Project Document

Workspace Login URL : https://bluestock.in/blueflow/m
Login Details : You will receive over mail
Work Policy : https://bluestock.in/hr/work-policy.html
Team Structure

ID	Name	Mail	Mo	Role
11	Omkar Prasad Choudhury	omkarchoudhury0706@gmail.com	7789056907	Team Lead 1
12	Kashish Kharate	kharatekashish@gmail.com	6263009904	Team Lead 2
13	kumkum sahoo	kumkum982706@gmail.com	9827068749	Team Lead 3
14	Antre Rutuja Vikas	antrerutuja99@gmail.com	7767895245	Dev
15	Domala Pardeev	pardeevdomala6@gmail.com	9160993980	Dev
16	Chittimalla.Nikshitha	chittimallanikshitha05@gmail.com	9912239392	Dev
17	Krishna Keshri	krishnakeshri9510ib@gmail.com	6201777253	Dev
18	Arpit kumar mandal	arpitmandal31@gmail.com	9348890090	Dev
19	Nagamalla rakesh	nagamallarakesh3@gmail.com	9010393981	Dev
20				Dev

Project: IPO Web Application & REST API Development
Company: Bluestock Fintech
Website : www.bluestock.in
Mail Id : hello@bluestock.in
WA Contact :7038202440

Date: 01/06/2025
Department : #BF-SOFT-DEV

Project Manager - Yash Kale
Mail id - yashkale@bluestock.in
WA No : 9209550273

Important :-

Check UI UX Design- https://www.figma.com/design/PCUxVS5rJc6sJkzgjIMdTJ/MJ-Bluestock---IPO-Web-App?node-id=0-1&t=uTp9zYoAxTCagjMQ-1

Check System Design: - https://www.figma.com/board/g9bjreevYNJkfMuwRacyaP/System-Design?t=rhom7O3DRl5pdHkG-1

Assets (Logo,SVG, PNG Etc : https://drive.google.com/drive/folders/1yH9Y_mIqqEkZXtzhqHSuFtEwFOr8BXH5?usp=drive_link

Task Management for (Team lead & Co Team Lead):

- Use Notion for assigning and tracking tasks within the team.
- Developers must report daily work status to the Team Leader.
- Developers also can change their role by taking permission of team leader
- The Team Leader should report work progress every 7 days to Mr. Yash Kale.
- Write high quality industry standard code.
- Take regularly google meeting with team members

GitHub Repo Link: Team Lead must create private repository for entire team member and give access to all team members.

Introduction

This report outlines the production-level software development tasks assigned to our interns at Bluestock Fintech. The project involves developing an IPO web application and design REST API for the Bluestock website/app and our clients' websites/apps. These tasks are designed to enhance the interns' practical knowledge and contribute to our ongoing projects. Each task aligns with our company's goals and the interns' skills and career aspirations.

Objective:
Develop a web application and REST API that provides IPO-related information to the public. The application will display information such as company logo, name, price band, opening and closing dates, issue size, issue type, listing date, status, IPO price, listing price, listing gain, current market price (CMP), and current return. Additionally, it will include downloadable RHP and DRHP PDFs.

Data Source : Add dummy IPO Data in database which shown on upcoming ipo webpage (refer ui ux design)

Software Requirements
Backend:

- SDK: Python (Version 3.12.3)
- Framework: Django (Version 5.0.6) - `pip install Django`
- API: Django REST Framework (Version 3.15.1) - `pip install djangorestframework`
- Tools: Postman for API testing, Git & GitHub for version control

Frontend:

- Technologies: HTML, CSS, plain JavaScript (no NodeJS)
- Framework: Bootstrap 5 (via CDN link)
- Database: PostgreSQL
- IDE: Visual Studio Code (VS Code)

1. **Prerequisites**

Interns are required to familiarize themselves with the following concepts before starting the project:

What is Stock Market ? - https://youtu.be/Zt6bVL39b9M?si=efZqf77wkWaOrnAQ
What is IPO ? - https://youtu.be/gWrR5qPEmWE?si=QAf19b_i-uSMn3vV

PROJECT FEATURES

Public User Interface:

- Home page: List of IPOs (upcoming, ongoing, listed)
- IPO detail page with full IPO data
- Download RHP & DRHP PDFs

- Search & Filter by status or name

Admin Panel:

- Login-secured interface
- Create, update, delete IPO data
- Upload PDF files (RHP, DRHP)
- Manage logos and all IPO fields

API:

- /api/ipo/ — List IPOs
- /api/ipo/<id>/ — IPO details
- Filtering, search & sort support

This information will be available on both the Bluestock website/app and clients' websites/apps.

PROJECT STRUCTURE

```
ipo_project/
├── ipo_app/
│   ├── models.py
│   ├── views.py
│   ├── serializers.py
│   ├── urls.py
│   └── admin.py
├── ipo_project/
│   ├── settings.py
│   ├── urls.py
├── media/  # PDF & logo uploads
├── templates/
│   └── home.html, detail.html, ...
├── static/
├── db.sqlite3 / PostgreSQL
└── manage.py
```

Development Overview

Important Notes:-

- This is a production-level project; therefore, write quality code and test features regularly.
- Apply necessary security rules to ensure data protection and integrity.
- Utilize ChatGPT for testing code, writing features, and designing the database schema.

1. References

https://youtu.be/s7aINQPGNDM?si=ydfab7GMUaMCg91W

https://www.youtube.com/watch?v=C1NgOmoOszc&list=PLjVLYmrlmjGcyt3m6rt21nfjhYSWP_Ue_

https://youtu.be/5EY6JFptZgw?si=nwZ5DE7nVc4TXs8X

9.Deadlines

Date	Work Status
-	Complete All Frontend (Client Side, Admin Dashboard)
-	Complete Entire Project

//Deadline for entire project submission updated in workspace

Note: The timeline is flexible. Discuss with your team leader to determine a suitable schedule for all developers.

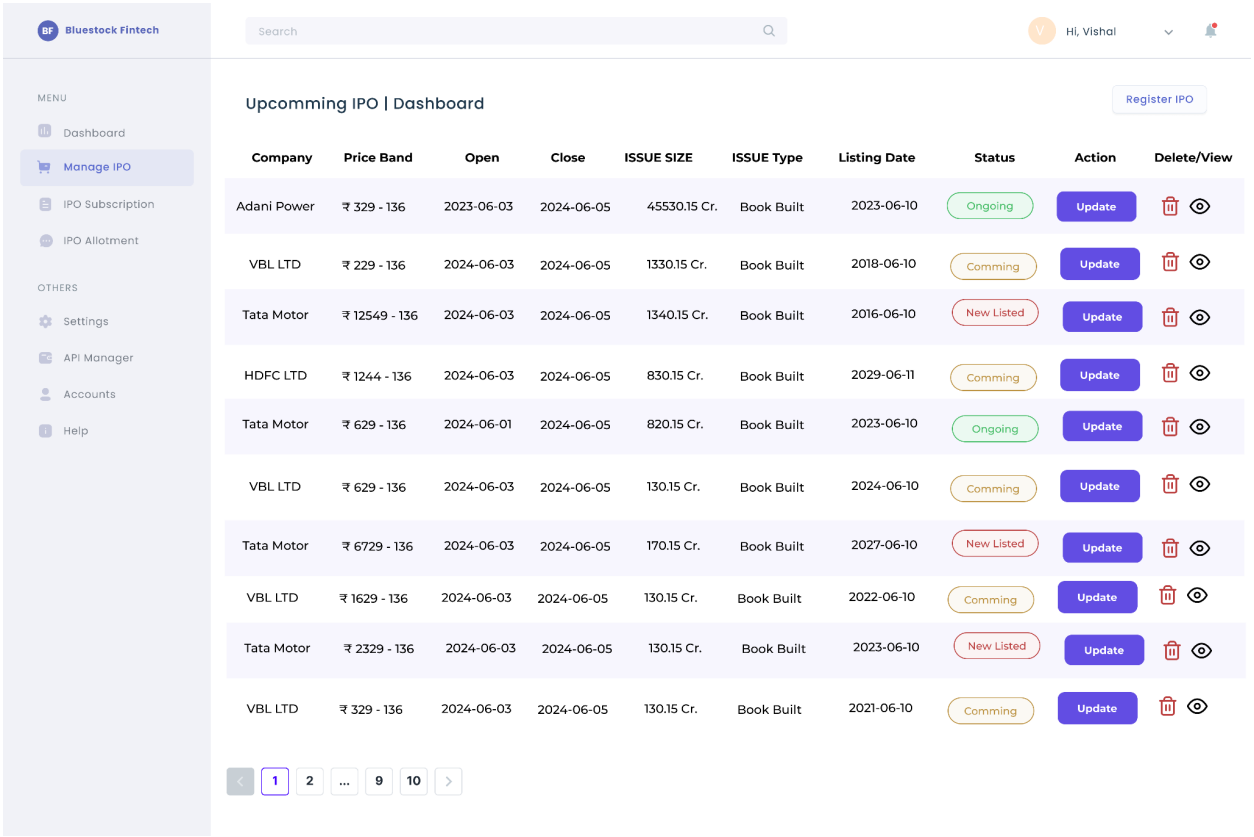
Submission Guidelines

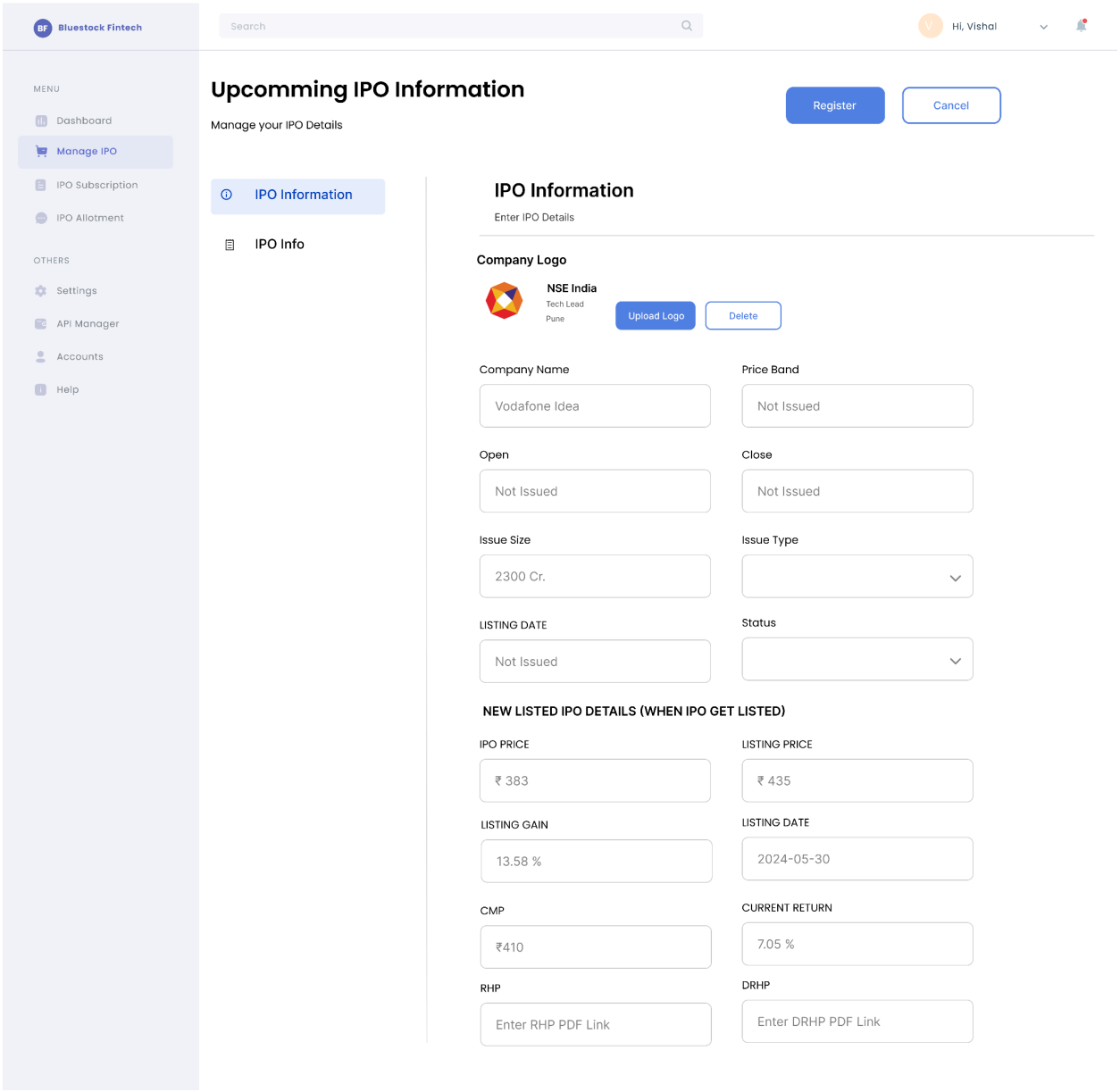
- Do not commit buggy or error-prone code.
- Thoroughly test your code on your local machine before committing.
- Commit changes to the main branch and push them.

10. **Resources for This Project Assets** (Logo,SVG, PNG Etc) : https://drive.google.com/drive/folders/11Q6kapopPp4tVn82QKRCX8cpHYHO5GCK?usp=drive_link (Request Access)

Figma UI/UX Prototype:

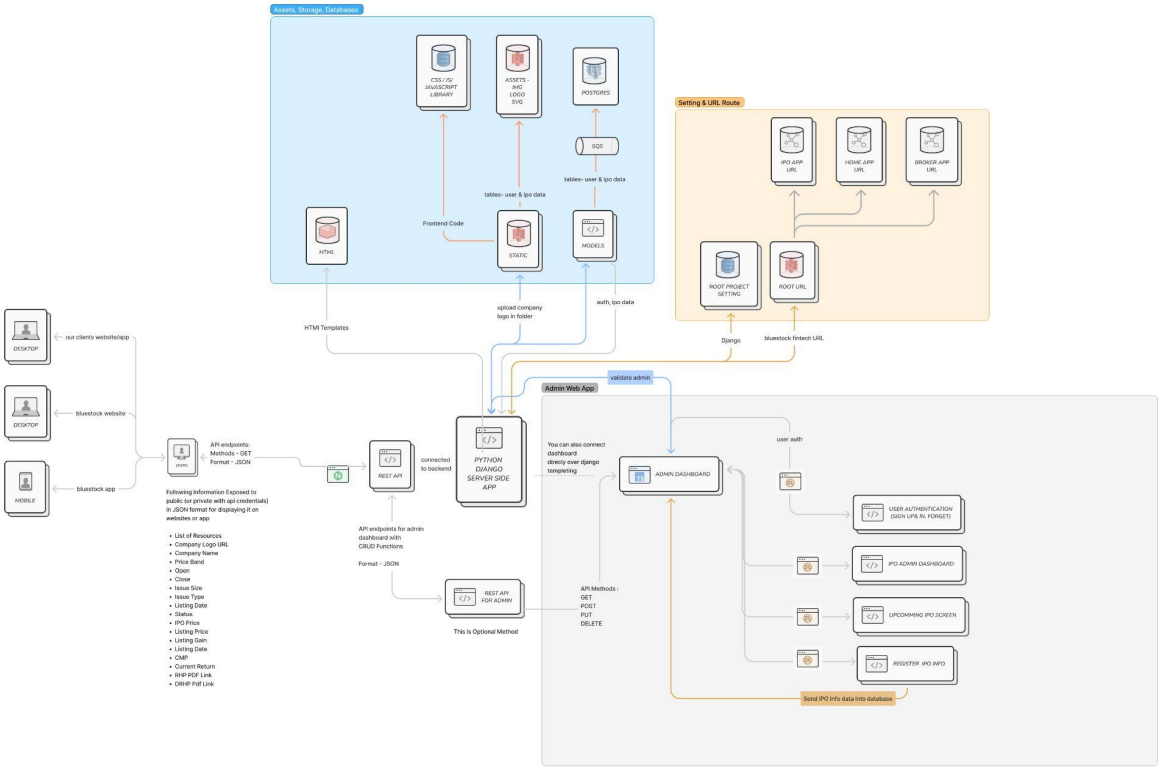
Please visit link for complete details - https://www.figma.com/design/PCUxVS5rJc6sJkzgjIMdTJ/MJ-Bluestock---IPO-Web-App?node-id=0-1&t=uTp9zYoAxTCagjMQ-1





System Design:

View More: - https://www.figma.com/board/g9bjreevYNJkfMuwRacyaP/System-Design?node-id=0-1&p=f



System Design : IPO Web Application & REST API
By Bluestock Fintech

Django Models

```
from django.db import models

class IPO(models.Model):
    STATUS_CHOICES = [
        ('upcoming', 'Upcoming'),
        ('ongoing', 'Ongoing'),
        ('listed', 'Listed'),
    ]

    company_name = models.CharField(max_length=255)
    logo = models.ImageField(upload_to='logos/')
    price_band = models.CharField(max_length=100)
    open_date = models.DateField()
    close_date = models.DateField()
    issue_size = models.CharField(max_length=100)
    issue_type = models.CharField(max_length=100)
    listing_date = models.DateField(null=True, blank=True)
    status = models.CharField(max_length=20, choices=STATUS_CHOICES)
    ipo_price = models.FloatField(null=True, blank=True)
```

```
    listing_price = models.FloatField(null=True, blank=True)
    current_market_price = models.FloatField(null=True, blank=True)
    rhp_pdf = models.FileField(upload_to='docs/', null=True, blank=True)
    drhp_pdf = models.FileField(upload_to='docs/', null=True, blank=True)

    @property
    def listing_gain(self):
        if self.ipo_price and self.listing_price:
            return round(((self.listing_price - self.ipo_price) / self.ipo_price) * 100, 2)
        return None

    @property
    def current_return(self):
        if self.ipo_price and self.current_market_price:
            return round(((self.current_market_price - self.ipo_price) / self.ipo_price) * 100, 2)
        return None

    def __str__(self):
        return self.company_name
```

ER Diagram Description:

Entities and Attributes:

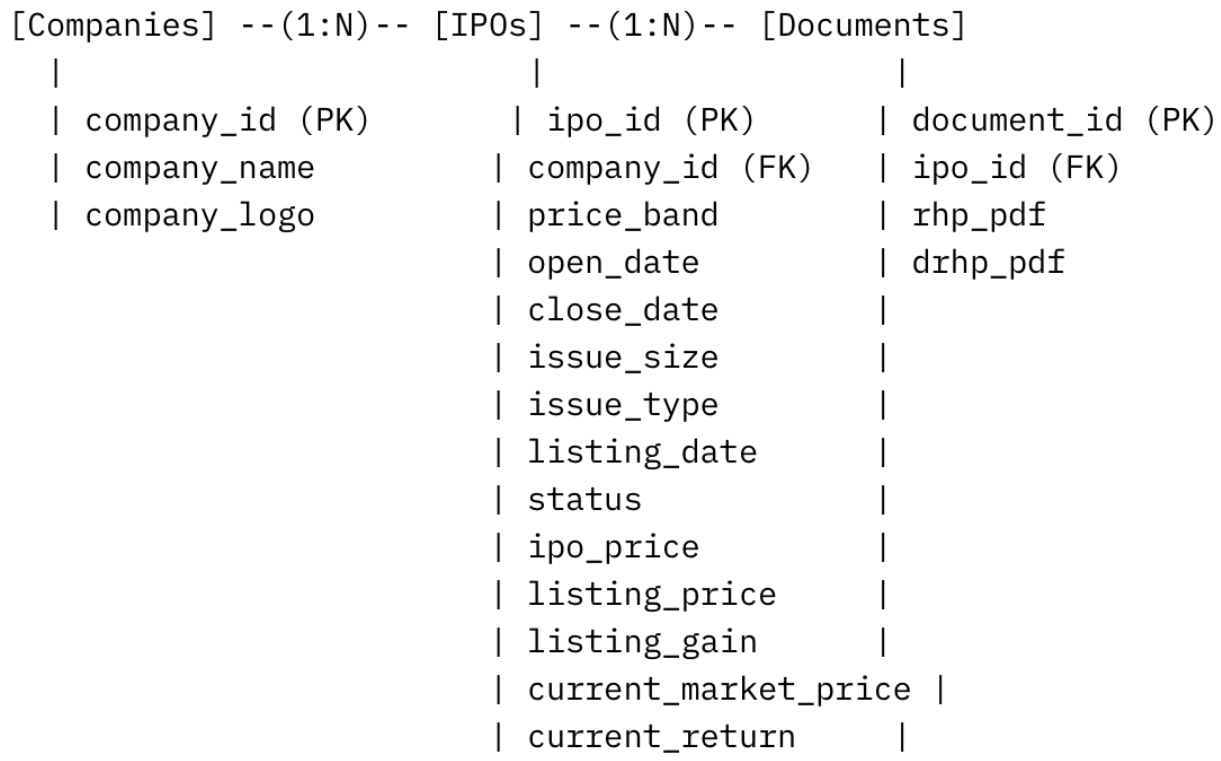
1. **Companies**
    - **company_id**: INT (Primary Key, Auto-Increment)
    - **company_name**: VARCHAR(255) (Not Null)
    - **company_logo**: VARCHAR(255) (URL or file path)
2. **IPOs**
    - **ipo_id**: INT (Primary Key, Auto-Increment)
    - **company_id**: INT (Foreign Key referencing Companies.company_id)
    - **price_band**: VARCHAR(50)
    - **open_date**: DATE
    - **close_date**: DATE
    - **issue_size**: VARCHAR(100)
    - **issue_type**: VARCHAR(50)
    - **listing_date**: DATE
    - **status**: ENUM('Upcoming', 'Open', 'Closed', 'Listed')
    - **ipo_price**: DECIMAL(10,2)
    - **listing_price**: DECIMAL(10,2)
    - **listing_gain**: DECIMAL(5,2)
    - **current_market_price**: DECIMAL(10,2)

- **current_return**: DECIMAL(5,2)

3. **Documents**
    - **document_id**: INT (Primary Key, Auto-Increment)
    - **ipo_id**: INT (Foreign Key referencing IPOs.ipo_id)
    - **rhp_pdf**: VARCHAR(255) (URL or file path)
    - **drhp_pdf**: VARCHAR(255) (URL or file path)

Relationships:

1. **Companies to IPOs**
    - **Type**: One-to-Many
    - **Description**: One company can have multiple IPOs, but each IPO is associated with exactly one company.
    - **Foreign Key**: company_id in IPOs references company_id in Companies.
    - **On Delete**: CASCADE (if a company is deleted, all related IPOs are deleted).
2. **IPOs to Documents**
    - **Type**: One-to-Many
    - **Description**: One IPO can have multiple documents, but each document is associated with exactly one IPO.
    - **Foreign Key**: ipo_id in Documents references ipo_id in IPOs.
    - **On Delete**: CASCADE (if an IPO is deleted, all related documents are deleted).


[Companies] --(1:N)-- [IPOs] --(1:N)-- [Documents]
company_id (PK)
company_name
company_logo
ipo_id (PK)
company_id (FK)
price_band
open_date
close_date
issue_size
issue_type
listing_date
status
ipo_price
listing_price
listing_gain
current_market_price
current_return
document_id (PK)
ipo_id (FK)
rhp_pdf
drhp_pdf