VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi- 590018

A

PROJECT REPORT

On

"IPO Management System"

Submitted in the partial fulfilment of Fifth Semester Mini Project Work

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

By

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MS ENGINEERING COLLEGE

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the project work entitled **"IPO Database Management System"** carried out by **Manish Kumar Sharma** (1ME19CS048) and **Adarsh Prakash** (1ME19CS001), is a bonafide student of **M S ENGINEERING COLLEGE** submitted in partial fulfilment for the award of **Bachelor of Engineering** in **Computer Science and Engineering** of **Visvesvaraya Technological University,** Belagavi, during the year **2021-22**. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report, deposited in the department library. This project work report has been approved as it satisfies the academic requirements in respect of mini-project work prescribed for a **Bachelor of Engineering** Degree.

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Signature of Guide **Signature of HOD**

Internal Examiner Name ---------- **Signature** ----------

External Examiner Name ---------- **Signature** ----------

Exam Date: 28th March 2022

ABSTRACT

It is a database-dependent application that basically provides users access to IPO which is the official index of the Bombay Stock Exchange (BSE), Small and Medium-Sized Enterprises(SME). The application has unlimited storage to store New Initial Public Offering(IPO) released in the year 2021 which constitutes the Sensex.

The application is made using python and consists of a GUI. There will be many forms that will serve the purposes of different functions and features to be implemented. There will also be an option to sign up as a registered user. Any query by a registered user will lead to changes in the database and will be saved so that the user can track it even afterward.

A user can access the database for different purposes like viewing the current value of any particular IPO. A registered user will also have an option to edit the entries of the records. Also, the User has accessed The updates that will be taken from the website:https://www.chittorgarh.com/report/ipo-in-india-list-main-board-sme/82/?year=2021 and other websites whose addresses are given in references.

ACKNOWLEDGMENT

A project work of immense sheer size and it cannot be proficient by an individual all by them, ultimately I am gratifying to a number of individuals whose qualified guidance, and assistance and encouragement have made it a pleasant venture to undertake this project work.

I am grateful to my institution, **M S Engineering College** with its ideals and inspiration for having provided us with the facilities, which has made this project work a success.

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CHAPTER-1

INTRODUCTION

1.1 PROJECT DESCRIPTION

The main objective of the project is to design and develop a user friendly-system

● Easy to use an efficient computerised system.

● Developing an accurate and flexible system will eliminate data redundancy.

● To study the functioning of the IPO management System.

● To make software fast in processing, with a good user interface.

● To make software with a good user interface so that users can change it and it should be used for a long time without error and maintenance.

● To provide a synchronised and centralised IPO database.

● Computerization can be helpful as a means of saving time and money.

● To provide a better Graphical User Interface (GUI).

● Fewer chances of information leakage.

● Provides Security to the data by using login and password methods.

● To provide immediate storage and retrieval of data and information.

● Improving arrangements for students' coordination.

● Reducing paperwork.

1.2 LIMITATIONS:

● Time consumption in data entry as the records are to be manually maintained faculties a lot of time.

● Lot of paper work is involved as the records are maintained in the files and registers.

● Storage Requires as files and registers are used the storage space requirement is increased.

● Less Reliable use of papers for storing valuable data information is not at all reliable.

1.3 SCOPE OF THE PROJECT

IPO data are covered extensively, which include; Issues, Prospectus, Allotment & New Listing. In today's fast moving and dynamic world, short-term investors face difficulty while choosing which avenue to invest in the study has been carried out to analyse the post-Initial Public Officer (IPO) performance of various companies that have gone public in 2021 using event study methodology. The study also tries to determine whether these IPOs were under priced in the short run and identifies various factors that influence the movement of such IPOs in the short run. The study found that about 70 per cent of the selected IPOs are underpriced in the short run and the movement of these IPOs in the short run is not influenced by the age of the company, issue size of the IPO, ownership sector and the promoter's holdings after the issue.

1.4 OBJECTIVE

- To analyze post-IPO performance of selected companies.
- To identify whether the IPOs of selected companies are under priced, fairly priced or overpriced.
- To analyse the impact of various variables such as age of the companies, issue size of the IPO, ownership holding of such companies and the promoter's holdings after the issue on abnormal and total returns of selected Indian IPOs.

CHAPTER-2

SOFTWARE SPECIFICATION

2.1 SYSTEM REQUIREMENTS

2.1.1 Hardware Specifications:

- PROCESSOR: 32-Bit/64-Bit Processor
- RAM: 1GB RAM
- HARD DISK: 10GB(Minimum)
- MONITOR: 1080x1440(Resolutions)

2.1.2 Software Specifications:

- OPERATING SYSTEM: Windows7/8/10/Linux
- FRONT END TOOL: Python
- BACK END TOOL: Sqlite
- DEVELOPMENT TOOL: Sqlite3, Tkinter

2.2 TOOLS AND TECHNOLOGIES USED

2.2.1 Tkinter: Python provides variousoptionsfor developing graphical user interfaces (GUIs). Most important are listed below.

- Tkinter − Tkinter is the Python interface to the Tk GUI toolkit shipped with Python. We would look this option in this chapter.
- wxPython − This is an open-source Python interface for wxWindows http://wxpython.org.
- JPython − JPython is a Python port for Java which gives Python scripts seamless access to Java class libraries on the local machine http://www.jython.org8

2.2.2 Sqlite3:

Python SQLite3 module is used to integrate the SQLite database with Python. It is a standardized Python DBI API 2.0 and provides a straightforward and simple-to-use interface for interacting with SQLite databases. There is no need to install this module separately as it comes along with Python after the 2.5x version.

2.3 Data Requirements

Table: ipo_database

S. No.	Attributes	Data Type	Description
1	issuer_company	text	Issuer Company of each IPO
2	exchange	text	exchange market like BSE, SME
3	open_date	numeric	Open date of IPO
4	close_date	numeric	Close date of IPO
5	lot_size	integer	Quantity released of IPO
6	issue_price	integer	Issue price of IPO
7	issue_size	integer	Size of IPO

2.4 FUNCTIONAL REQUIREMENTS:

2.4.1 Interface Requirements: -

User Interface is there to provide communication between the user and the system and our application also has communication between them. The user interface provides many functions to the user to select from and the user based on his/her requirements and needs selects one or the other. The various functions provided by the system which the user can access are:-

Generic View: - This is the most basic feature which can be accessed by any kind of user whether registered or unregistered. This is the function that will be provided to the user when he/she opens the application. Under this, a user can see **IPO value**, get the basic knowledge about constituent 10 IPOs, and can also read the **news**.

Registration : - User can register them self to perform different type of functions like View, Add records in Database, Edit/Update, Delete features.For registration it asks for username and password which are mandatory to enter.

Login: - After the user gets registered, he selects the login option from the main GUI. He/she has to provide **username** and **password** .If the credentials are correct then the user's can use the different functionalities provided by this program.

2.4.2 Non Functional Requirements

I. Security:-

I.1. Login ID

Every registered user who uses the system shall have a Username and Password.

II. Performance :-

II.1. Response Time

The application will respond in 2-3 seconds.

II.2. User Interface

The GUI is user informative and very user friendly.

II.2. Resource Utilisation

The resources are modified according to the user's operations like viewing IPOs, etc.

II.3. Capacity

The application can support multiple users to get registered.

III. Maintainability:-

III.1. Back Up

All the data of the registered users are stored up in the database.

III.2. Errors

The application is designed in such a way that there is minimum scope of errors.

IV. Reliability:-

The system is very reliable because all the values are extracted from official website and other reputed websites.

V. Availability:-

The system is available to the user 24 hours a day 7 days a week and 365 days a year.

VI. Usability:-

- The user must have some basic knowledge about Sensex and Stock Markets otherwise a little training is required.
- The application is user friendly and self-explanatory.

VII. User Cost:-

The user can use this application free

3 Conceptual Design

3.1 RELATIONAL SCHEMA DIAGRAM:

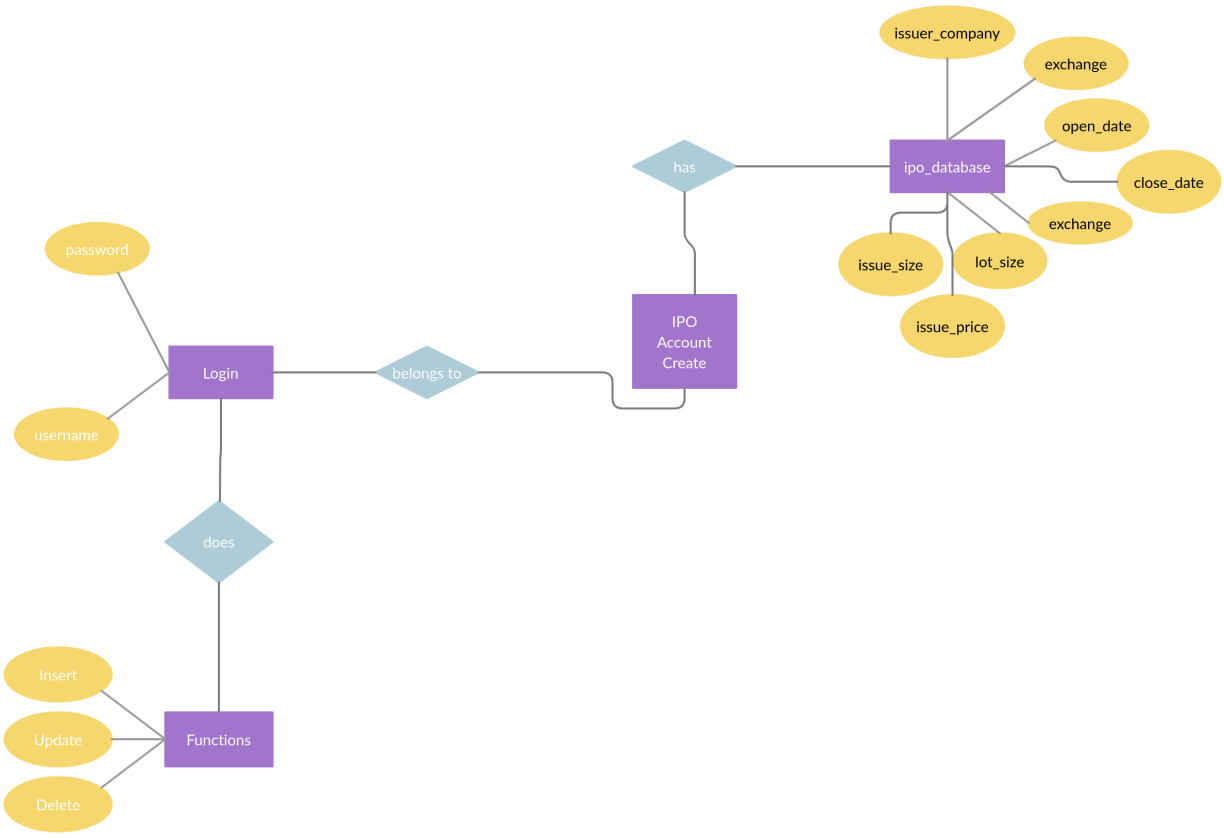
ipo_database

issuer_company	exchange	open_date	close_date	lot_size	issue_price	issue_size

login

username	password

3.2 ER DIAGRAM:



4. Implementation:

4.1 Login and Register: -

```
from tkinter import *
 from PIL import Image,ImageTk,ImageDraw
 import os
 def delete2():
   screen3.destroy()
 def delete3():
   screen4.destroy()
 def delete4():
   screen5.destroy()
 def login_sucess():
   global screen3
   screen3 = Toplevel(screen)
   screen3.title("Success")
   screen3.geometry("150x100")
   Label(screen3, text = "Login Sucess").pack()
   Button(screen3, text = "OK", command =delete2).pack()
 def password_not_recognised():
   global screen4
   screen4 = Toplevel(screen)
   screen4.title("Success")
   screen4.geometry("150x100")
   Label(screen4, text = "Password Error").pack()
   Button(screen4, text = "OK", command =delete3).pack()
 def user_not_found():
   global screen5
   screen5 = Toplevel(screen)
   screen5.title("Success")
   screen5.geometry("150x100")
   Label(screen5, text = "User Not Found").pack()
```

```
global     username
global password
  global  username_entry
  global   password_entry
  username  =  StringVar()
  password = StringVar()
  Label(screen1, text = "Please enter details below").pack()
  Label(screen1, text = "").pack()
  Label(screen1, text = "Username * ").pack()
  username_entry = Entry(screen1, textvariable = username)
  username_entry.pack()
  Label(screen1, text = "Password * ").pack() password_entry
  = Entry(screen1, textvariable = password)
  password_entry.pack()
  Label(screen1, text = "").pack()
  Button(screen1, text = "Register", width = 10, height = 1, command =
register_user).pack()

def login():
  global screen2
  screen2 = Toplevel(screen)
  screen2.title("Login")
  screen2.geometry("300x250")
  Label(screen2, text = "Please enter details below to login").pack()
  Label(screen2, text = "").pack()
  global  username_verify
  global password_verify
  username_verify = StringVar()
  password_verify = StringVar()
```

```
def main_screen():
  global screen
  screen = Tk()
  screen.geometry("300x250") screen.title("IPO
  Management System 2021")
  screen.config(bg="#2c3e50")

  login_label=Label(text = "IPO Management System 2021 Login ", bg = "#2c3e50",
 width = "300", height = "2", font = ("Arial", 18)).pack()
  Label(text = "", bg="#2c3e50").pack()
screen.mainloop()

main_screen()
```

4.2 Main Page:-

```
 from tkinter import * from PIL
import Image
import sqlite3
import tksheet
root =Tk()
root.title('IPO MANAGEMENT SYSTEM V1.2')

#root.iconbitmap('/home/muglu/Personal/DataBase/project/IPO Test/ipo.ico')
root.config(bg="#516395")
root.geometry("700x540")
#Databases
#Create a databse or connect to one
conn= sqlite3.connect('IPO_DB.db')
#create cursor
c= conn.cursor() #Create Table
'''

c.execute(""" CREATE TABLE ipo_database(
      issuer_company text,
      exchange text,
      open_date numeric,
      close_date numeric,
      lot_size integer,
      issue_price integer,
      issue_size integer
      )""")

'''
```

```
global issuer_company_editor

global exchange_editor
global  open_date_editor
global  close_date_editor
global lot_size
global issue_price_editor
global issue_size_editor
def submit():
      #Create a database or connect to
      one conn=
      sqlite3.connect('IPO_DB.db') #create
      cursor
      c= conn.cursor()

      # Insert Into Table

      c.execute("INSERT INTO ipo_database VALUES(:issuer_company, :exchange, :open_date,
:close_date, :lot_size, :issue_price, :issue_size)",

      {
            'issuer_company': issuer_company.get(),
            'exchange': exchange.get(),
            'open_date': open_date.get(),
            'close_date': close_date.get(),
            'lot_size': lot_size.get(),
            'issue_price':issue_price.get(),
            'issue_size' :issue_size.get()  })

      #Commit Changes
      conn.commit()
      #Close Connection
      conn.close()
      print_records1= ''
   for record in records:

       print_records1 += str(record[7])+"\n "
   sl_no= Label(show, text="Serial Number")
   sl_no.grid(row=3, column=1,padx=4)
   sl_no.config(bg="#516395",font=('FreeSerif',18))
   sl_no = Label(show, text=print_records1)
   sl_no.grid(row=5, column=1,padx=4)
   sl_no.config(bg="#516395")
   print_records2= ''
```

```
    for record in records:
print_records2 += str(record[0])+"\n " issuer_company_label =
Label(show,text="Issuer company")
issuer_company_label.grid(row=3, column=2,padx=4)
issuer_company_label.config(bg="#516395",font=("FreeSerif", 18))
#Create Submit Button

submit_btn= Button(root, text="Add Record To Database", command=submit)
submit_btn.grid(row=8, column=0, columnspan=2, pady=10, padx=10,ipadx=100)
#Create Show Records Button
show_btn= Button(root, text="Show Records", command=show_data)
show_btn.grid(row=9, column=0, columnspan=2, padx=10, pady=10, ipadx=137) #
Create a delete Button
del_btn= Button(root, text="Delete Records", command=delete) del_btn.grid(row=12,
column=0, columnspan=2, padx=10, pady=10, ipadx=136) #Create a edit button
edit_btn= Button(root, text="Edit Records", command=edit) edit_btn.grid(row=13,
column=0, columnspan=2, padx=10, pady=10, ipadx=136) #Commit Changes
conn.commit()
```

5. User Interfaces

Fig- Dashboard

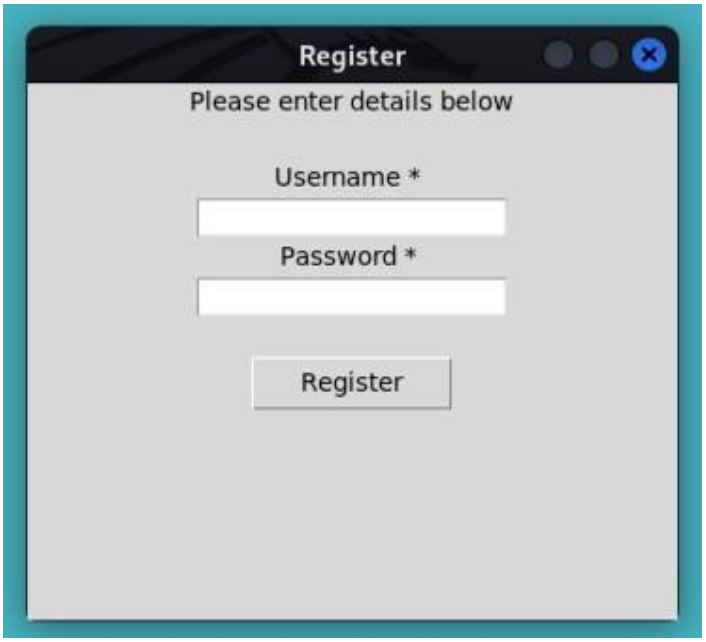


Fig: Register Page

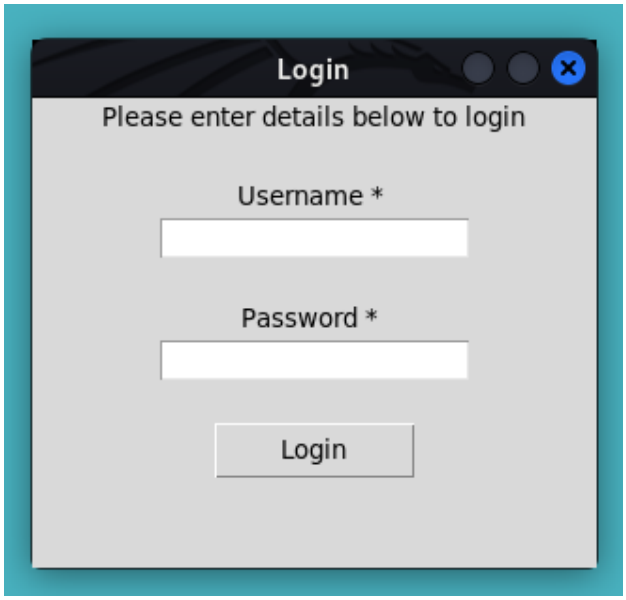


Fig: Login Page

Fig: IPO Management System

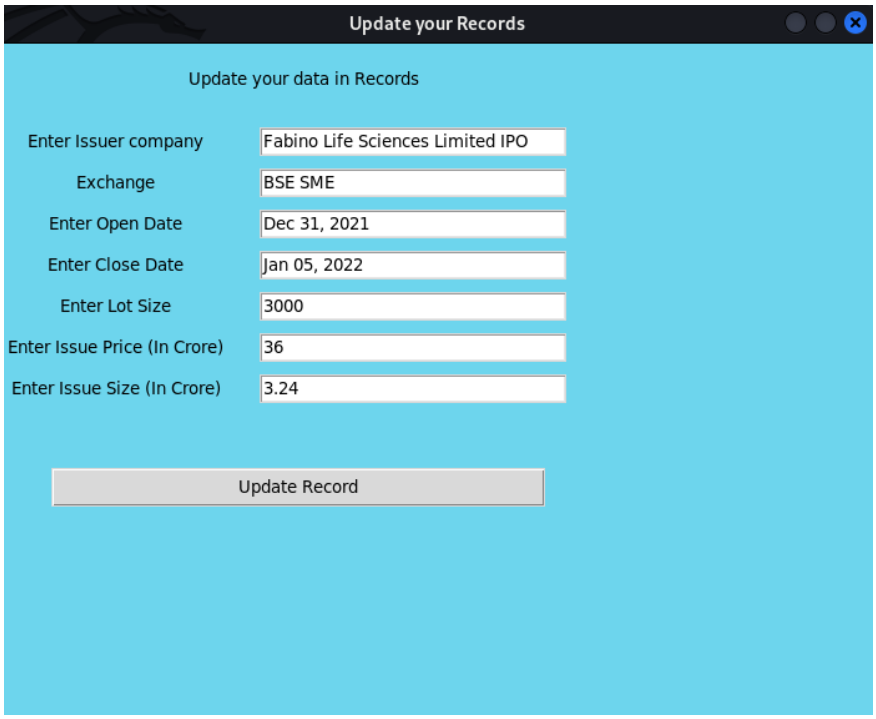


Fig: Update Records

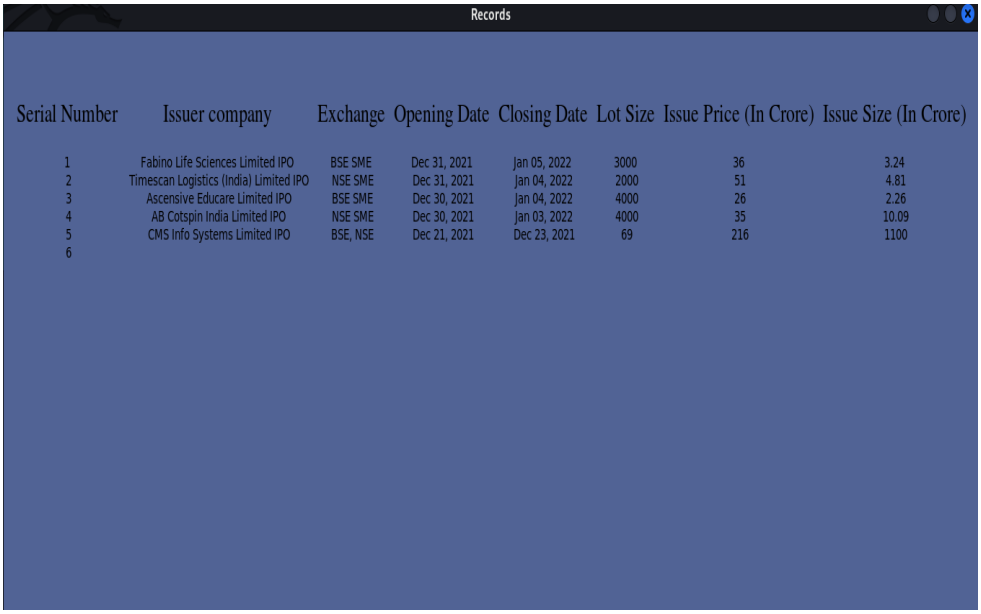


Fig: View Records

6. CONCLUSION

After all the rigorous sittings and hours of hard labour by all the team members, the project is finally completed and has really shaped in a satisfying way. The application stands out in most of its performance requirements and also has a very friendly and self-explaining user interface.

The application is very practical and simple to run and use. In today's time when personal finance is so important that everyone needs to be updated about the stock market and its day to day happenings, this application can prove to be very handy to the user in terms of keeping track of favourite IPO. It also satisfies security concerns as it is based on username and password.

We hope the application ends up giving a nice experience to every user and has no fatal errors and any severe drawbacks. Any suggestion or feedback is eagerly awaited by us.

7. REFERENCES

The following references helped immensely in gathering information about the project and its creation. The application accesses them to update and retrieve the values of IPO and its individual stock. All the references provided below may not have explicit use in the application or for the user but were visited numerous times by the developers during the development of the project for different information and knowledge. If any reference is missed in the list below it is deeply regretted. The references are as follows: -

https://www.chittorgarh.com/report/ipo-in-india-list-main-board-sme/82/?year=2021

https://journals.sagepub.com/doi/full/10.1177/0971890720914100

www.bseindia.com/sensex/index.htm

http://www.bseindia.com/stockinfo/indices.aspx

http://www.bseindia.com/