduce the manual work. Following are the objective of the proposed system-

- The system removes the possibility of any erroneous reading to occur as it first validates the data fed to it
- All are unnecessary tedious paperwork is removed
- The user is given the facility to view the test, observations that were carried out earlier.
- Security checks are carried out whenever access to private information changes of sensitive data is requested.
- To provide fast access and past data backup facility is provided.

SYSTEM ANALYSIS

SOFTWARE REQUIREMENTS

Windows 7, 8, 10

Visual Basic 6.0

Microsoft Access

HARDWARE REQUIREMENTS

Ram-512 MB

Processor Pentium 4 or above

HDD - 20 GB

SYSTEM DESIGN:

ENTITY RELATIONSHIP DIAGRAM:

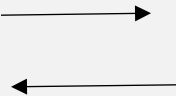



The overall logical structure of a database can be expressed graphically by an E_R DIAGRAM. The entity relationship diagram enables a software engineer to fully specify the data object that are input from a system, the

Attribute that define the properties of these objects and the

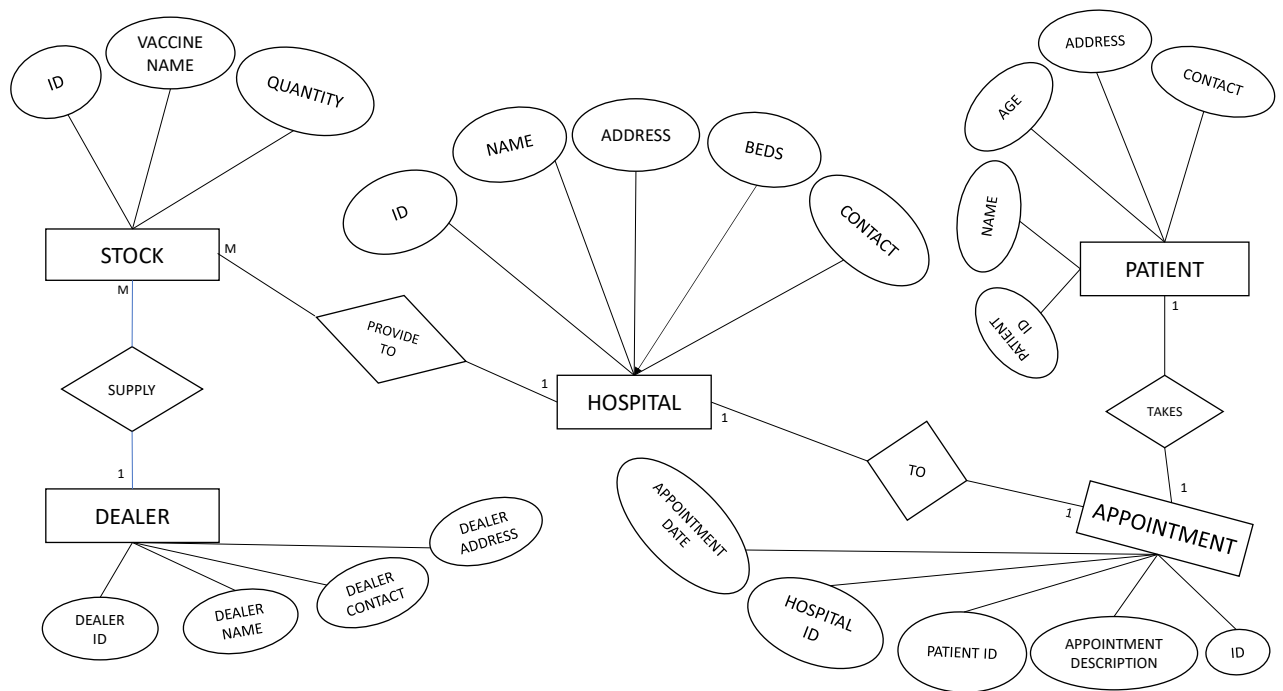
Relationships between these objects. The E-R data model is one of the several semantic data models, the semantic aspect of the model lies in the attempt to represent the meaning of the data. The E-R MODEL is extremely useful in mapping the meaning and interaction of real-world enterprises into a conceptual schema.

Please note that the concept of E-R diagram is totally different from DFD.

To draw E-R diagram we use following symbol-

SR. NO	SYMBOL	MEANING
1		FLOW LINES DIRECTIONAL FLOW
2		RECTANGLE TO REPRESENT ENTITY
3		DIAMOND BOX TO REPRESENT RELATIONSHIP
4		ELLIPSE TO REPRESENT ATTRIBUTE

ENTITY RELATIONSHIP DIAGRAM:





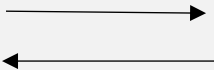
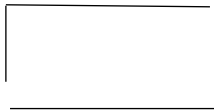
DATA FLOW DIAGRAM:

A data flow diagram is a graphical technique that depicts information flow and the transforms that are applied as data moves from input to output. The data flow diagram is also known as Data Flow Graph or Bubble Chart.

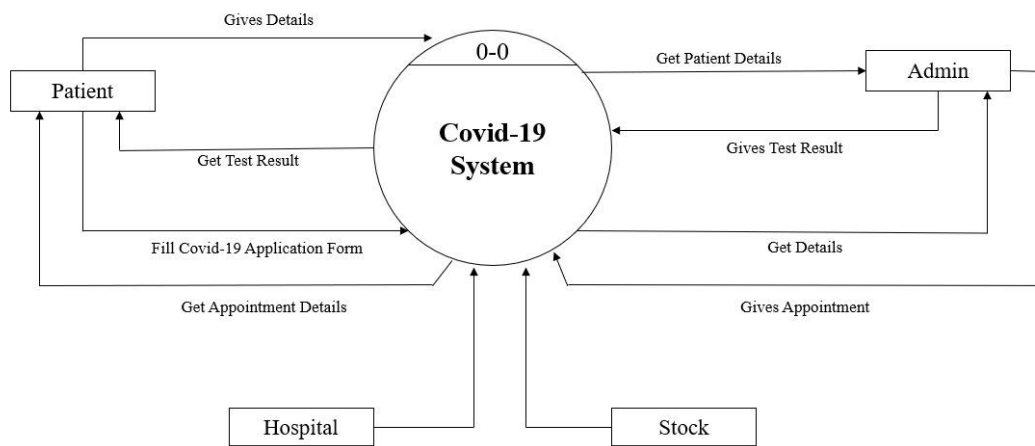
The processes in data flow diagram are shown by named circles or bubbles and data flow is represented by named arrows entering or leaving the bubbles.

A rectangle represents by a source or sinks and is a net originator or consumer of data.

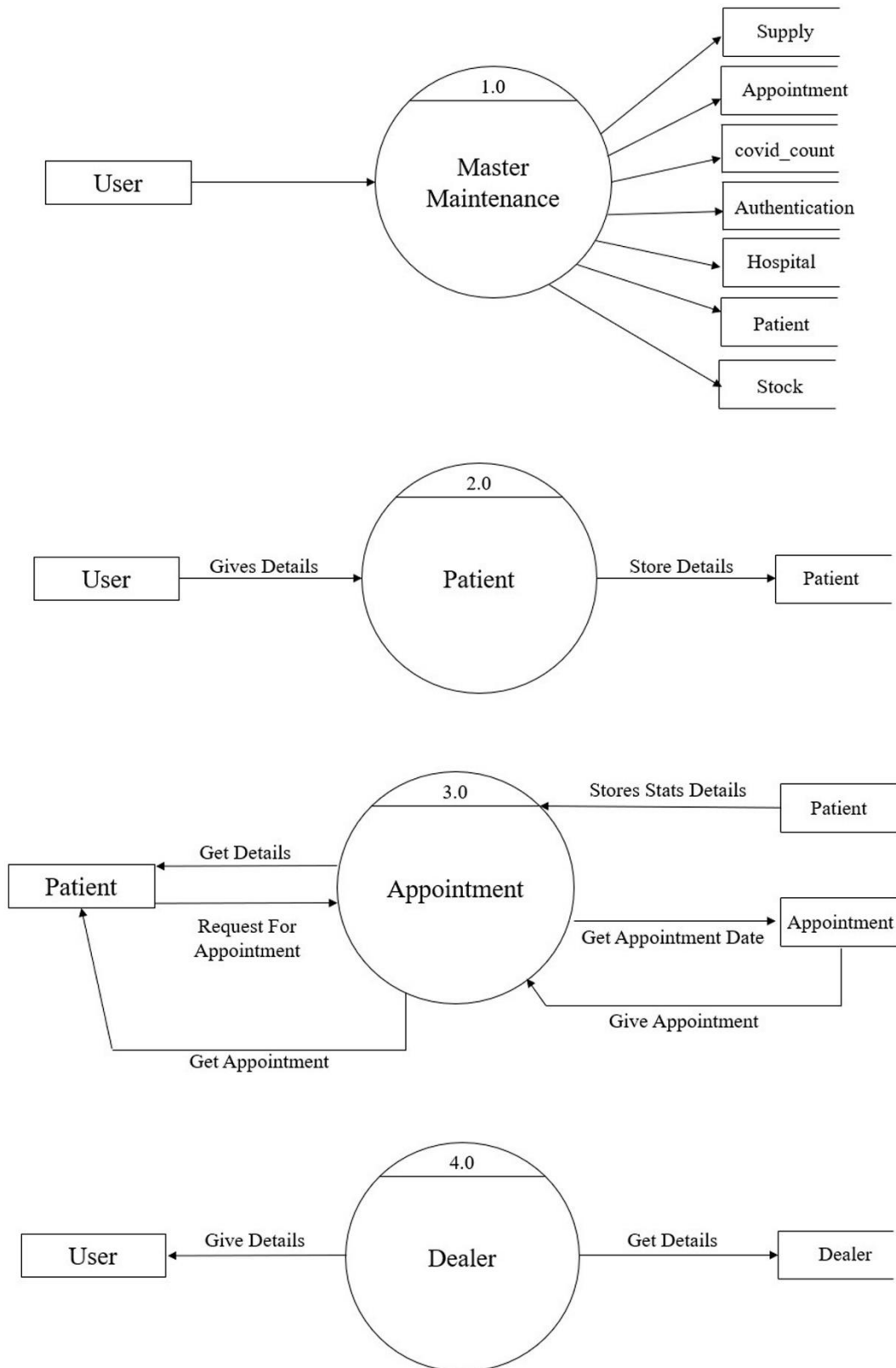
In DFD, there are four symbols as-

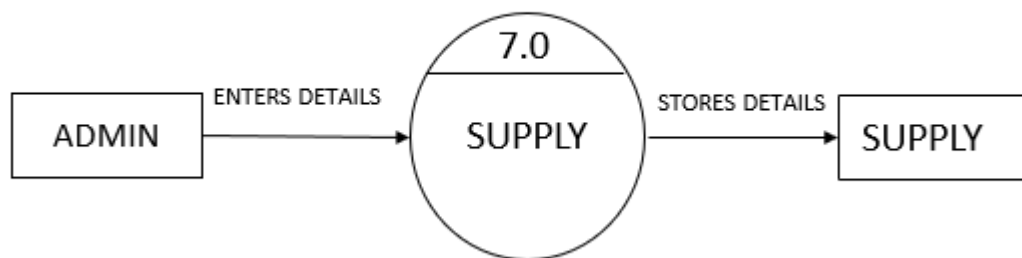
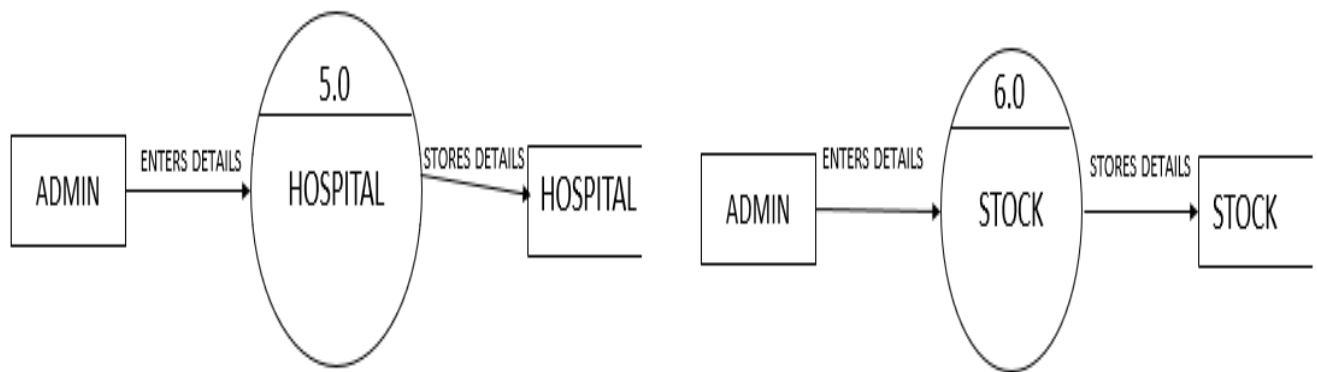
SR NO.	SYMBOL	MEANING
1		A procedural or consumer or Information that exit outside. The system is represented by External entity.
2		A transformer of information that exit within the system is represented by process.
3		Arrow head indicate the flow of data from entity to process or process to entity.
4		Storage of data that is to be used by one or more Processes is represented by Data store.

CONTEXT LEVEL DFD:



FIRST LEVEL DFD:





FILE DESIGN

TABLE DESIGN

The database is design for this system is as follows:

SR NO.	TABLE NAME	PURPOSE
1	AUTHENTICATION	To add and Authenticate the login of the admin or user
2	COVID_COUNT	To keep record of total, active, recovered and death cases due to COVID-19.
3	DEALER	To add Dealer's details from which the vaccines are being taken
4	HOSPITAL	Details of Hospital which are COVID-19 centers
5	PATIENT	Details of Patients are stored
6	STOCK	To keep the record of vaccine stock
7	SUPPLY	To supply the stock in Hospitals and to keep track of stock available in each hospital.
8	APPOINTMENT	To give appointment to the patient as per the Beds, Vaccine availability of the Hospital

1. TABLE NAME: - AUTHENTICATION

FIELDS	DATATYPE
USERNAME	STRING
PASSWORD	STRING

2. TABLE NAME: - COVID COUNT

FIELDS	DATATYPE
CITY NAME	STRING
TOTAL COUNT	NUMBER
ACTIVE COUNT	NUMBER
DEATH COUNT	NUMBER
RECOVER COUNT	NUMBER

3. TABLE NAME: - DEALER

FIELDS	DATATYPE
ID	NUMBER
COMP_NAME	STRING
BRAND_NAME	STRING
PLOT	STRING
STREET	STRING
CITY	STRING
STATE	STRING
PIN	NUMBER
PHONE NUMBER	NUMBER
EMAIL	STRING

4. TABLE NAME: - HOSPITAL

FIELDS	DATATYPE
HOSPITAL ID	NUMBER
HOSPITAL NAME	STRING
PLOT	STRING
STREET	STRING
CITY	STRING
STATE	STRING
HOSPITAL EMAIL	STRING
HOSPITAL CONTACT	NUMBER
HOSPITAL BEDS	NUMBER

5. TABLE NAME: - PATIENT

FIELDS	DATATYPE
ID	NUMBER
FIRST NAME	STRING
MIDDLE NAME	STRING
LAST NAME	STRING
GENDER	STRING
MARTIAL STATUS	STRING
BLOOD GROUP	STRING
DOB	DATE
KIN NAME	STRING
KIN RELATION	STRING
KIN PHONE	NUMBER
KIN EMAIL	STRING
HOUSE NO	STRING
STREET	STRING
CITY	STRING
PIN	NUMBER
PHONE NO	NUMBER
EMAIL	STRING
ALTERNATE PHONE NO	NUMBER
PHOTO	MEMO

6. TABLE NAME: - STOCK

FIELDS	DATATYPE
ID	NUMBER
DEALER ID	NUMBER
VACCINE NAME	STRING
QUANTITY	NUMBER
PURCHASE DATE	DATE

7. TABLE NAME: - SUPPLY

FIELDS	DATATYPE
ID	NUMBER
HOSPITAL ID	NUMBER
HOSPITAL NAME	STRING
SUPPLY BRAND	STRING
SUPPLY QUANTITY	NUMBER
SUPPLY DATE	DATE

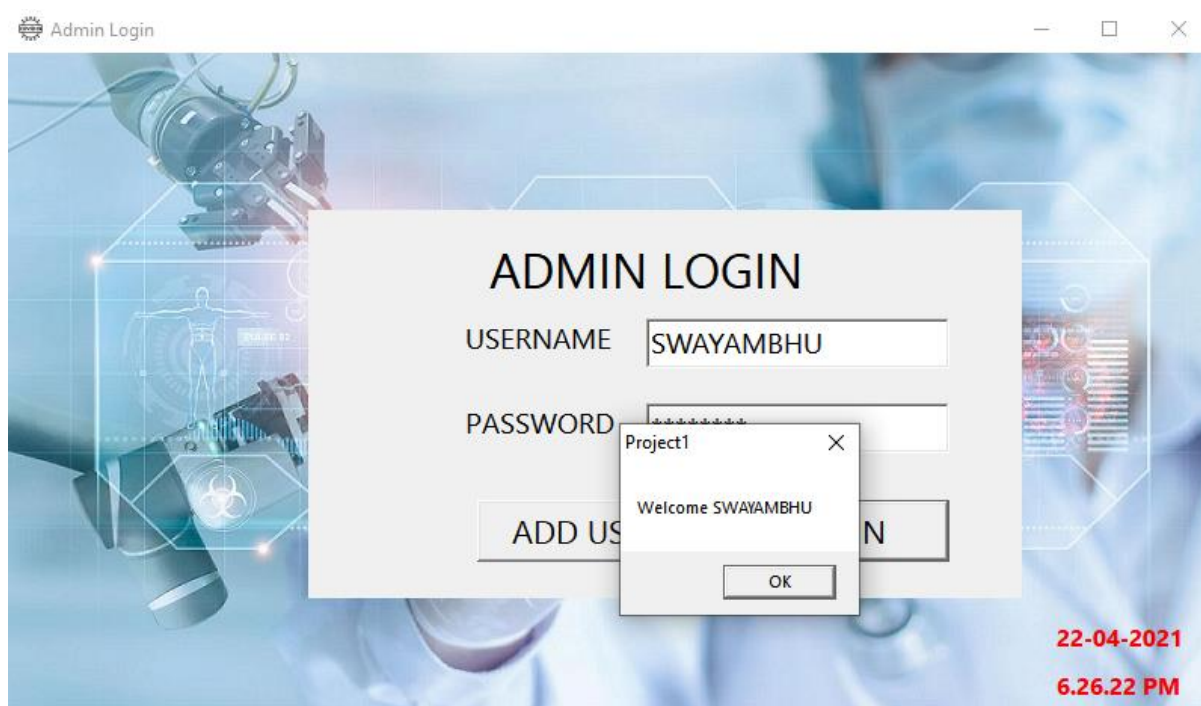
8. TABLE NAME: - APPOINTMENT

FIELDS	DATATYPE
ID	NUMBER
HOSPITAL ID	NUMBER
PATIENT ID	NUMBER
PATIENT NAME	STRING
APPOINTMENT DESCRIPTION	STRING
APPOINTMENT DATE	DATE
STATUS	STRING
COVID RESULT	STRING

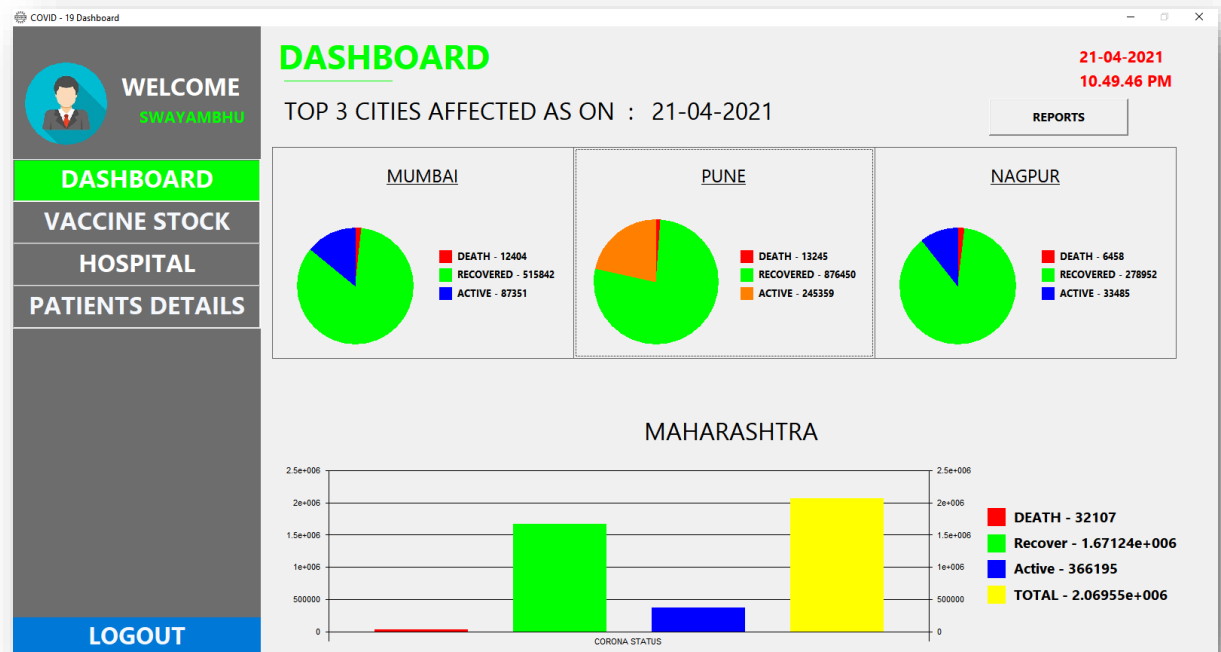
FORM DESIGN

USER INTERFACE

1. LOGIN PAGE



2. DASHBOARD



3. VACCINE STOCK – ADD STOCK

Covid-19 Vaccine Stock

WELCOME SWAYAMBHU

DASHBOARD

VACCINE STOCK

HOSPITAL

PATIENTS DETAILS

LOGOUT

VACCINE STOCK MANAGEMENT

ADD STOCK

Add New Dealer

SEARCH BY COMPANY NAME

SEARCH

COMPANY NAME: BHARAT BIOTECH

ADDRESS

PLOT: GENOME VALLEY STREET: TURKAPALLY, SHAMIRPET

CITY: HYDERABAD STATE: TELANGANA

PIN CODE: 500078

VACCINE NAME / BRAND: COVAXIN

CONTACT

PHONE NUMBER: 9948080567 EMAIL ID: feedback@bharatbiotech.co

SAVE FIRST PREV NEXT UPDATE DELETE CLEAR

SUPPLY

Add Stock

BRAND NAME: SELECT BRAND CLEAR

QUANTITY: *Required ADD STOCK

PURCHASE DATE: 15-04-2021

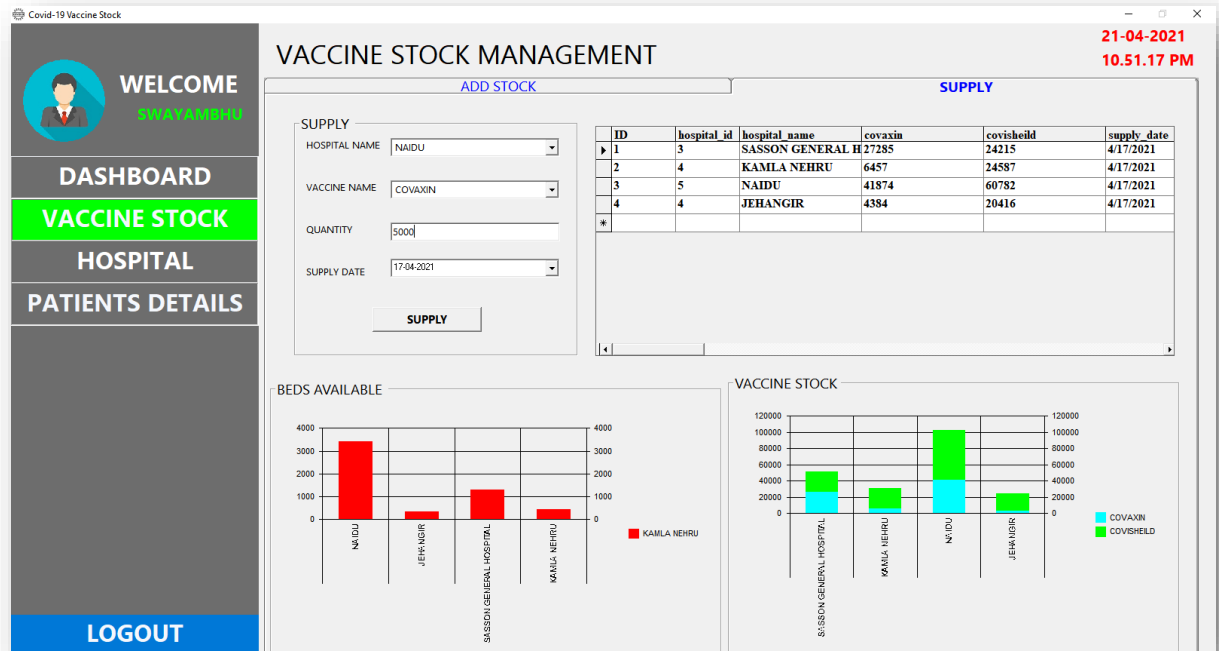
SORT

SORT BY DATE: 16-04-2021 SORT

SORT BRAND: SELECT BRAND SHOW ALL

ID	dealer id	vaccine_name	quantity	purchase_date
25	14	COVAXIN	10000	21-04-2021
26	29	COVISHIELD	20000	15-04-2021
*				

4. VACCINE STOCK – SUPPLY STOCK



5. HOSPITAL

Form1

WELCOME
SWAYAMBHU

DASHBOARD
VACCINE STOCK
HOSPITAL
PATIENTS DETAILS
LOGOUT

HOSPITAL MANAGEMENT

21-04-2021 10:51:47 PM

ADD HOSPITAL

HOSPITAL NAME: NAIDU

ADDRESS

PLOT: RTO STREET: BEHIND PUNE RAILWAY S
CITY: PUNE STATE: MAHARASHTRA

CONTACT

CONTACT NO.: 8888351537 TOTAL BEDS: 3419
EMAIL ID: contact@naidu.in

ADD **UPDATE** **DELETE** **CLEAR**

SEARCH ***SEARCH BY HOSPITAL NAME**

hospital_id	hospital_name	Plot	Street	City	State	Hospital Email	hospital_contact	hospital_beds	covaxin
5	NAIDU	RTO	BEHIND PUNE RAILWAY S	PUNE	MAHARASHTRA	contact@naidu.in	8888351537	3419	41874
6	JEHANGIR	32	SASSON ROAD, OPEPUNE	PUNE	MAHARASHTRA	emergency@jehangir	9758351837	349	4384
3	SASSON GENERAL	STATION ROAD	AGARKAR NAGAR	PUNE	MAHARASHTRA	contact@sasson.in	9395000751	1295	27285
4	KAMLA NEHRU	MANGALWAR PET	NEAR KASBA PET	PUNE	MAHARASHTRA	contact@kamlaNehru	8208308444	449	6457

6. PATIENT – REGISTRATION

REGISTRATION

PATIENT REGISTRATION

NAME [FIRST] - [MIDDLE] - [LAST] ONKAR DHARMENDRA JUKTI

GENDER: M
MARITAL STATUS: UM
BLOOD GROUP: A+
DATE OF BIRTH: 02-01-1998

ADDRESS:
HOUSE NO.: 12
STREET: NEW MAIMI, LAXMI ROAD
CITY: PUNE
PIN CODE: 411001

CONTACT NUMBERS:
PHONE: 7775882143
ALTERNATE MOBILE: 8087808076
E-MAIL: onkarjukti@gmail.com

NEXT OF KIN:
NAME: ANIRUDH JOSHI
RELATION: FRIEND
PHONE: 8087808076
E-MAIL: anirudhjoshi0911@gmail.com

ADD PATIENT UPDATE CURRENT PATIENT
DELETE CURRENT PATIENT CLEAR ALL

SEARCH PATIENT
NAME [FIRST] - [MIDDLE] - [LAST]
SEARCH PRINT PATIENT DETAILS

UPLOAD

LOGOUT

7. PATIENT – SET APPOINTMENT

SET APPOINTMENT

HOSPITAL: NAIDU BEDS AVAILABLE: 3419

PATIENT NAME [FIRST] - [MIDDLE] - [LAST]
ONKAR DHARMENDRA JUKTI

APPOINTMENT FOR?
☒ COVID - 19 TEST ☐ COVID - 19 VACCINATION

APPOINTMENT DATE: 16-04-2021

STATUS AND RESULT
STATUS: ☒ PENDING ☐ COMPLETED
RESULT: SELECT RESULT

SET APPOINTMENT UPDATE APPOINTMENT

BEDS AVAILABLE

SEARCH
PATIENT NAME [FIRST] - [MIDDLE] - [LAST]
SEARCH

APPOINTMENTS
TODAY'S APPOINTMENT

ID	hospital_id	hospital_name	patient_id	patient_name
19	5	NAIDU	3	ANIRUDH ANAND JOSHI
20	6	JEHANGIR	4	SHIVAM DATATRAY
21	3	SASSON GENERAL HOSPITAL	5	SHREYASH FUNDALIK
22	4	KAMLA NEHRU	8	SWAYAMBHU GOPAL
23	5	NAIDU	10	ONKAR DHARMENDRA

VACCINE STOCK

COVAXIN COVISHIELD

DATA REPORT

1. PATIENT APPOINTMENTS



APPOINTMENTS

21 April 2021

ID:	HOSPITAL NAME	PATIENT NAME	DESCRIPTION	APPOINTMENT	STATUS	COVID
19	NAIDU	ANIRUDH ANAND JOSHI	COVID - 19 TEST	22-04-2021	PENDING	PENDING
20	JEHANGIR	SHIVAM DATTATRAY	COVID - 19 VACCINATION	22-04-2021	PENDING	PENDING
21	SASSON GENERAL	SHREYASH PUNDALIK	COVID - 19 TEST	22-04-2021	PENDING	PENDING
22	KAMLA NEHRU	SWAYAMBHU GOPAL	COVID - 19 TEST	22-04-2021	PENDING	PENDING
23	NAIDU	ONKAR DHARMENDRA	COVID - 19 VACCINATION	22-04-2021	PENDING	PENDING

TOTAL APPOINTMENTS **5**

DEVELOPED BY SWAYAMBHU DHURI

2. HOSPITAL REPORT



COVID-19 CENTERS

22 April 2021

ID	HOSPITAL NAME	PLOT	STREET	CITY	STATE	EMAIL	MOB NO	BEDS
5	NAIDU	RTO	BEHIND PUNE RAILWAY	PUNE	MAHARASHTRA	contact@naidu.in	8888351537	3419
6	JEHANGIR	32	SASSON ROAD, OPP TO	PUNE	MAHARASHTRA	emergency@jehangir.in	9758351837	349
3	SASSON GENERAL	STATION	AGARKAR NAGAR	PUNE	MAHARASHTRA	contact@sasson.in	9395000751	1295
4	KAMLA NEHRU	MANGALWAR	NEAR KASBA PETH POST	PUNE	MAHARASHTRA	contact@kamlaNehru.in	8208308444	449

TOTAL COVID-19 CENTERS : 4

DEVELOPED BY SWAYAMBHU DHURI