STOCKER

[UDP]

A Project Report Submitted by

Kanan Anadkat-171160107002

Hetvi Gandhi-1711601018

Pranav Joshi-1711601029

Brijesh Shukla-171160107052

in partial fulfilment for the award of the degree of

Bachelor of Engineering

in

Computer Engineering

Marwadi Education Foundation-Faculty of PG Studies

& Res. In Engineering & Technology, Rajkot

Gujarat Technological University, Ahmedabad

2020-21

Marwadi Education Foundation-Faculty of PG Studies

& Res. In Engineering & Technology, Rajkot

Computer Engineering Department

2020-21

CERTIFICATE

This is to certify that the project entitled **Stoker** has been carried out by **Kanan Anadkat-171160107002** under my guidance in partial fulfilment of the degree of Bachelor of Engineering in Computer Engineering of Gujarat Technological University, Ahmedabad during the academic year 2019-20.

Date: _____

Internal Guide **Head of the Department**

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Assistant Professor

Prof. Jay Teraiya
Head of Department

Marwadi Education Foundation

Faculty of [Engineering/Technology/PG Studies]

Computer Engineering Department

2020-21

CERTIFICATE

This is to certify that the project entitled **Stoker** has been carried out by **Hetvi Gandhi-171160107018** under my guidance in partial fulfilment of the degree of Bachelor of Engineering in Computer Engineering of Gujarat Technological University, Ahmedabad during the academic year 2020-21.

Date: _____

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Head of the Department

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Faculty of [Engineering/Technology/PG Studies]

Computer Engineering Department

2020-21

CERTIFICATE

This is to certify that the project entitled **Stoker** has been carried out by **Pranav Joshi-171160107029** under my guidance in partial fulfilment of the degree of Bachelor of Engineering in Computer Engineering of Gujarat Technological University, Ahmedabad during the academic year 2020-21.

Date: _____

Internal Guide **Head of the Department**

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Prof. Jay Teraiya
Head of Department

Marwadi Education Foundation

Faculty of [Engineering/Technology/PG Studies]

Computer Engineering Department

2020-21

CERTIFICATE

This is to certify that the project entitled **Stoker** has been carried out by **Brijesh Shukla-171160107052** under my guidance in partial fulfilment of the degree of Bachelor of Engineering in Computer Engineering of Gujarat Technological University, Ahmedabad during the academic year 2020-21.

Date: _____

Internal Guide	**Head of the Department**
Prof. Shaktirajsinh Jadeja Assistant Professor	Prof. Jay Teraiya Head of Department

Undertaking about Originality of Work

We hereby certify that we are the sole authors of this UDP project report and that neither any part of this UDP project report nor the whole of the UDP Project report has been submitted for a degree by other student(s) to any other University or Institution.

We certify that, to the best of our knowledge, the current UDP Project report does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations or any other material from the work of other people included in our UDP Project report, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that we have included copyrighted material that surpasses the boundary of fair dealing within the meaning of the Indian Copyright (Amendment) Act 2012, we certify that we have obtained a written permission from the copyright owner(s) to include such material(s) in the current UDP Project report and have included copies of such copyright clearances to our appendix.

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Team:

Enrolment Number	**Name**	**Signature**
171160107002	Kanan Anadkat	Kanan Anadkat
171160107018	Hetvi Gandhi	Hetvi Gandhi
171160107029	Pranav Joshi	Pranav Joshi
171160107052	Brijesh Shukla	Brijesh Shukla

Place: _____ Date: _____

Acknowledgments

We would like to extend our hearty thanks with a deep sense of gratitude and respect to all those who provides us immense help and guidance during our project.

We would like to thank our Head of Department for providing a vision about the system. We have been greatly benefited from their regular critical reviews and inspiration throughout my work.

We would like to express our sincere thanks to our internal guide Prof. Shaktirajsinh jadeja and who gave us an opportunity to undertake such a challenging and great innovative work. We are grateful to them for their guidance, encouragement, understanding and insightful support in the development process.

Last but not the least we would like to mention here that we are greatly indebted to each and everybody who has been associated with our project at any stage but whose name does not find a place in this acknowledgement.

Index

Institute's Vision and Mission

Institute's Vision

Our vision is to address challenges facing our society and planet through sterile education that builds capacity of our students and empower them through their innovative thinking practice and character building that will ultimately manifest to boost creativity and responsibility utilizing the limited natural resources to meet with the challenges of the 21st century.

Institute's Mission

- To Produce creative, responsible and informed professionals
- To produce individuals who are digital-age literates, inventive thinkers, effective communicators and highly productive.
- To deliver cost-effective quality education
- To offer world-class, cross-disciplinary education in strategic sectors of economy though well devised and synchronized delivery structure and system, designed to tackle the creative intelligence and enhance the productivity of individuals.
- To provide a conducive environment that enables and promotes individuals to creatively interact, coordinate, disseminate and examine change, opinion as well as concept that will enable students to experience higher level of learning acquired through ceaseless effort that lead to the development of character, confidence, values and technical skills.

Department's Vision and Mission

Department's Vision

To impart quality technical education through research, innovation and teamwork for creating professionally superior and ethically strong manpower that meet the global challenges of engineering industries and research organization in the area of Computer Engineering.

Department's Mission

- Maintain a vital, state-of-the art ICT enabled teaching and learning methodologies, which provides its students and faculty with opportunities to create, interpret, apply and disseminate knowledge.
- Enable graduates in becoming digital age literates, innovators, efficient communicators and result oriented professionals.
- Dedicate itself to providing its students with the skills, knowledge and attitudes that will allow its graduates to succeed as engineers, leaders, professionals and entrepreneurs.
- Prepare its graduates for life-long learning to meet intellectual, ethical and career challenges.
- Inspire graduates for competitive exam higher education as well as research and development.

PEO, PO and PSO

Program Educational Objectives (PEO):

The program educational objectives for the Computer Engineering program describe accomplishments that graduates are expected to attain within four years after graduation. The Computer Engineering program educational objectives are to produce graduates who:

- Function and communicate effectively to solve technical problems.
- Advance professionally to roles of greater computer engineering responsibilities, and/or by transitioning into leadership position in business, government, and/or education.
- Participate in life-long learning through the successful completion of advanced degrees, continuing education, and/or engineering certification(s)/licensure or other professional development.
- Demonstrate a commitment to community by applying technical skills and knowledge to support various service activities.
- Assume positions of leadership and responsibility within an organization and progress through advanced degree or certificate programs in engineering, business, and other professionally related fields.

Program Outcomes (POs)

Engineering Graduates will be able to:

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

PSO1. Students shall demonstrate skills, the knowledge and competence in the analysis, design and development of computer based systems addressing industrial and social issues.

PSO2. Students shall have competence to take challenges associated with future technological issues associated with security, wearable devices, augmented reality, Internet of Anything etc.

Abstract

This is interesting machine learning project in this project we will make one website or software. In this we will plane for the predict the future price of the stock market. in this we will using frontend ,backend an as well as the graph plotting using machine learning we will use HTML, CSS, JS for frontend developing and for backend python, machine learning and django as well as flask and for API another dataset to storing the data and to hosting this website we will use Xamp server or Gunicorn This is also use full for that if user is new to stock market and in this project we will set some advanced level features like you will trading directly from here or using graph our software or website is giving some advice to user to stay ,to buy of go for sell in this data will fetch form official site of BSE of NSE in every 2 second so this is brief idea of our software.

List of Figures

1. Introduction

1.1 Problem Summary and Introduction

1.2 Aim and Objectives

1.3 Problem Specifications

1.4 Plan of the work

Duration of Work	Completed Work
July-August	Done Shodh yatra
August-September	Decided the project definition and started gathering the requirements.
September-October	Technology, tools, functionalities and features have been decided.
October-November	Wire frame, the flow of the website and Roles of the Different user has been decided and create Activity diagram, Sequence diagram, Use case diagram accordingly.
November-December	Started learning the technologies and implemented data dictionary for the project.
December-January	Final implementation of the website is been started. Finalize the layout of the website and implemented registration and login Field.
January-February	Complete the whole GUI of the website, put the necessary validations on that and made the changes in the validation as per faculty guide suggested.
February-March	Start working on functionalities.

March-April	Whole functionalities are implemented and testing part will take place.

1.5 Materials / Tools required

2. Analysis, Design Methodology and Implementation Strategy

2.1 Ideation Canvas

<table>
<tr><td colspan="2">IDEATION CANVAS Group ID:——— DATE:
Domain Name: Stocker</td></tr>
<tr><td colspan="2">People:
Admin, User, Advisor</td></tr>
<tr><td>Activities:
Registration, Login,
Taking user Details,
Taking Shares Details,
Asking Inquiry</td><td>Situation /Context /Location:
Using of Internet,
Using of Database,
Buy Shares,
Sell Shares</td></tr>
<tr><td colspan="2">Props / Possible Solutions:
Local server, Database,
Internet, Laptop,
PC</td></tr>
</table>

Fig 2.1

Ideation is a process of generating, developing and creating new ideas.

This idea is understood as a basic element of thought that can be visual, concrete or abstract.

Ideation is an essential part of design process, both in education and practice.

- **It includes:-**

  - People
  - Activities
  - Situation/context/location

- Props/possible solution

- **People are:-**

  - Admin
  - User
  - Advisor

- **Activities going on:-**

  - Registration
  - Login
  - Taking User Details
  - Taking Shares Details
  - Asking For Inquiry

- **Situation/context/location:-**

  - Using of Internet
  - Using of Database
  - Buy Shares
  - Sell Shares

- **Props/Possible solution:-**

  - Local server
  - Database
  - Internet
  - Laptop
  - PC

2.2 Product Development Canvas

<table>
<tr><td colspan="3">PRODUCT DEVLOPMENT CANVAS
Group ID: Domain Name: Stocker DATE:</td></tr>
<tr><td rowspan="2">Purpose:
Save Money,
Save Time,
Easy to Interact</td><td>Product Experience:
Time Efficient,
Cost Efficient,
More Comfort</td><td rowspan="2">Customer Revalidation:
Person has to provide
the right information of
their shares and all
Other basic detail of his/her.</td></tr>
<tr><td>Product Functions:
Easily get information of his/her shares, Easily Take
Expert advice about shares, they can easily compeers
Price of shares from the past records.</td></tr>
<tr><td rowspan="2">People:
Admin,
User,
Investor,
Advisor</td><td>Product Functions:
Provide the right advise for buying or selling the
shares, provide the information of all shares of
users with the date of buying and total quantity.</td><td rowspan="2">Reject, Redesign, Retain:
They should provide a
specific detail of the shares.</td></tr>
<tr><td>Components:
PC,
Mobile,
Laptop,
Internet</td></tr>
</table>

Fig 2.2

Product development is the process of designing, creating, marketing new products or services to benefit customers.

Product design is a prototype mode. The prototype mode is the iterative generation of artifacts intended to answer questions that get you closer to your final solution.

- **It includes:-**

- Purpose
- People
- Product Experience
- Product function
- Product features
- Components
- Customer revalidation
- Reject , Redesign , Retain

➢ **Purpose:-**

- Save Money
- Save Time
- Easy To Interact

➢ **People:-**

- Admin
- User
- Investor
- Advisor

➢ **Product Experience:-**

- Time Efficient
- Cost Efficient
- More Comfort

➢ **Product Functions:-**

- Provide car for renting
- Take online payment

➢ **Product Features:-**

- Easily get information of his/her shares,
- Easily Take expert advice about shares,
- They can easily compeers price of shares from the past records

➢ **Components used:-**

- PC

- Laptop
- Mobile Phone
- Internet

➢ **Customer Revalidation**

- Person has to provide the right information of their shares and all other basic detail of his/her.

➢ **Redesign**

- They should provide a specific detail of the shares

2.3 Dataset Overview

2.4 System Design

- **Activity Diagram**

An activity diagram is used to model the workflow depicting conditions, constraints, sequential and concurrent activities. On the other hand, the purpose of a Use Case is to just depict the functionality i.e. what the system does and not how it is done.

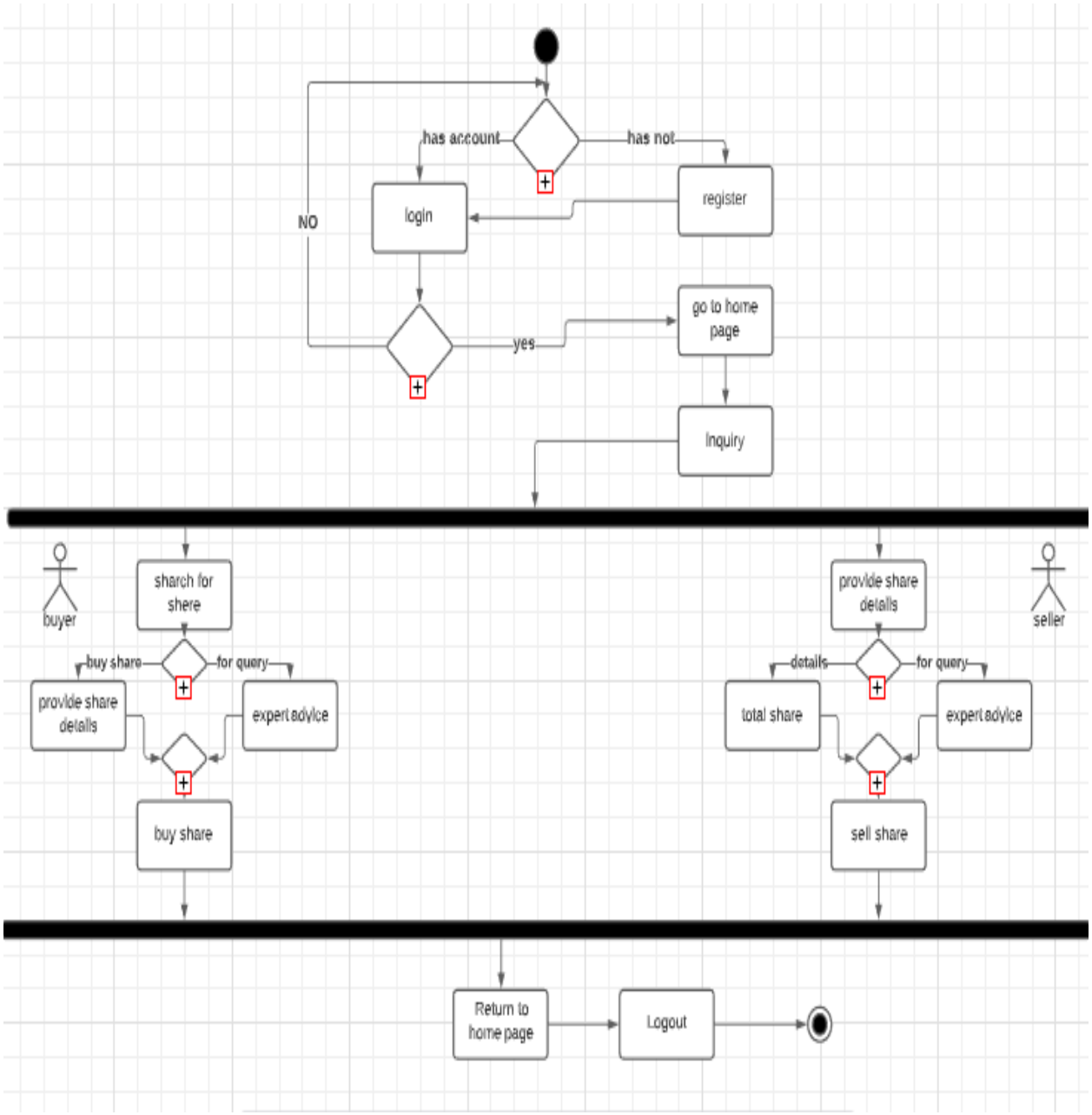


Fig 4.1(a)

- **Sequence Diagram**

A sequence diagram is a type of interaction diagram because it describes how—and in what order—a group of objects works together.

These diagrams are used by software developers and business professionals to understand requirements for a new system or to document an existing process.

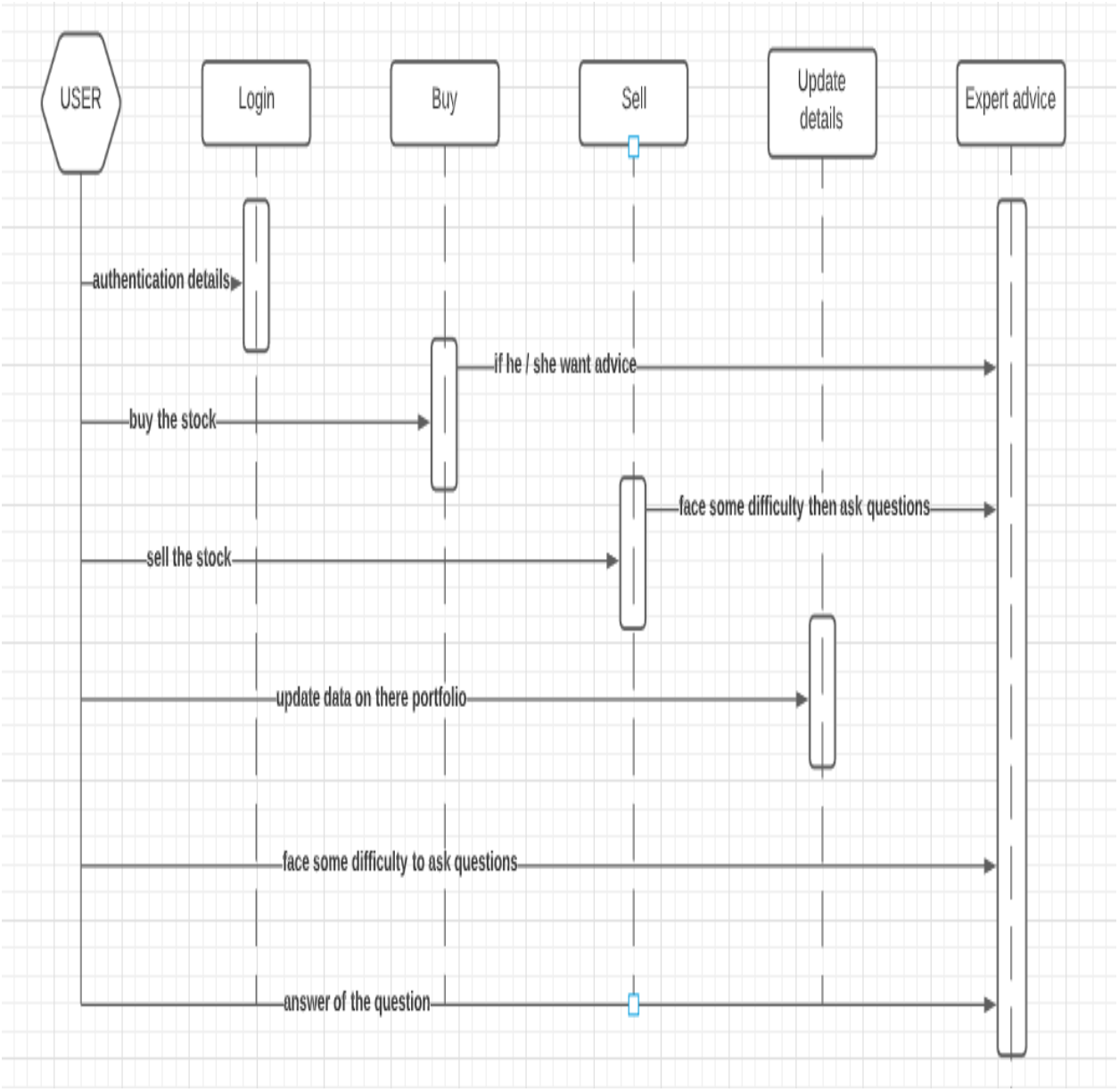


Fig 4.1(b)

- **Use Case Diagram**

The purpose of the use case diagrams is simply to provide the high level view of the system and convey the requirements in laypeople's terms for the stakeholders. Additional diagrams and documentation can be used to provide a complete functional and technical view of the system.

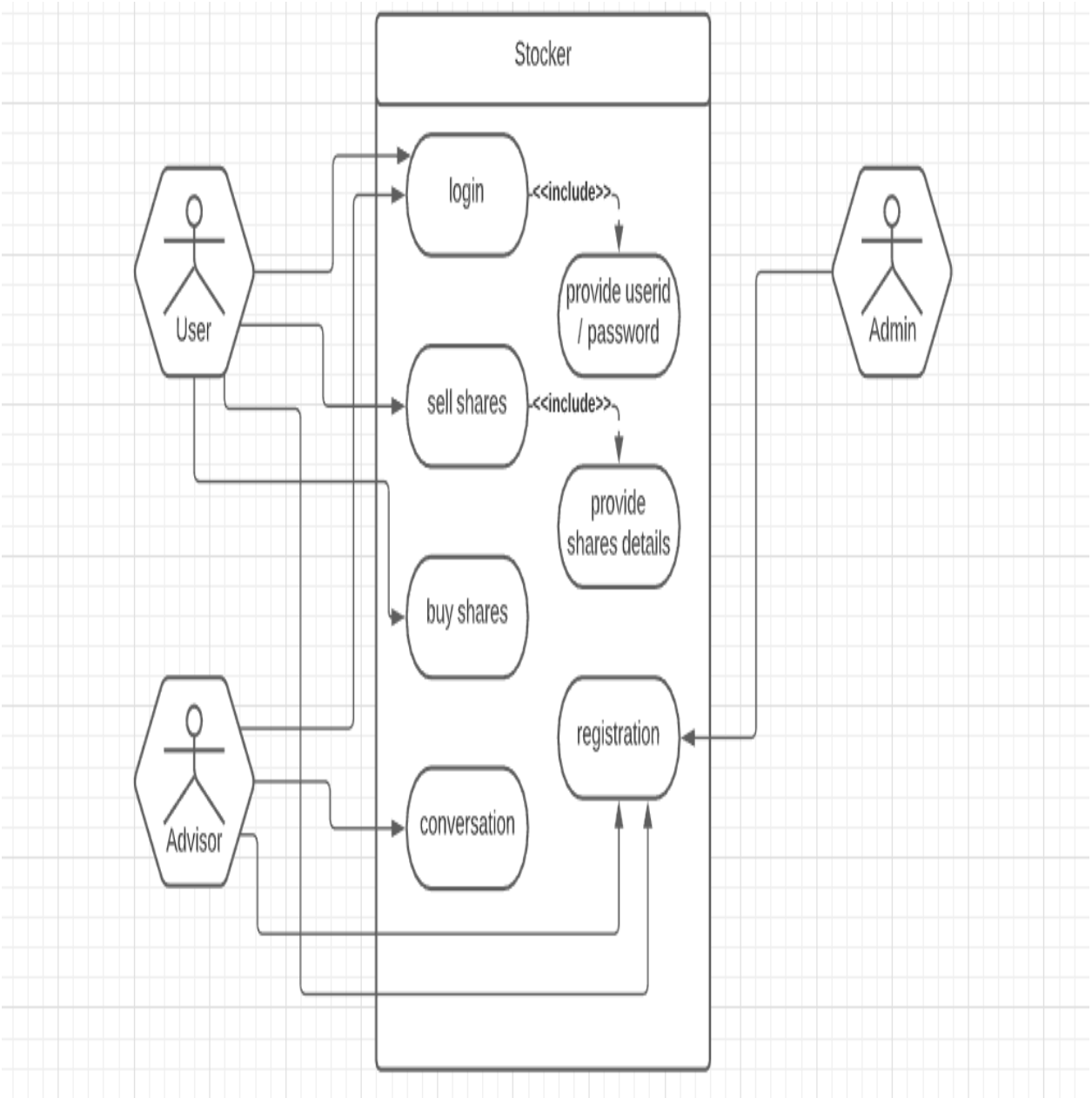


Fig 4.1(c)

- **Class Diagram**

A sequence diagram is a type of interaction diagram because it describes how—and in what order—a group of objects works together. These diagrams are used by software developers and business

professionals to understand requirements for a new system or to document an existing process.

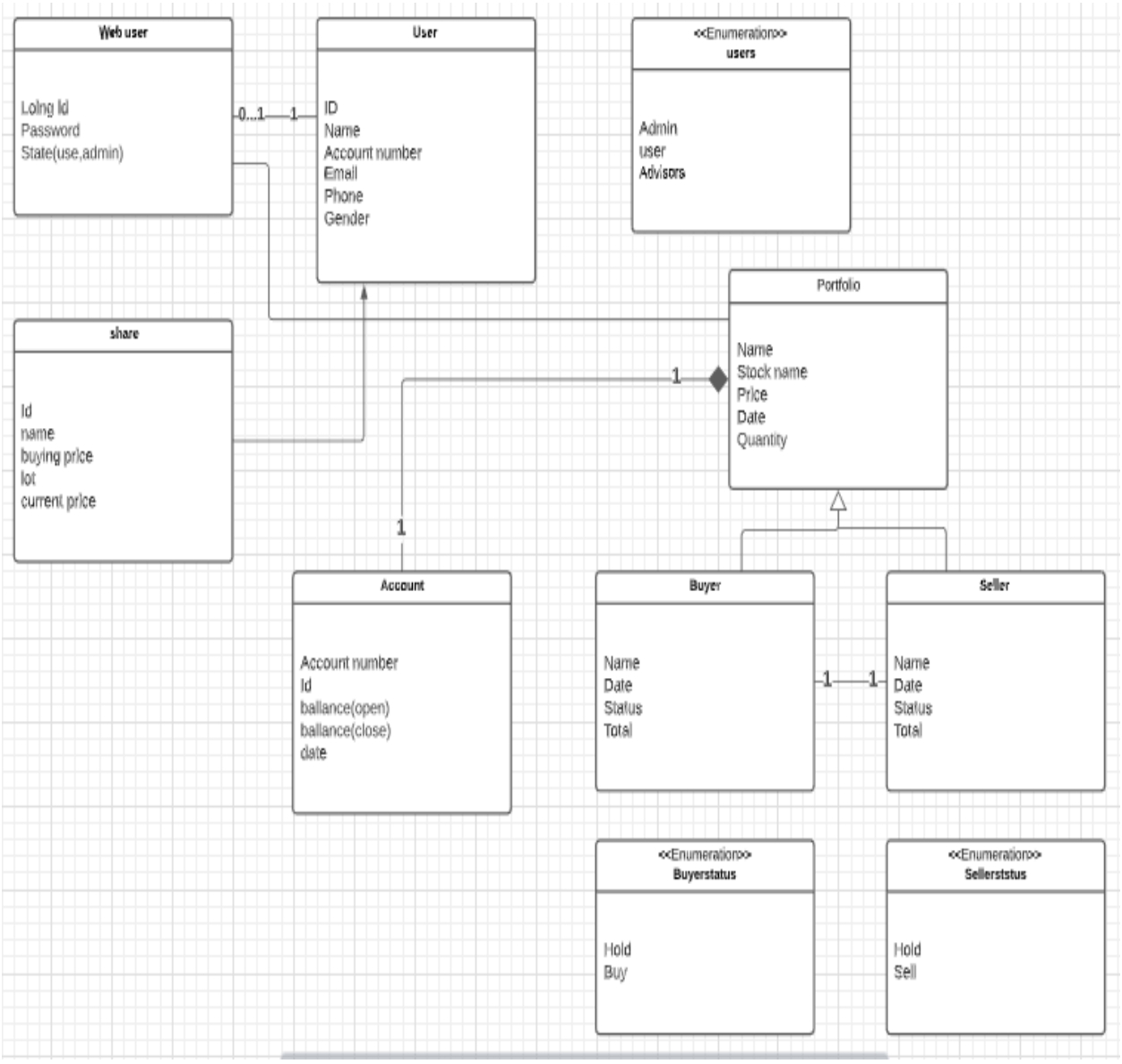


Fig 4.1(d)

- **DFD**

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and

arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination.

A. Level 0

A level 0 data flow diagram (DFD), also known as a context diagram, shows a data system as a whole and emphasizes the way it interacts with external entities. This DFD level 0 example shows how such a system might function within a typical retail business.

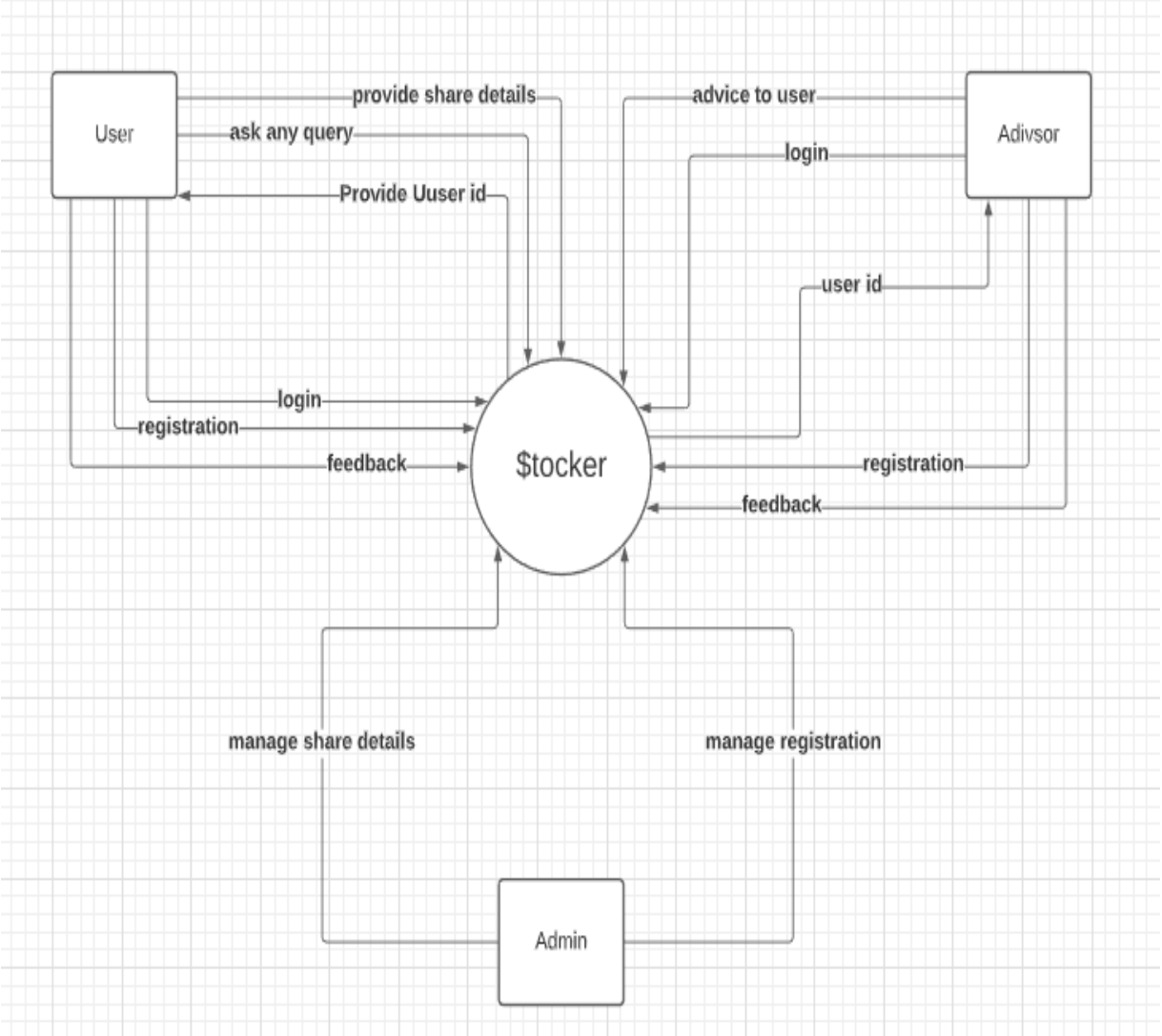


Fig 4.1(e-1)

B. Level 1

A level 1 data flow diagram (DFD) is more detailed than a level 0 DFD but not as detailed as a level 2 DFD. It breaks down the main processes into sub processes that can then be analyzed and improved on a more intimate level.

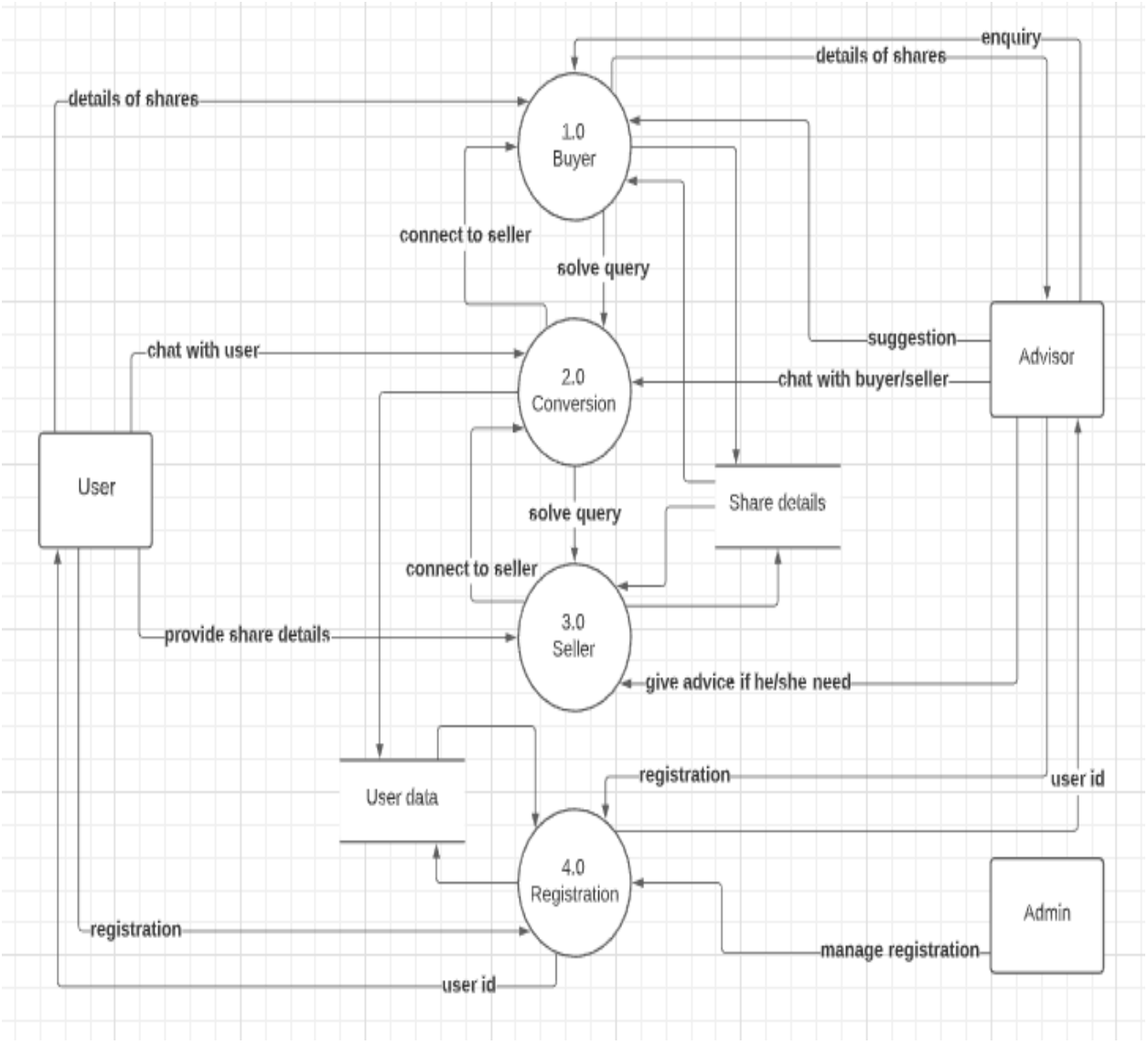


Fig 4.1(e-2)

3. Implementation

3.1 Implemented Functionality

3.2 Results and Reports

3.3 Snapshots

3.4 Testing and Verification

- **Testing**

  - **White box**:

    White-box testing is a method of testing software that tests internal structures or workings of an application, as opposed to its functionality. In white-box testing an internal perspective of the system, as well as programming skills, are used to design test cases. The tester chooses inputs to exercise paths through the code and determine the appropriate outputs. This is analogous to testing nodes in a circuit, e.g. in-circuit testing (ICT). White-box testing can be applied at the unit, integration and system levels of the software testing process. Although traditional testers tended to think of white-box testing as being done at the unit level, it is used for integration and system testing more frequently today. It can test paths within a unit, paths between units during integration, and between subsystems during a system– level test. Though this method of test design can uncover many errors or problems, it has the potential to miss unimplemented parts of the specification or missing requirements.

  - **Black Box**:

    Black box testing is a method of software testing that examines the functionality of an application without peering into its internal structures or workings. This method of test can be applied virtually to every level of software testing: unit, integration, system and acceptance. It typically comprises most if not all higher level testing, but can also embody unit

    From testing perspective:

    - ✓ Fault – wrong or missing function in the code.
    - ✓ Failure – the manifestation of a fault during execution.

- ✓ Malfunction – according to its specification the system does not meet its specified functionality.

- **Software Verification**

Software Verification: The process of evaluating software to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase. Software verification is ensuring that the product has been built according to the requirements and design specifications.

- **Software Validation**

- ✓ Software Validation: The process of evaluating software during or at the end of the development process to determine whether it satisfies specified requirements.
- ✓ Software validation ensures that the product meets the user's needs, and that the specifications were correct in the first place. Software verification ensures that "you built it right". Software validation ensures that "you built the right thing". Software validation confirms that the product, as provided, will fulfill its intended use.

Thus for our project we verified that:

- ✓ Application provides all the functionalities to the user to buy books online with ease.
- ✓ We validate that the user puts all correct information for registration & login purpose so that data integrity is maintained.
- ✓ Also we validate Design in different mobiles so that there might be no changes in the GUI of the application

4. Conclusion

4.1 Summary of the results

4.2 Advantages of your work/results/methodologies

4.3 Scope of future work

4.4 Attainment of POs and PSOs

PO / PSO	Attainment Level	Justification
PO1	0/1/2/3	Note: Write justification about how PO1 is mapped with your project or why it is not mapped. Justification should be based on Attainment Level (0/1/2/3 where 0 means "not mapped" and 3 means "Highly mapped")
PO2		
PO3		
PO4		
PO5		
PO6		
PO7		
PO8		
PO9		
PO10		
PO11		
PO12		
PSO1		

PSO2		

5. Business Model Canvas (BMC)

Fig 5(a)

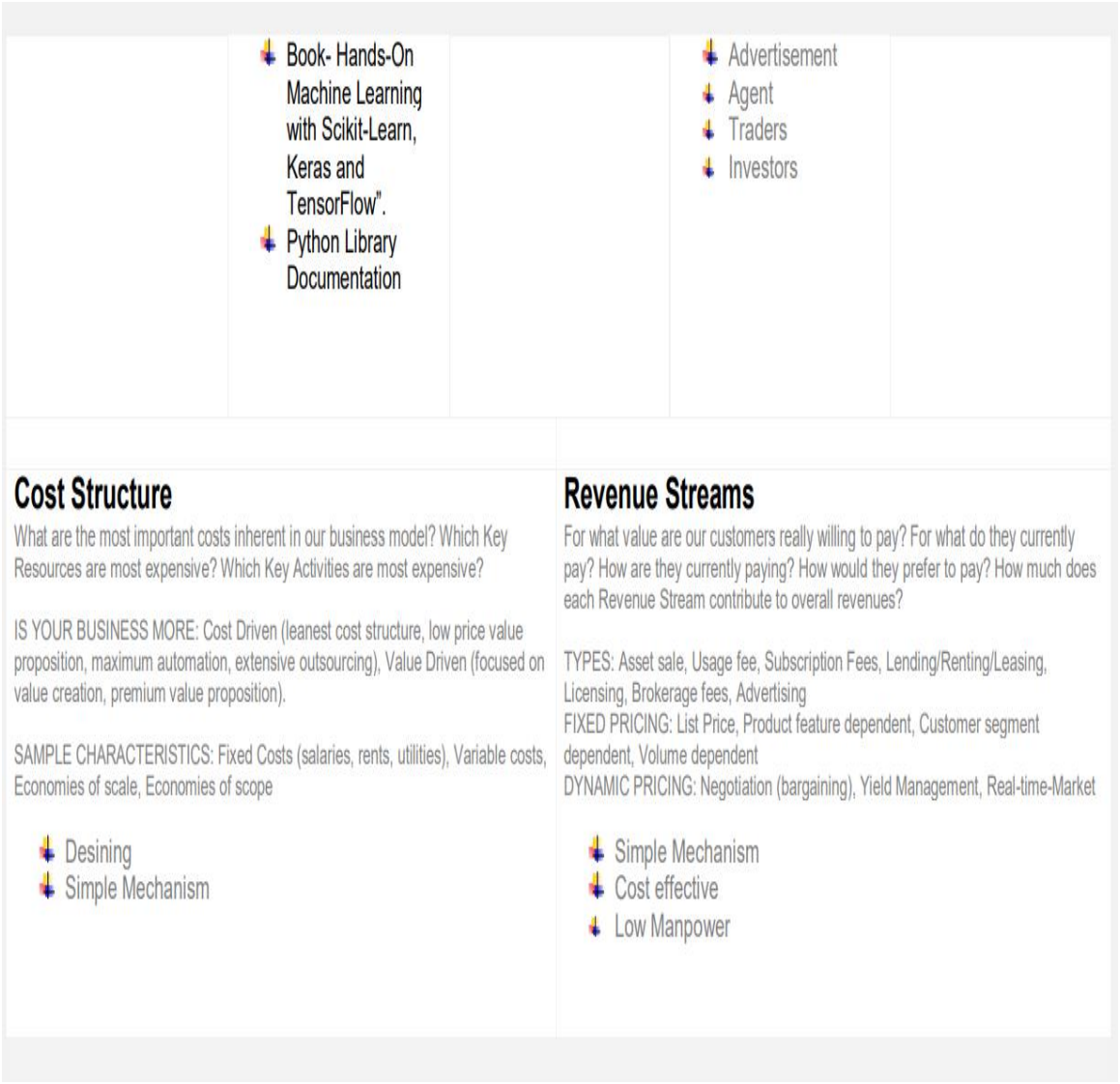


Fig 5(b)

- Key Partners
  - Investors
  - Traders
  - Stockbrokers
  - Adviser

- Key Activities
  - First you need to register yourself so you can see your profile.
  - User can see all the available options for every share.
  - User can predict the share price after seeing the market behaviour.
  - User can get all the information about stock data in real-time.
  - User can see all the statistics of rise and fall share so it is useful for user to invest in shares.

- Value Propositions
    - User likes to use it because the performance is the better.
    - The main benefit for the user is it having a simple mechanism so it is very helpful for user.
    - The system cost is very low (Cost Reduction).
    - The accessibility of the system is very easy it is very easy to access.

- Customer Relationship
    - User can opt for the personal assistance option for investing their money into shares.
    - From login user can view all the login activities which is done by the user.
    - From Dashboard user can view the entire shares price.

- Customer Segments
    - Traders
    - Investors

- Key Resources
    - Book-hands-on Machine Learning with scikit-Learn, keras and TensorFlow.
    - Python Library Documentation.

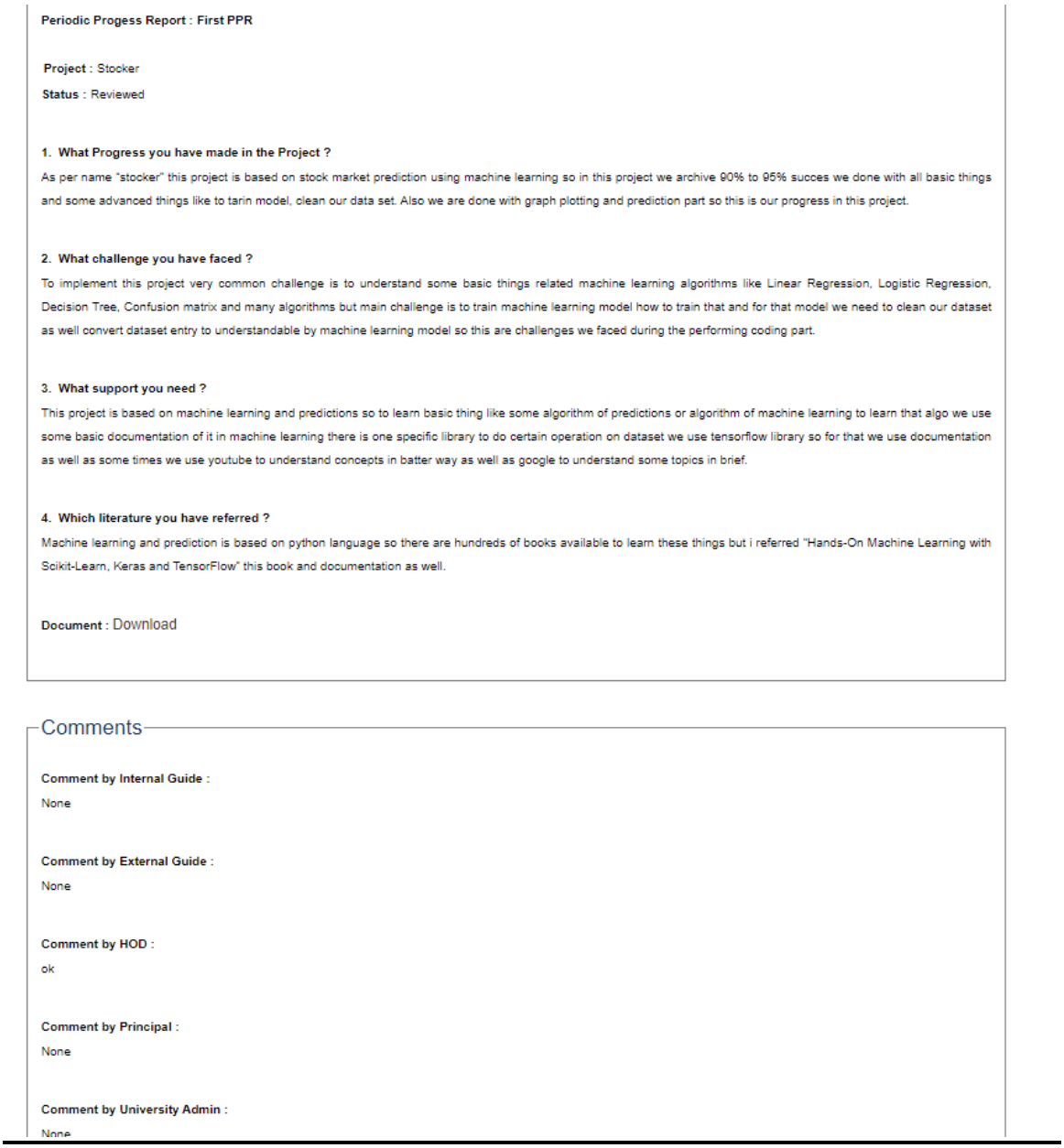
- Channels
    - Advertisement
    - Agent
    - Traders
    - Investors

- Cost Structure
    - Designing is very simple so it cost us.
    - The mechanism is so simple so user can use it without any difficulties.

- Revenue Streams
    - The mechanism is simple.
    - Cost Effective.
    - Low Manpower.

6. Periodic Progress Reports (PPR)

- **Periodic Progress Report 1**



Periodic Progess Report : First PPR

Project : Stocker
Status : Reviewed

1. What Progress you have made in the Project ?
As per name "stocker" this project is based on stock market prediction using machine learning so in this project we archive 90% to 95% succes we done with all basic things and some advanced things like to tarin model, clean our data set. Also we are done with graph plotting and prediction part so this is our progress in this project.

2. What challenge you have faced ?
To implement this project very common challenge is to understand some basic things related machine learning algorithms like Linear Regression, Logistic Regression, Decision Tree, Confusion matrix and many algorithms but main challenge is to train machine learning model how to train that and for that model we need to clean our dataset as well convert dataset entry to understandable by machine learning model so this are challenges we faced during the performing coding part.

3. What support you need ?
This project is based on machine learning and predictions so to learn basic thing like some algorithm of predictions or algorithm of machine learning to learn that algo we use some basic documentation of it in machine learning there is one specific library to do certain operation on dataset we use tensorflow library so for that we use documentation as well as some times we use youtube to understand concepts in batter way as well as google to understand some topics in brief.

4. Which literature you have referred ?
Machine learning and prediction is based on python language so there are hundreds of books available to learn these things but i referred "Hands-On Machine Learning with Scikit-Learn, Keras and TensorFlow" this book and documentation as well.

Document : Download

Comments

Comment by Internal Guide :
None

Comment by External Guide :
None

Comment by HOD :
ok

Comment by Principal :
None

Comment by University Admin :
None

Fig 6(a)

1. What Progress you have made in the Project ?

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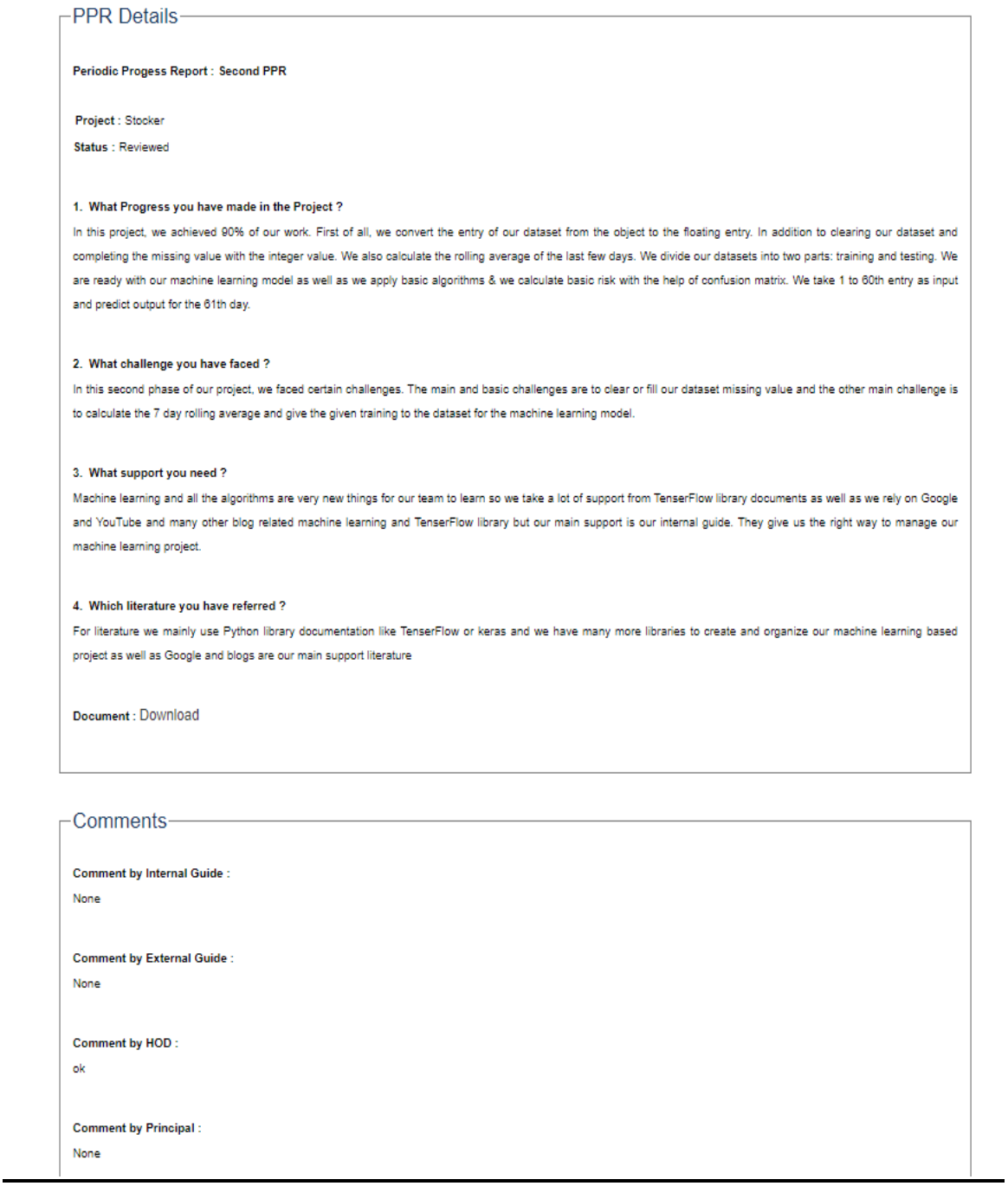
- **Periodic Progress Report 2**



PPR Details

Periodic Progess Report : Second PPR

Project : Stocker

Status : Reviewed

1. What Progress you have made in the Project ?

In this project, we achieved 90% of our work. First of all, we convert the entry of our dataset from the object to the floating entry. In addition to clearing our dataset and completing the missing value with the integer value. We also calculate the rolling average of the last few days. We divide our datasets into two parts: training and testing. We are ready with our machine learning model as well as we apply basic algorithms & we calculate basic risk with the help of confusion matrix. We take 1 to 60th entry as input and predict output for the 61th day.

2. What challenge you have faced ?

In this second phase of our project, we faced certain challenges. The main and basic challenges are to clear or fill our dataset missing value and the other main challenge is to calculate the 7 day rolling average and give the given training to the dataset for the machine learning model.

3. What support you need ?

Machine learning and all the algorithms are very new things for our team to learn so we take a lot of support from TenserFlow library documents as well as we rely on Google and YouTube and many other blog related machine learning and TenserFlow library but our main support is our internal guide. They give us the right way to manage our machine learning project.

4. Which literature you have referred ?

For literature we mainly use Python library documentation like TenserFlow or keras and we have many more libraries to create and organize our machine learning based project as well as Google and blogs are our main support literature

Document : Download

Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

ok

Comment by Principal :

None

Fig 6(b)

1. What Progress you have made in the Project ?

In this project, we achieved 90% of our work. First of all, we convert the entry of our dataset from the object to the floating entry. In addition to clearing our dataset and

completing the missing value with the integer value. We also calculate the rolling average of the last few days. We divide our datasets into two parts: training and testing. We are ready with our machine learning model as well as we apply basic algorithms & we calculate basic risk with the help of confusion matrix. We take 1 to 60th entry as input and predict output for the 61th day.

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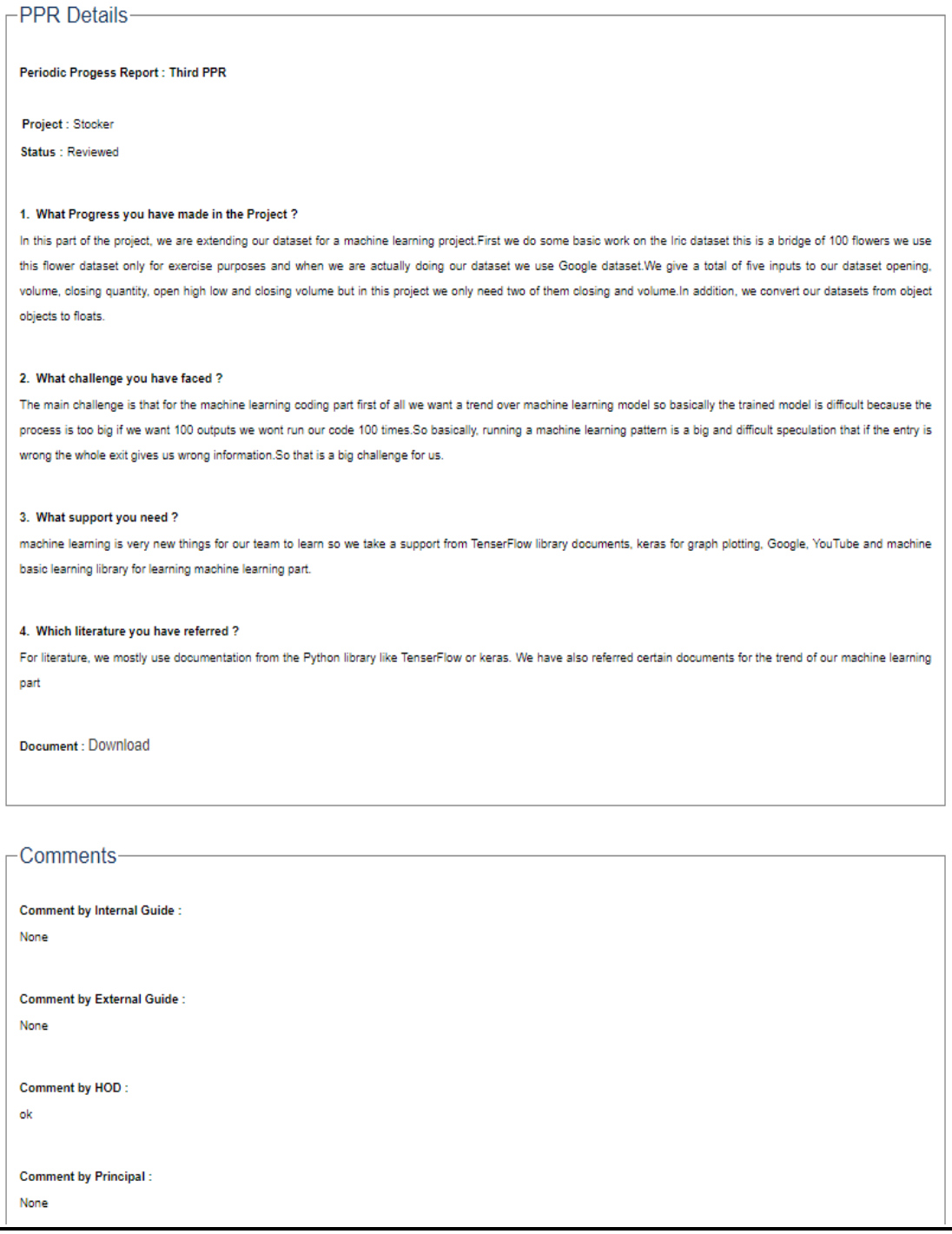
4. Which literature you have referred ?

For literature we mainly use Python library documentation like TenserFlow or keras and we have many more libraries to create and organize our machine learning based project as well as Google and blogs are our main support literature

- **Periodic Progress Report 3**



PPR Details

Periodic Progess Report : Third PPR

Project : Stocker

Status : Reviewed

1. What Progress you have made in the Project ?

In this part of the project, we are extending our dataset for a machine learning project.First we do some basic work on the Iric dataset this is a bridge of 100 flowers we use this flower dataset only for exercise purposes and when we are actually doing our dataset we use Google dataset.We give a total of five inputs to our dataset opening, volume, closing quantity, open high low and closing volume but in this project we only need two of them closing and volume.In addition, we convert our datasets from object objects to floats.

2. What challenge you have faced ?

The main challenge is that for the machine learning coding part first of all we want a trend over machine learning model so basically the trained model is difficult because the process is too big if we want 100 outputs we wont run our code 100 times.So basically, running a machine learning pattern is a big and difficult speculation that if the entry is wrong the whole exit gives us wrong information.So that is a big challenge for us.

3. What support you need ?

machine learning is very new things for our team to learn so we take a support from TenserFlow library documents, keras for graph plotting, Google, YouTube and machine basic learning library for learning machine learning part.

4. Which literature you have referred ?

For literature, we mostly use documentation from the Python library like TenserFlow or keras. We have also referred certain documents for the trend of our machine learning part

Document : Download

Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

ok

Comment by Principal :

None

Fig 6(c)

1. What Progress you have made in the Project ?

In this part of the project, we are extending our dataset for a machine learning project.First we do some basic work on the Iric dataset this is a bridge of 100 flowers we

use this flower dataset only for exercise purposes and when we are actually doing our dataset we use Google dataset.We give a total of five inputs to our dataset opening, volume, closing quantity, open high low and closing volume but in this project we only need two of them closing and volume.In addition, we convert our datasets from object objects to floats.

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The main challenge is that for the machine learning coding part first of all we want a trend over machine learning model so basically the trained model is difficult because the process is too big if we want 100 outputs we wont run our code 100 times.So basically, running a machine learning pattern is a big and difficult speculation that if the entry is wrong the whole exit gives us wrong information.So that is a big challenge for us.

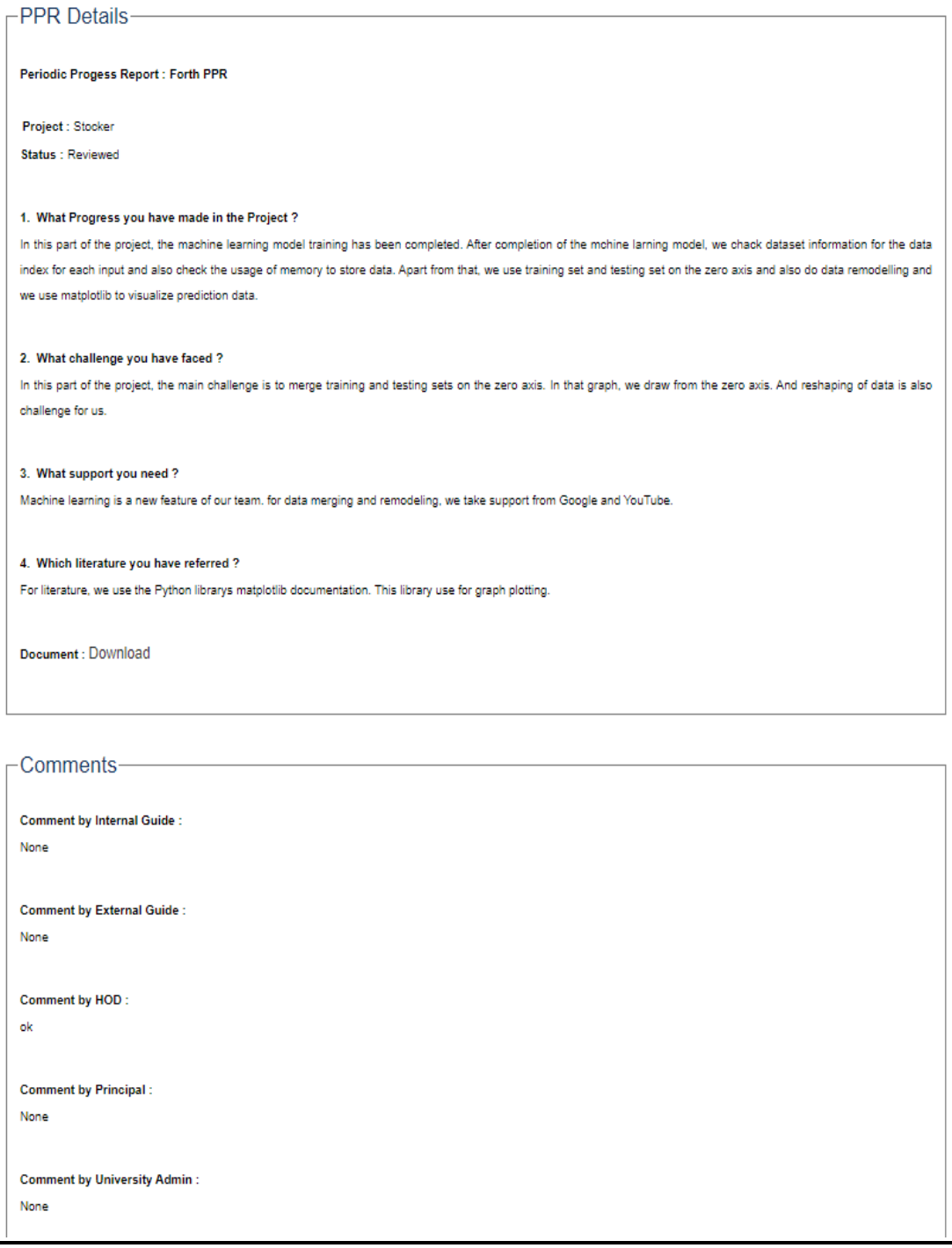
3. What support you need ?

machine learning is very new things for our team to learn so we take a support from TenserFlow library documents, keras for graph plotting, Google, YouTube and machine basic learning library for learning machine learning part.

4. Which literature you have referred ?

For literature, we mostly use documentation from the Python library like TenserFlow or keras. We have also referred certain documents for the trend of our machine learning part

- **Periodic Progress Report 4**



PPR Details

Periodic Progess Report : Forth PPR

Project : Stocker

Status : Reviewed

1. What Progress you have made in the Project ?

In this part of the project, the machine learning model training has been completed. After completion of the mchine larning model, we chack dataset information for the data index for each input and also check the usage of memory to store data. Apart from that, we use training set and testing set on the zero axis and also do data remodelling and we use matplotlib to visualize prediction data.

2. What challenge you have faced ?

In this part of the project, the main challenge is to merge training and testing sets on the zero axis. In that graph, we draw from the zero axis. And reshaping of data is also challenge for us.

3. What support you need ?

Machine learning is a new feature of our team. for data merging and remodeling, we take support from Google and YouTube.

4. Which literature you have referred ?

For literature, we use the Python librarys matplotlib documentation. This library use for graph plotting.

Document : Download

Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

ok

Comment by Principal :

None

Comment by University Admin :

None

Fig 6(d)

1. What Progress you have made in the Project ?

In this part of the project, the machine learning model training has been completed. After

completion of the mchine larning model, we chack dataset information for the data index for each input and also check the usage of memory to store data. Apart from that, we use training set and testing set on the zero axis and also do data remodelling and we use matplotlib to visualize prediction data.

2. What challenge you have faced ?

In this part of the project, the main challenge is to merge training and testing sets on the zero axis. In that graph, we draw from the zero axis. And reshaping of data is also challenge for us.

3. What support you need ?

Machine learning is a new feature of our team. for data merging and remodeling, we take support from Google and YouTube.

4. Which literature you have referred ?

For literature, we use the Python librarys matplotlib documentation. This library use for graph plotting.

7. Patent Drafting Exercise (PDE)

- # Form 1 – APPLICATION FOR GRANT OF PATENT

College	:	MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT
Department	:	Computer Engineering
Discipline	:	BE
Semester	:	Semester 8
Project Name	:	Stocker
Team ID	:	119711

Form 1 – APPLICATION FOR GRANT OF PATENT

Applicants :

Sr. No	Name	Nationality	Address	Mobile No.	Email Id
1	Joshi Pranav Dhirenbhai	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	9106982766	pranav.joshi15065@marwadieduca
2	Anadkat Kanan Nileshbhai	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	9099080620	anadkatkanan99@gmail.com
3	Gandhi Hetvi Sandipbhai	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	9265295633	hetvigandhi1999@gmail.com
4	Shukla Brijesh Pradyumankumar	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	8999531031	brijeshpshukla@gmail.com

***Fig 7(a-1)**

Inventors :

Sr. No	Name	Nationality	Address	Mobile No.	Email Id
1	Joshi Pranav Dhirenbhai	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	9106982766	pranav.joshi15065@marwadieducation.edu.in
2	Anadkat Kanan Nileshbhai	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	9099080620	anadkatkanan99@gmail.com
3	Gandhi Hetvi Sandipbhai	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	9265295633	hetvigandhi1999@gmail.com
4	Shukla Brijesh Pradyumankumar	Indian	Computer Engineering , MARWADI EDUCATION FOUNDATION - FACULTY OF PG STUDIES & RES. IN ENGG. & TECH., RAJKOT , Gujarat Technologycal University.	8999531031	brijeshpshukla@gmail.com

I/We, the applicant(s) hereby declare(s) that:

Following are the attachments with the applications :

Fig 7(a-2)

- **Form 2 - PROVISIONAL/COMPLETE SPECIFICATION**

Form 2 - PROVISIONAL/COMPLETE SPECIFICATION

1 . Title of the project/invention :

Stocker

2. Preamble to the description :

Provisional

3. Description

a) Field of Project / Invention / Application :

This document is useful for all those who want to invest in the stock market and for those who are investing .The software also provides expert advice which will be useful for people and it also includes daily ,weekly and monthly updates of stock market.Here,people can also manage their portfolio by sharing the stokes information and even if people see exert advice from this information.

b) Prior Art / Background of the Project / Invention :

As it is stock market prediction portal so not that much security related requirements but data must be safe means data must not be got leak because which may create to issue and also data must be safe in terms of storage means data must not be loss ,it must be backed up properly because data loss may create great issue.

c) Summary of the Project / Invention :

Our project includes purpose,people,product experience,product function,product features,components,customer revalidation,Reject,redesign,Retain.Also includes On going Activities like Registration,login,Taking user details,Taking shares details,asking for inquiry.our stakeholders are Developers(Admin),buyer,seller,advisor.

d) Objects of Project / Invention :

Model train from dataset testing, Cleaning Dataset,Prediction.

e) Drawings :

Fig 7(b-1)

f) Description of Project / Invention : (full detail of project) :

Main aim to develope this system is to give the perfect prediction of each and every stock.It also allows to get a expert advice from the expert.User can keep track of each stock in which he/she can invest the money.Every type of user of the system who are already registered with the "Stocker" system are the users of the system.Firstly we have designed the prototype of project using Cacoa wire frame so that every team member must have clear idea of the project.Entire project depends on end-users operation..Fundamental indicators like price to earning ratio,price to sales ratio,cash flow ratio are used by which a companys stock value can be predicted.Objective of system is to give a approximate idea of where stock market might be headed.Grounded by communication theories we propose to use a data mining algorithm to detect communication patterns within a company to determine such patterns may reveal performance of the company.

g) Examples :

h) Claims (Not required for Provisional Application) / Unique Features of Project

Software is based on anaconda environment also jupyter notebook is used to combine software code ,computational output and multimedia resources in a single document.Data Analysis tool like Tiingo is used to create APis and also data fetch.It can also generate 250 keys per day and generate .csv file.

4. Claims

5. Date and signature

6. Abstract of the project / invention :

It is an interesting machine learning project and in this project we will make one website or software.in this we will plan for the prediction of the future price of stock market.we will be using frontend, backend as well as graph plotting using machine learning we will use HTML,CSS,JS and PHP for frontend developing and for backend python,machine learning and django as well as flask and for database we will use MYSQL or SQLITE. or any other dataset to store the data. To host this website we will use Xamp server.

Fig 7(b-2)

- **Form 3 – STATEMENT AND UNDERTAKING UNDER SECTION 8**

Form 3 – STATEMENT AND UNDERTAKING UNDER SECTION 8

Name of the applicant(s) : I/We, Joshi Pranav Dhirenbhai ,Anadkat Kanan Nileshbhai ,Gandhi Hetvi Sandipbhai ,Shukla Brijesh Pradyumankumar

Name,Address and Nationality of the joint applicant :

Hereby declare :

(i) that I/We have not made any application for the same/substantially the same victim invention outside India.

(ii) that the rights in the application(s) has/have been assigned to

Name of the Country	Date of Application	Application Number	Status of the Application	Date of Publication	Date of Grant
N/A	N/A	N/A	N/A	N/A	N/A

(iii)That I/We undertake that upto the date of grant of the patent by the Controller, I/We would keep him informed in writing the details regarding corresponding applications for patents filed outside India within three months from the date of filing of such application.

Dated this 9 day of May 2021

To be signed by the applicant or his authorised registered patent agent : Signature.....

Name of the Natural Person who has signed : Joshi Pranav Dhirenbhai ,Anadkat Kanan Nileshbhai ,Gandhi Hetvi Sandipbhai ,Shukla Brijesh Pradyumankumar

To,
The Controller of Patents,
The Patent Office,
At Mumbai

Fig 7(c)

8. Plagiarism Report