RAILWAY ENQUIRY SYSTEM

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Mini Project Report

Submitted in partial fulfilment of the

Requirements for the award of the Degree of

BACHELOR OF ENGINEERING

IN

INFORMATION TECHNOLOGY

By

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Department of Information Technology

Vasavi College of Engineering (Autonomous)

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2021

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Hyderabad-500 031

Department of Information Technology



DECLARATION BY THE CANDIDATE

We, BHEESHMA REDDY, NIKITHA MARAMRAJU, SANTOSH KUMAR bearing hall ticket numbers, 1602-19-737-128, 1602-19-737-145 and1602-19-737-164, hereby declare that the project report entitled "RAILWAY ENQUIRY SYSTEM" is submitted in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Information Technology.

This is a record of bonafide work carried out by us and the results embodied in this project report have not been submitted to any other university or institute for the award of any other degree or diploma.

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Department of Information Technology



BONAFIDE CERTIFICATE

This is to certify that the project entitled "RAILWAY ENQUIRY SYSTEM" being submitted by BHEESHMA REDDY, NIKITHA MARAMRAJU, SANTOSH KUMAR SOMA bearing 1602-16-737-128, 1602-16-737-145, 1602-16-737-164 in partial fulfilment of the requirements for the award of the degree of Bachelor of Engineering in Information Technology is a record of bonafide work carried out by him/her under my guidance.

R. Dharma Reddy
Assistant professor
Internal guide

Dr. Ram Mohan Rao HoD Dept Of IT

ACKNOWLEDGEMENTS

The satisfaction that accompanies that the successful completion of the project would not have been possible without the kind support and help of many individuals. We would like to extend our sincere thanks to all of them.

We would like to take the opportunity to express our humble gratitude to R. Dharma Reddy Sir under whom we executed this project. We are grateful to his guidance, inspiration and constructive suggestions that helped us in the preparation of this project. His constant guidance and willingness to share his vast knowledge made us understand this project and its manifestations in great depths and helped us to complete the assigned tasks. We would like to thank all faculty members and staff of the Department of Information Technology for their generous help in various ways for the completion of this project.

Finally, yet importantly, we would like to express our heartfelt thanks to our HOD Dr. K. Ram Mohan Rao Sir and classmates for their help and wishes for the successful completion of this project.

ABSTRACT

Service quality is the most important factor for the passenger's satisfaction. India has biggest railway network across the country and in the whole world. The purpose of this project is to enhance the service quality of Railway Enquiry System and to attain the passenger's satisfaction.

In this project we provide users with the details of a train and various functions related to it. The Railway Enquiry System facilitates the passengers to enquire about the trains available on the basis of Train name and Train number, enquire about the status of the booked ticket, locating the live station of the train and the railway stations available in a particular geographical region.

The aim of this project is to design and develop a web application for the users incorporated with these features.

This project uses various available Railway APIs provided by RapidAPI.

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1. LIST OF TABLES/FIGURES

1) UI PROTOTYPES AND SCREENSHOTS-

- Home Page
- Search Train by name
- Search Train by number
- PNR status
- Live station
- Find Station
- Find trains between source and destination
- Find train fares
- Railway Station near you
- User Query Section
- Chatbot

2) USE CASE DIAGRAM

2. INRODUCTION

Service quality is the most important factor for the passenger's satisfaction. India has biggest railway network across the country and in the whole world. The purpose of this project is to enhance the service quality of Railway Enquiry System and to attain the passenger's satisfaction. In this project we provide users with the details of a train and various functions related to it. The Railway Enquiry System facilitates the passengers to enquire about the trains available on the basis of train number and train name, enquire about the status of the booked ticket, locating the live station of the train and the railway stations available in a particular geographical region. The aim of this project is to design and develop a web application for the users incorporated with these features. This project uses various available Railway related 3rd party Rest API'S.

2.1. Objective

To design an online website for tourists travelling through railways, through which the users are provided with the details of a train and various functions related to it. It facilitates the passengers to –

- Home Page
- Search Train by name
- Search Train by number
- PNR status
- Live station
- Find Station
- Find trains between source and destination
- Find train fares
- Railway Station near you
- User Query Section
- Chatbot

General Constraints 2.2.

All computer software needs certain hardware components and also other

software resources to be present, in order for computers to be used efficiently.

These pre-requisites are known as System Requirements. System

Requirements are of two types - Software Requirements and Hardware

Requirements.

2.2.1. Hardware Constraints

Hardware Requirements refer to the common set of requirements defined by any

operating system or software application and are usually the physical computer

resources. In this we look into the architecture, processing power, memory,

secondary memory, display adapter and peripherals.

In order to use Railway Enquiry System, one should have the following hardware

requirements:

• Any device like smart phones with OS or the desktops/laptops having a

browser to access the website

2.2.2. Software Constraints

Software Requirements deal with defining the software resource requirements and

prerequisites that need to be installed on a computer to provide optimal functioning

of an application. These preconditions are generally not included in the software

package and need to be installed separately.

In order to use Railway Enquiry System, one should have the following software

requirements:

Server side: Rest API

• Client side: Any network enabled device which is able to connect to the

server and can run the browser will be able to open the website.

2.3. Characteristics

- User Friendly: The proposed website is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover, the user interface which is provided in the proposed website, which provides user to deal with the system very easily.
- Computer operator control: Computer operator control will be there so no chance of errors. Moreover, storing and retrieving of information is easy.

3. RELATED WORK

3.1. EXISTING SYSTEM

The official government railway website such as IRCTC has features such as

- Catering & Hospitality
- Internet Ticketing
- Travel &Tourism
- Packaged Drinking Water (Rail Neer)

Railway since time immemorial has been the kaleidoscope of tourist in the country. Considering the vast expanse of the country, Railways in India have been moving carrying domestic as well international visitors.

IRCTC, established in 1999, has been mandated by the Government of India to professionalize and upgrade rail-based tourism in the country. Over the last twenty years, IRCTC has been a catalyst in the overall promotion and development of rail tourist across the country.

IRCTC is probably the only organization offering packages ranging from Rs.900 per day to USD 900 per day.

3.2. LIMITATIONS OF THE EXISTING SYSTEM

The official IRCTC website often shows server error or downtime messages. Its maintenance has been falling down drastically over the past few decades



3.3. PROPOSED MODEL

The model which we are designing has the best service quality. The purpose of this project is to enhance the service quality of Railway Enquiry System and to attain the passenger's satisfaction. In this project we provide users with the details of a train and various functions related to it. The Railway Enquiry System facilitates the passengers to enquire about the trains available on the basis of train number and train name, enquire about the status of the booked ticket, locating the live station of the train and the railway stations available in a particular geographical region. The aim of this project is to design and develop a web application for the users incorporated with these features

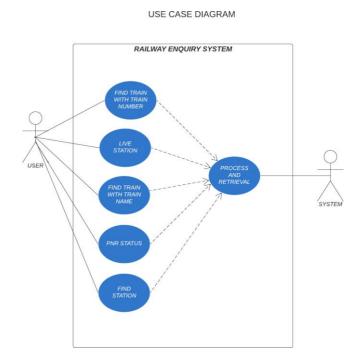
4. PROPOSED WORK

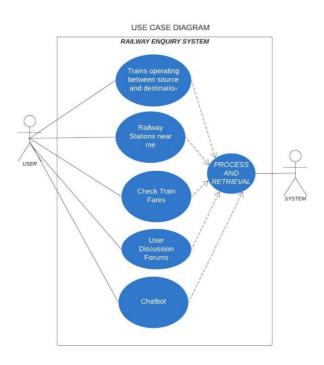
4.1. ACTORS

An actor is a user or external system with which a system being modelled interacts. User and the system are actors in the proposed system.

4.2. USE CASES

A use case is a methodology used in system analysis to identify, clarify and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. The method creates a document that describes all the steps taken by a user to complete an activity.





4.2.1. USER USE CASES

4.2.1.1. FIND TRAIN WITH TRAIN NUMBER

Firstly, the user is required to enter the train number in the search box. The user is given the option to get to know the train details such as

- 1) Train name
- 2) From (Place)
- 3) Destination (Place)
- 4) Arrival time and departure time
- 5) Availability of train on particular days of a week.

4.2.1.2. FIND TRAIN BY NAME

Firstly, the user is required to enter the train name in the search box. The user is given the option to get to know the train details such as

- 1) Train name
- 2) From (Place)
- 3) Destination (Place)
- 4) Arrival time and departure time
- 5) Availability of train on particular days of a week

4.2.1.3. LIVE STATION

Using this feature the user can get the details of the running train. The user is required to enter the train ID and date of journey.

The following status of the train gets displayed –

- 1) Train ID
- 2) Train Number
- 3) From (Place)
- 4) Destination (Place)
- 5) Departure status
- 6) Termination status
- 7) Date and time of departure
- 8) Alert message
- 9) Train is Late by (in minutes)

4.2.1.4. PNR STATUS

The user is required to enter the PNR number first. The details such as –

- 1) Train number
- 2) Train name
- 3) From (Place)
- 4) Destination (To)
- 5) Boarding date
- 6) Class
- 7) Chart status
- 8) Last Updated

- 9) Termination status
- 10) Date and time of departure
- 11) Alert message
- 12) Train is Late by (in minutes)

4.2.1.5. FIND STATION

The user is required to enter the required station details. There will be a list of trains displayed running through that station.

4.2.1.6. FIND TRAINS BETWEEN SOURCE AND DESTINATION

The user is required to enter the names of source and destination stations There will be list of trains displayed that are available between the required stations. Train departure, arrival time and the total journey time is displayed.

4.2.1.7. FIND TRAIN FARES

The user is required to enter the names of source and destination stations along with the train number. The categories like adult, general, tatkal, child, etc. are displayed along with their fares for different classes like 1A, 2A, 3A, SL, 2S, GN.

4.2.1.8. RAILWAY STATIONS NEAR YOU

The longitude and latitude of our region are automatically retrieved by the system based on the algorithm used. User need to enter the radius (in km) within which he wishes to get the train details. All the train details within that radius are displayed.

4.2.1.9. CHATBOT

User can have a chat with the system in case of any queries such as Finding trains between two stations, fares, railway stations, PNR status and live station.

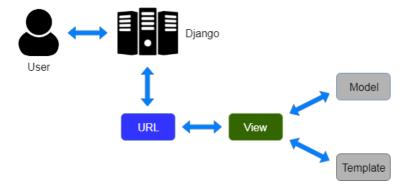
4.3. ARCHITTECTURE AND TECHNOLOGY USED

4.3.1. ARCHITECTURE

4.3.1.1. DJANGO ARCHITECTURE

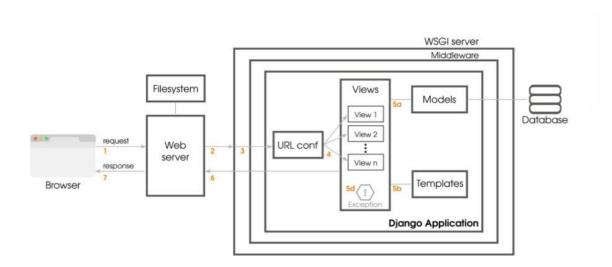
Django is based on the MVT Architecture: Model, View and Template. It is a software design pattern for developing a web application. It has the following three parts:

- Model: It acts as the data access layer which handles the data and the database. It
 is responsible for maintaining data. It is the logical data structure behind the entire
 application and is represented by a database (MySQL, Postgres, etc.).
- <u>View</u>: It is the user interface. It interacts with the model and renders a template. It is used to display our template using HTML, CSS and JavaScript files.
- <u>Template</u>: It acts as the presentation layer which handles the UI completely. It
 consists of the static parts of the desired HTML output as well as some special
 syntax describing how dynamic content will be inserted.



4.3.1.2. OVERALL ARCHITECTURE

In Django, every view is associated with a URL. So, when the user clicks anything, Django first checks whether the URL exists or not. Then, it displays the View associated with that URL. Each view has association with a Model and a Template. Whatever is present in the template, is displayed using the view, and any data is pulled from the database using the Model.



4.3.2. TECHNOLOGY USED

4.3.2.1. FRONTEND

Front-end web development is the development of the graphical user interface of a website, through the use of HTML, CSS, and JavaScript, so that users can view and interact with that website.

• HTML

The Hyper Text Markup Language, or HTML is the standard markup language for documents designed to be displayed in a web browser. It uses different tags in the language to format web pages.

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. It adds style – fonts, colors, spacing, etc. – to Web documents.

JAVASCRIPT

JavaScript often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. It is a lightweight, interpreted or just-in-time compiled programming language with first-class functions.

BOOTSTRAP

Bootstrap is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first websites. It is an opensource toolkit used for quickly designing custom, responsive and powerful websites.

4.3.2.2. **BACKEND**

DJANGO

Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. It takes care of much of the hassle of web development, so you can comfortably code your app. Some other advantages of Django are: it's heavy security, high scalability and increasing versatility.

It uses Python as its major backend language and provides the SQLite database by default.

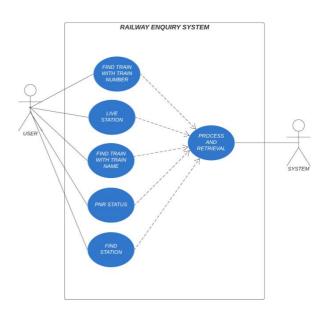
• PYTHON

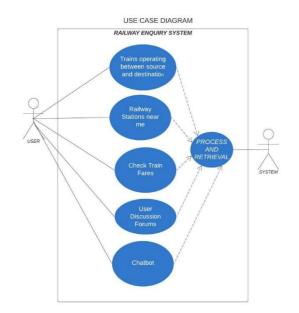
Python is an interpreted high-level general-purpose programming language. Its design philosophy emphasizes code readability with its use of significant indentation. Its language constructs as well as its object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects

4.4. DESIGN

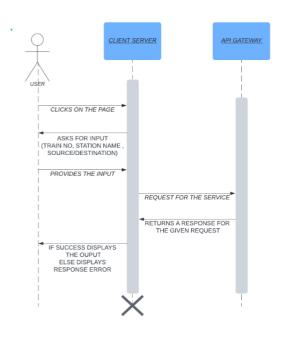
4.4.1. USE CASE DIAGRAM

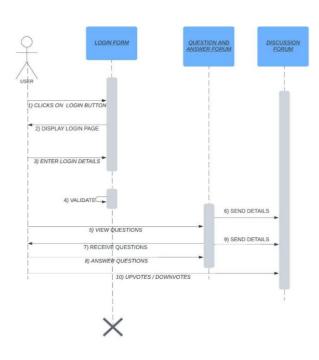
USE CASE DIAGRAM



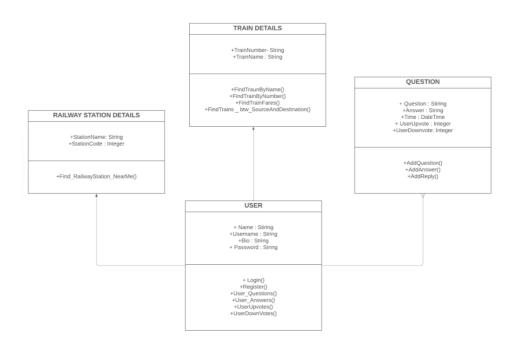


4.4.2. SEQUENCE DIAGRAMS

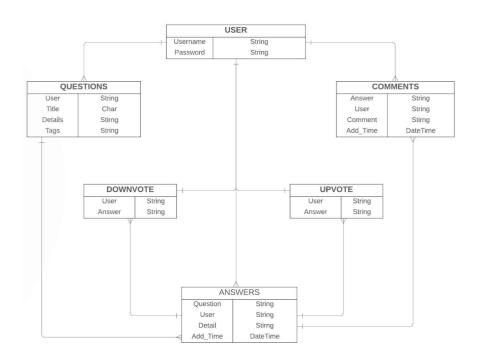




4.4.3. CLASS DIAGRAM



4.4.4. DB SCHEMA



4.5. IMPLEMENTATION

4.5.1. FIND TRAIN WITH TRAIN NUMBER

Firstly, the user is required to enter the train number in the search box. The user is given the option to get to know the train details such as

- 1) Train name
- 2) From (Place)
- 3) Destination (Place)
- 4) Arrival time and departure time
- 5) Availability of train on particular days of a week.

4.5.2. FIND TRAIN BY NAME

Firstly, the user is required to enter the train name in the search box. The user is given the option to get to know the train details such as

- 1) Train name
- 2) From (Place)
- 3) Destination (Place)
- 4) Arrival time and departure time
- 5) Availability of train on particular days of a week

4.5.3. LIVE STATION

Using this feature the user can get the details of the running train. The user is required to enter the train ID and date of journey.

The following status of the train gets displayed –

- 1) Train ID
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- 3) From (Place)
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- 5) Departure status
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- 7) Date and time of departure
- 8) Alert message
- 9) Train is Late by (in minutes)

4.5.4. PNR STATUS

The user is required to enter the PNR number first. The details such as –

- 1) Train number
- 2) Train name
- 3) From (Place)
- 4) Destination (To)
- 5) Boarding date
- 6) Class
- 7) Chart status
- 8) Last Updated

4.5.5. FIND STATION

The user is required to enter the required station details. There will be a list Trains displayed running through that station.

4.5.6. FIND STATION

The user is required to enter the required station details. There will be a list of trains displayed running through that station.

4.5.7. FIND TRAINS BETWEEN SOURCE AND DESTINATION

The user is required to enter the names of source and destination stations There will be list of trains displayed that are available between the required stations. Train departure, arrival time and the total journey time is displayed.

4.5.8. FIND TRAIN FARES

The user is required to enter the names of source and destination stations along with the train number. The categories like adult, general, tatkal, child, etc. are displayed along with their fares for different classes like 1A, 2A, 3A, SL, 2S, GN.

4.5.9. RAILWAY STATIONS NEAR YOU

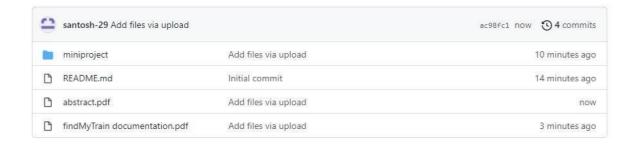
The longitude and latitude of our region are automatically retrieved by the system based on the algorithm used. User need to enter the radius (in km) within which he wishes to get the train details. All the train details within that radius are displayed.

4.5.10. CHATBOT

User can have a chat with the system in case of any queries such as Finding trains between two stations, fares, railway stations, PNR status and live station

4.6. GITHUB/FOLDER STRUCTURE

Based on the actual code and documentation files, we have segregated into two different folders – documentation and RailwayEnquirySystem.



4.7. TESTING

Testing refers to the approach in which a thorough investigation is conducted to provide stakeholders with information about the quality of the product or service under test. It allows us an objective, independent view of the software created.

In this project, we have done the basic testing. The testing techniques taken include:

- i. Execution of the program with the aim of finding errors
- ii. Testing functionality of each use case

4.8. DATASET STRUCTURE

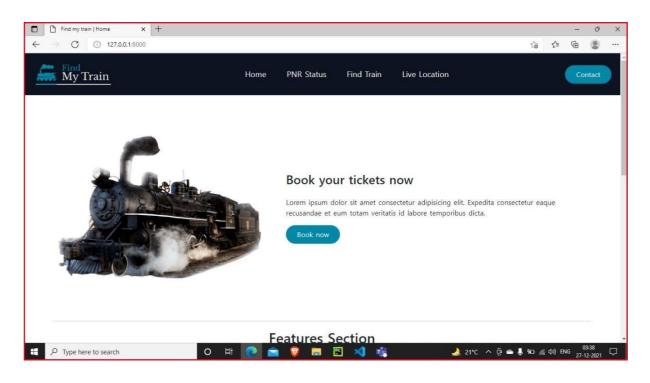
	А	В	С	D	E	F	G	н І
1	Latitude	Longitude	STATION_NAME	STATION_CODE	DIVISION	STATE	CATEGORY	
2	17.722201	83.2892612	VISAKHAPATNAM	VSKP	WAT	ANDHRA PRADESH	A1	
3	17.392422	78.4689988	HYDERABAD	HYB	SC	ANDHRA PRADESH	A1	
4	17.390647	78.5009093	KACHEGUDA	KCG	HYB	ANDHRA PRADESH	A1	
5	17.433709	78.5016144	SECUNDERABAD JN	SC	SC	ANDHRA PRADESH	A1	
6	13.628347	79.4199775	TIRUPATI	TPTY	GTL	ANDHRA PRADESH	A1	
7	16.518625	80.6198977	VIJAYAWADA	BZA	BZA	ANDHRA PRADESH	A1	
8	26.182549	91.7497434	GUWAHATI	GHY	LMG	ASSAM	A1	
9	26.15477	85.9072476	DARBHANGA JN.	DBG	SPJ	BIHAR	A1	
10	24.803241	84.9997072	GAYA JN.	GYA	MGS	BIHAR	A1	
11	26.121899	85.3791128	MUZAFFARPUR JN.	MFP	SEE	BIHAR	A1	
12	25.603303	85.137137	PATNA JN.	PNBE	DNR	BIHAR	A1	
13	25.24003	86.984511	BHAGALPUR	BGP	MLDT	BIHAR	A1	
14	25.787507	84.7249934	CHHAPRA JN.	CPR	VARANASI	BIHAR	A1	
15	30.702219	76.8224701	CHANDIGARH	CDG	UMB	CHANDIGARH	A1	
16	22.056106	82.1718547	BILASPUR JN	BSP	BSP	CHHATTISGARH	A1	
17	21.251384	81.6296413	RAIPUR	R	R	CHHATTISGARH	A1	
18	28.648928	77.3151845	ANAND VIHAR TERMINAL	ANVT	DLI	DELHI	A1	
19	28.660968	77.2276704	DELHI JN.	DLI	DLI	DELHI	A1	
20	28.588919	77.2534726	H. NIZAMUDDIN	HNZM	DLI	DELHI	A1	
21	28.641549	77.2208123	NEW DELHI	NDLS	DLI	DELHI	A1	
22	23.033182	72.509905	AHMEDABAD	ADI	AHMEDABAD	GUJARAT	A1	
23	22.311748	70.8027354	RAJKOT	RJT	RAJKOT	GUJARAT	A1	
24	18.952504	72.8403696	SURAT	ST	MUMBAI CENTRAL	GUJARAT	A1	
25	22.310775	73.18093	VADODARA	BRC	VADODARA	GUJARAT	A1	
26	30.337722	76.828023	AMBALA CANTT. JN.	UMB	UMB	HARYANA	A1	

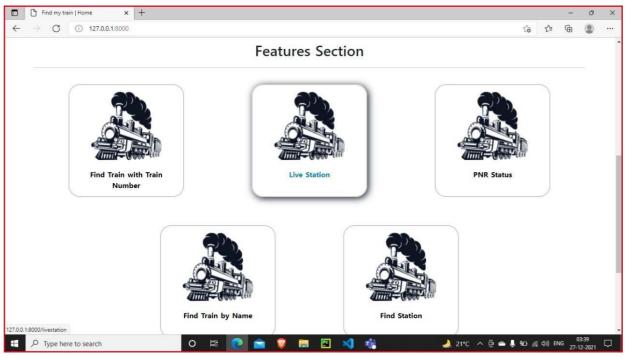
1	Latitude	Longitude	STATION_NAME	STATION_CODE	DIVISION	STATE	CATEGORY
2	15.9129	79.73999	BANSADHARA	BSDR	WAT	ANDHRA PRADESH	F
3	18.34348	83.62422	BATUVA PH	BTVA	WAT	ANDHRA PRADESH	F
4	18.75644	84.42242	DANDUGOPALAPURAM	DGB	WAT	ANDHRA PRADESH	F
5	15.9129	79.73999	GANGUWADA	GVA	WAT	ANDHRA PRADESH	F
6	18.57919	84.28329	HADOBHANGI	HBF	WAT	ANDHRA PRADESH	F
7	18.75644	84.42242	HARISHCHANDRAPURAI	HCM	WAT	ANDHRA PRADESH	F
8	17.37613	82.37111	KASHINAGAR	KNGR	WAT	ANDHRA PRADESH	F
9	18.91352	83.84938	LIHURI	LRI	WAT	ANDHRA PRADESH	F
10	17.73648	83.25258	MARRIPALEM PH	MIPM	WAT	ANDHRA PRADESH	F
11	15.9129	79.73999	NARAYANAPPAVALASA	NGJA	WAT	ANDHRA PRADESH	F
12	15.9129	79.73999	NARSIPURAM HALT	NSX	WAT	ANDHRA PRADESH	F
13	15.9129	79.73999	PALASINGI	PLSG	WAT	ANDHRA PRADESH	F
14	15.82645	78.03457	PARANNAVALASA	PRVA	WAT	ANDHRA PRADESH	F
15	15.9129	79.73999	PATHAPATNAM	PHM	WAT	ANDHRA PRADESH	F
16	15.9129	79.73999	PEDDASANA	PDSN	WAT	ANDHRA PRADESH	F
17	17.48742	78.33244	ROMPALLI	RML	WAT	ANDHRA PRADESH	F
18	18.6205	84.33529	ROUTHUPURAM PH	RMZ	WAT	ANDHRA PRADESH	F
19	18.52536	83.20117	SALUR	SALR	WAT	ANDHRA PRADESH	F
20	14.69051	77.5948	SITAPURAM	SPRM	WAT	ANDHRA PRADESH	F
21	18.60444	84.23422	TEKKALI	TEK	WAT	ANDHRA PRADESH	F
22	14.44632	79.98216	TEMBURU	TMB	WAT	ANDHRA PRADESH	F
23	22.28315	70.79937	AJJAKOLLU	AJA	НҮВ	ANDHRA PRADESH	F

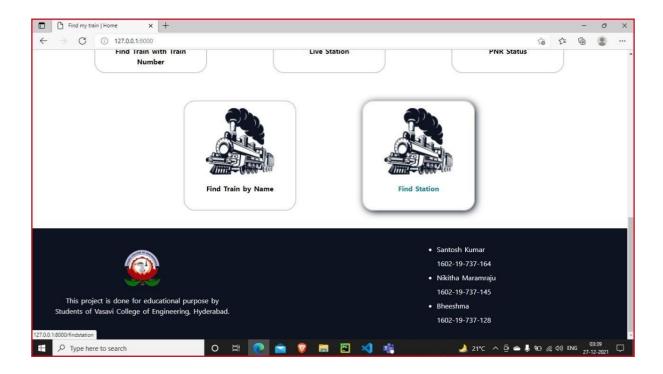
1	А	В	С	D	Е	F	G
1	Latitude	Longitude	STATION_NAME	STATION_CODE	DIVISION	STATE	CATEGORY
2	17.418	78.52	ARTS COLLEGE	ATC	HYB	ANDHRA PRADESH	С
3	15.83247	78.03247	BHARATH NAGAR	BTNR	SC	ANDHRA PRADESH	С
4	13.62637	79.43189	BORABANDA	BRBD	SC	ANDHRA PRADESH	С
5	17.48737	78.33268	CHANDA NAGAR	CDNR	SC	ANDHRA PRADESH	C
6	15.9129	79.73999	DABIRPURA	DQR	HYB	ANDHRA PRADESH	С
7	17.3325	78.47431	FALAKNUMA	FM	HYB	ANDHRA PRADESH	С
8	15.9129	79.73999	FATHENAGAR BRIDGE	FNB	SC	ANDHRA PRADESH	С
9	16.52266	80.61649	HAFIZPETA	HFZ	SC	ANDHRA PRADESH	С
10	24.58088	73.69197	HI-TECH CITY	HTCY	SC	ANDHRA PRADESH	С
11	17.60173	83.15583	HUPPUGUDA	HPQ	HYB	ANDHRA PRADESH	С
12	14.68002	77.60202	JAMAI OSMANIA	JOO	HYB	ANDHRA PRADESH	С
13	17.43432	78.49124	JAMES STREET	JET	SC	ANDHRA PRADESH	С
14	17.4133	78.46109	KHAIRATABAD	KQD	SC	ANDHRA PRADESH	С
15	17.40621	78.46316	LAKDIKAPUL	LKPL	SC	ANDHRA PRADESH	С
16	15.9129	79.73999	MALAKPET	MXT	HYB	ANDHRA PRADESH	С
17	17.44571	78.45226	NATURE CURE HOSPITAL	NCHS	SC	ANDHRA PRADESH	С
18	17.42373	78.46299	NECKLACE ROAD	NLRD	SC	ANDHRA PRADESH	С
19	13.62835	79.41998	SANJEEVAIAH PARK	SJVP	SC	ANDHRA PRADESH	С
20	17.42806	78.51965	SITAPHALMANDI	STPD	HYB	ANDHRA PRADESH	С
21	16.51862	80.6199	VIDYA NAGAR	VAR	HYB	ANDHRA PRADESH	С
22	17.02096	81.53568	YAKUTPURA	YKA	HYB	ANDHRA PRADESH	С
23	19.17211	72.95218	AIROLI	AIRL	BB	MAHARASHTRA	С
24	18.64858	73.7647	AKURDI	AKRD	PA	MAHARASHTRA	С
25	19.21012	73.18442	AMBERNATH	ABH	BB	MAHARASHTRA	С
26	19.26782	73.17172	AMBIVLI	ABY	ВВ	MAHARASHTRA	С

5. RESULTS

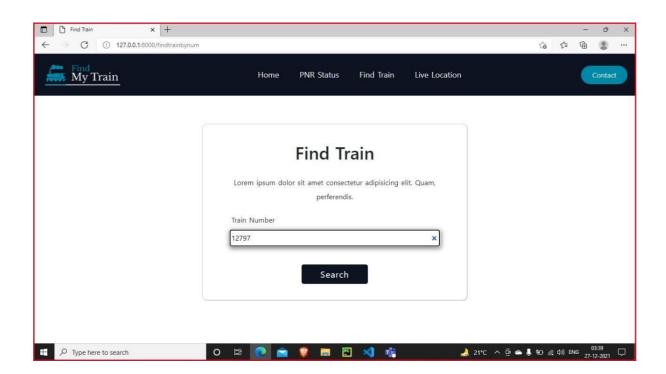
5.1. HOME PAGE

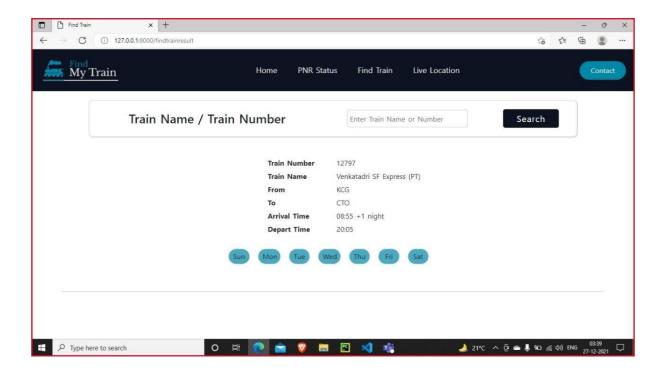




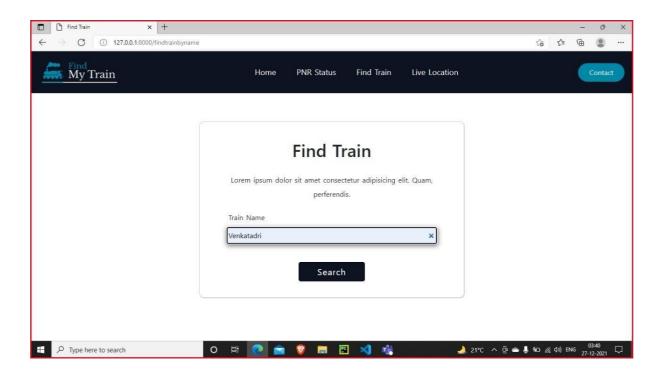


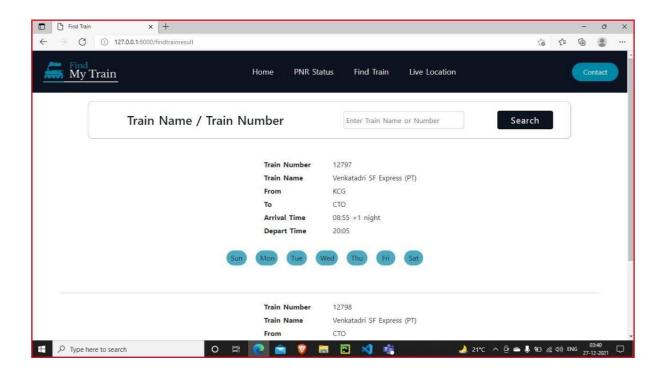
5.2. FIND TRAIN WITH TRAIN NUMBER



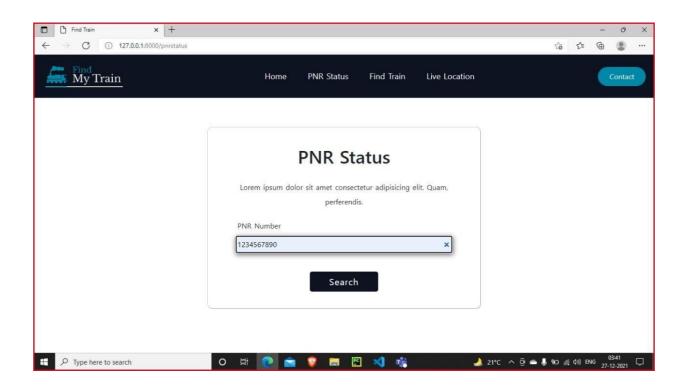


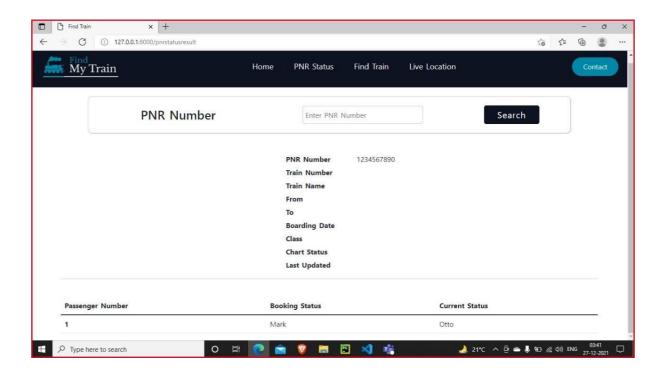
5.3. FIND TRAIN WITH TRAIN NAME



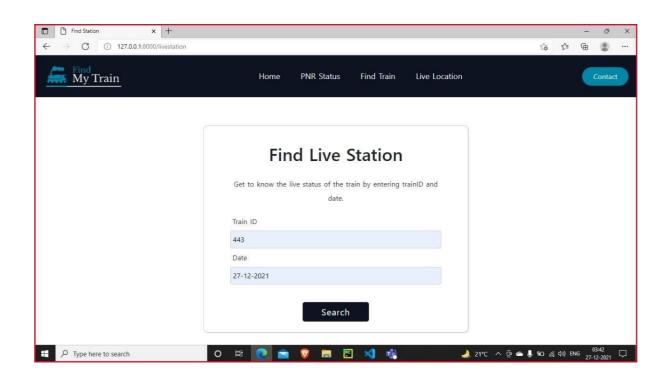


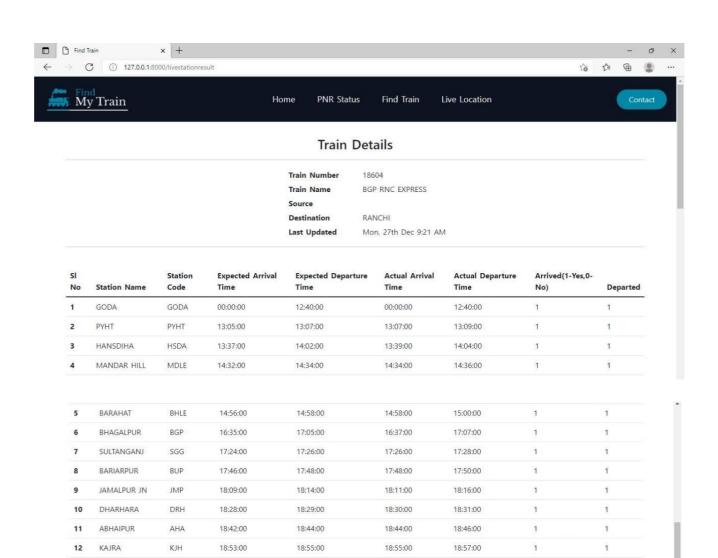
5.4. PNR STATUS





5.5. LIVE STATION





13

14

15

16 17

18

19

20

KIUL JN

JAMUI

JHAJHA

JASIDIH JN

MADHUPUR JN

CHITTARANJAN

DHANBAD JN

VIDYASAGAR

KIUL

JMU

JAJ

JSME

MDP

VDS

CRJ

DHN

19:30:00

20:13:00

21:10:00

21:52:00

22:22:00

22:47:00

23:14:00

01:15:00

19:50:00

20:15:00

21:20:00

21:57:00

22:27:00

22:49:00

23:16:00

01:20:00

19:32:00

20:15:00

21:12:00

21:54:00

22:24:00

22:49:00

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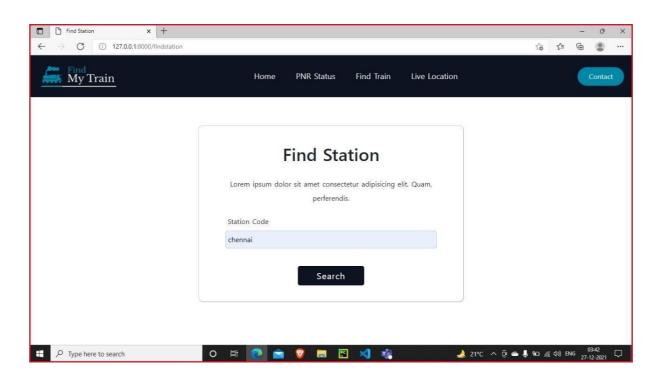
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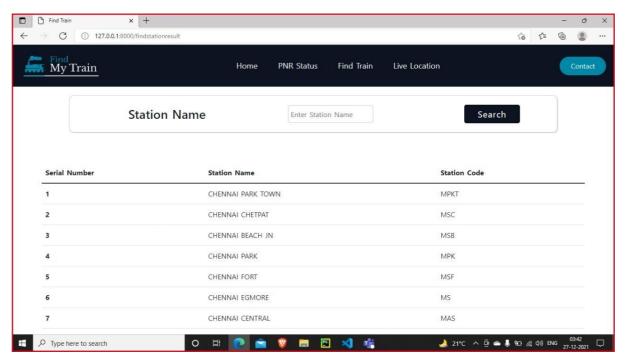
01:22:00

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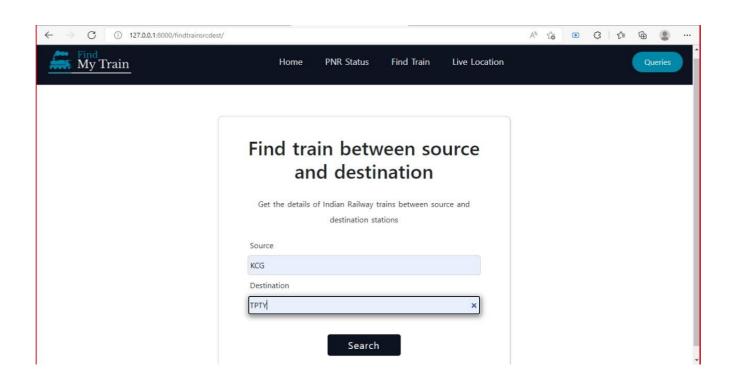
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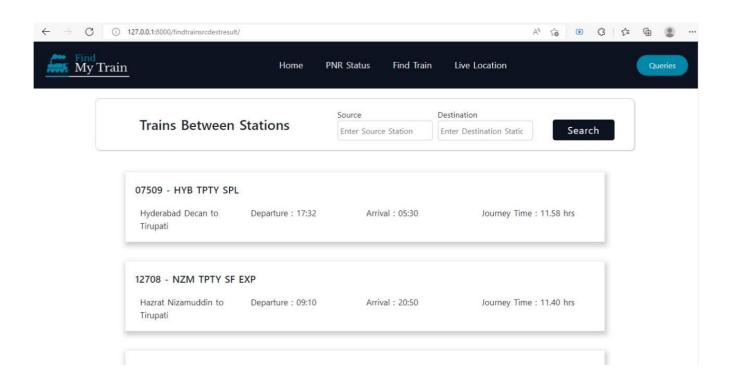
5.6. FIND STATION



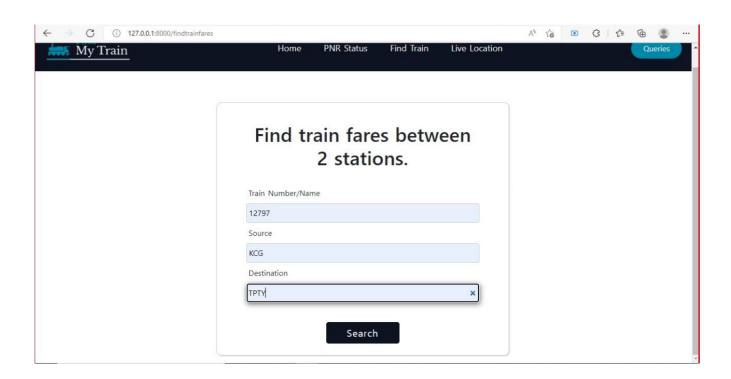


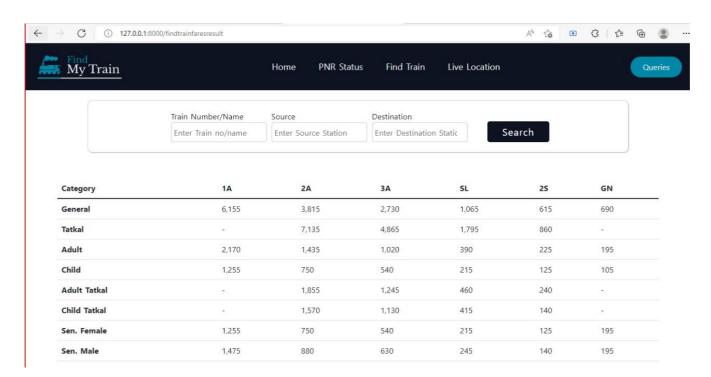
5.7. FIND TRAINS BETWEEN SOURCE AND DESTINATION



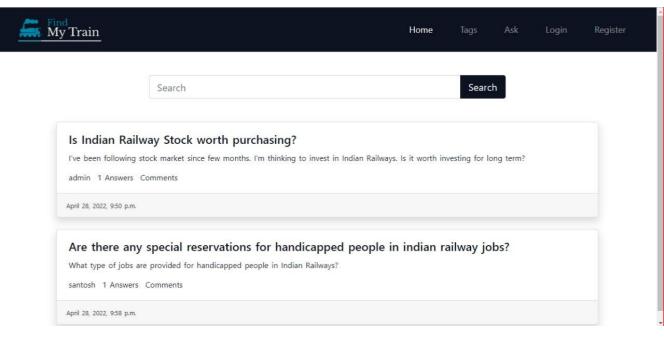


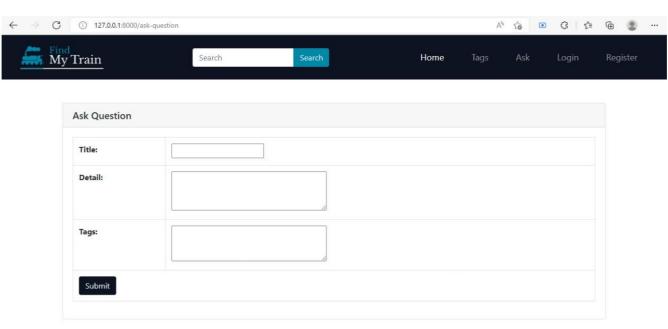
5.8. FIND TRAIN FARES





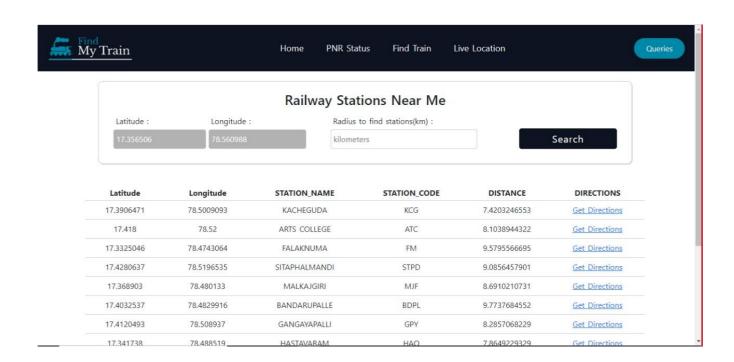
5.9. USER QUERY SECTION



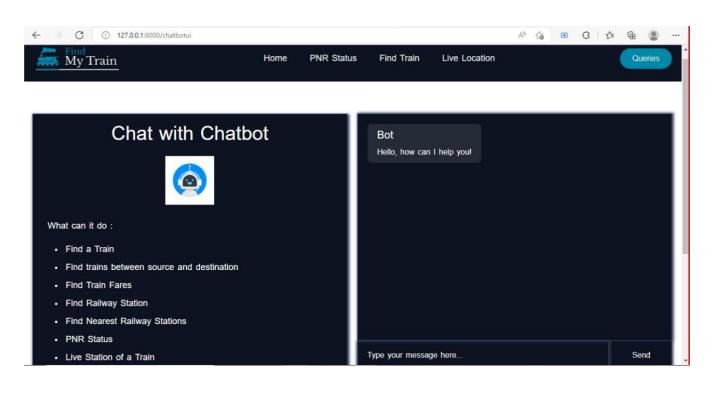


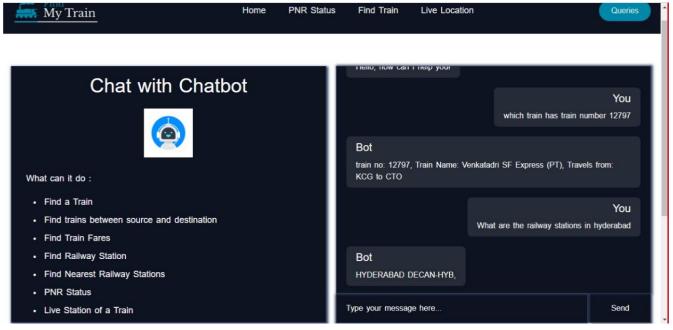
User Register					
Username:	Required. 150 characters or fewer. Letters,	digits and @/./+/-/_ only.			
Password:	Your password can't be too similar to Your password must contain at least Your password can't be a commonly Your password can't be entirely num	3 characters. used password.	nation.		
Password confirmation:	Enter the same password as before, for ver	ification.			

5.10. RAILWAY STATIONS NEAR YOU



5.11. CHATBOT





6. DISCUSSION AND FUTURE WORK

In this project, we have addressed the various railway enquiry features such as finding train by number, finding train by name, PNR status, live station, search station

We have developed an online webapp to include all these features mentioned above. This has been done by using Django framework because of its rapid development and scalability.

In future, we would like to incorporate more features like-Train tickets booking, probability of confirmation booking the tickets using ML, uploading railway blogs.

Also, this web application can be created into a mobile application using the Flutter framework and Firebase as the database.

7. REFERENCES

Django Documentation: https://docs.djangoproject.com/en/4.0/

GeeksForGeeks Django Tutorial: https://www.geeksforgeeks.org/django-

tutorial/Stack Overflow (for debugging): https://stackoverflow.com/

Bootstrap Documentation: https://getbootstrap.com/docs/4.1/getting-started/introduction/