

ITW PROJECT 2019



SwiftRail

Ashish Kumar (B. Tech - 18075068)
Sachin Srivastava (B. Tech - 18075070)
Manav Mukesh Jain (IDD - 18074021)

Why SwiftRail?

- Indian Railway has 12,617 trains carrying over 23 million passengers daily
- 1.2 Lakh people can use its website at one time.
- IRCTC booked 27 tickets when it was introduced in 2002. Now days IRCTC book average of 5 lakh tickets per day.
- IRCTC provides various other services to its common masses via its efficient website.



- To learn the functioning of such a website
- To try and find out additional features.
- To explore the creation of such a website.
- To get a feel of the real time world and its requirements.
- To learn how such complex operations of booking, cancelling, etc are done swiftly.

SWIFTRAIL WEBSITE

No. of Templates : 21

No. of Pages : 21

No. of models : 7

No. of Services provided : 6

No. of stations : 100

No. of trains : 10



WHAT WE OFFER

i
PNR STATUS
Check your pnr status for your booked ticket.

Train
TICKET BOOKING
Get your railway tickets booked with us.

Speaker
TRAIN ENQUIRY
Get informations about train schedule and train between stations.

ABOUT

WELCOME TO OUR WEBSITE

SwiftRail is a single place for all your train-related enquiries. Book your railway tickets with SwiftRail and enjoy a hassle-free journey. We have combined all the features of Indian Railways at a single location - PNR Status, Ticket Booking, Trains between stations, Train Schedule and many more.

SwiftRail

Make your journey hassle-free with SwiftRail. Book your tickets and get all railway informations at a single place.

CONNECT ON SOCIAL MEDIA

[Facebook](#) [Twitter](#) [Instagram](#) [Google+](#)

NAVIGATION

[HOME](#)
[PNR STATUS](#)
[BOOK TICKETS](#)
[TRAIN BETWEEN STATIONS](#)
[TRAIN SCHEDULE](#)
[TERMS OF SERVICE](#)

CONTACT US

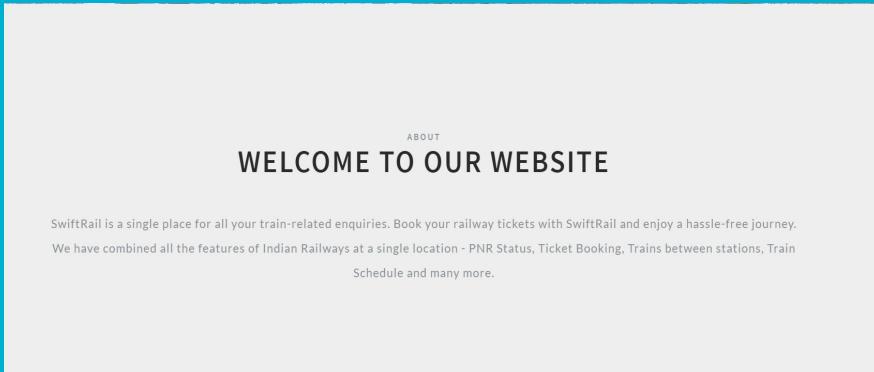
PHONE
+91 90000-00000

EMAIL
info@swiftrail.com

LOCATION
Varanasi, Uttar Pradesh



WEBSITE HEADER



- Contains a summary of all the tabs and services that are provided by the website.
- It also has the Emergency button and the basic buttons to book ticket or enquire about trains
- The next window is a welcome window which greets the user with a small message inviting them to use our website.

WEBSITE FOOTER

- Contains a list of various options that SwiftRail provides. The contact us column gives information about the administrator of the website the website.
- It also has the Emergency button.
- The footer contains the list of social media websites where SwiftRail can be found.

WHAT WE OFFER



PNR STATUS

Check your pnr status for your booked ticket.



TICKET BOOKING

Get your railway tickets booked with us.



TRAIN ENQUIRY

Get informations about train schedule and train between stations.

SwiftRail

Make your journey hassle-free with SwiftRail. Book your tickets and get all railway informations at a single place.

CONNECT ON SOCIAL MEDIA



NAVIGATION

HOME

PNR STATUS

BOOK TICKETS

TRAIN BETWEEN STATIONS

TRAIN SCHEDULE

TERMS OF SERVICE

CONTACT US

PHONE
+91 90000-00000

EMAIL
info@swiftrail.com

LOCATION
Varanasi, Uttar Pradesh

© 2019 SwiftRail. All rights reserved



LOGIN and REGISTER

The login page features a "Login" button at the top left and a "REGISTER" button at the top right. Below these are fields for "Username" and "Password". To the right of the password field is a "Forgot password?" link. At the bottom are buttons for "Login", "Login with Google", and "Login with Facebook". A link "Don't have an account? Register Here" is located at the bottom.

An "Invalid Credentials" message is displayed in a pink header bar above the login form. The form includes fields for "Username" and "Password", and buttons for "Login", "Login with Google", and "Login with Facebook". A link "Don't have an account? Register Here" is at the bottom.

Your access to and use of the Service is conditioned on your acceptance of and compliance with these Terms. These Terms apply to all visitors, users and others who access or use the Service. By accessing or using the Service you agree to be bound by these Terms. If you disagree with any part of the terms then you may not access the Service.

TERMS OF SERVICE

all provides only the facility for transacting with Railway's PRS System through the Internet. Indian Railway's rules for reservation and booking apply to all such transactions along with special conditions imposed for Internet-based booking. The special conditions and the terms of service applicable for Internet booking are detailed in this document. The following terms and conditions will apply if you wish to use the online ticket booking service.

The register page has a "Register" button at the top left. Below are fields for "Email", "Username", "First Name", "Last Name", "Gender" (with "Male" selected), "Date of Birth" (format mm/dd/yyyy), and "Password".

- A user has to register and create his profile, after accepting the terms and conditions before using the website.
- A user, if tries to use the website without logging in, is prompted to login first
- In case fields are left empty, the user is scrolled up to the respective field with the password (min 6 char) erased.
- A (green dot) in the top right indicates if a user has logged in or not alongside a new profile tab.

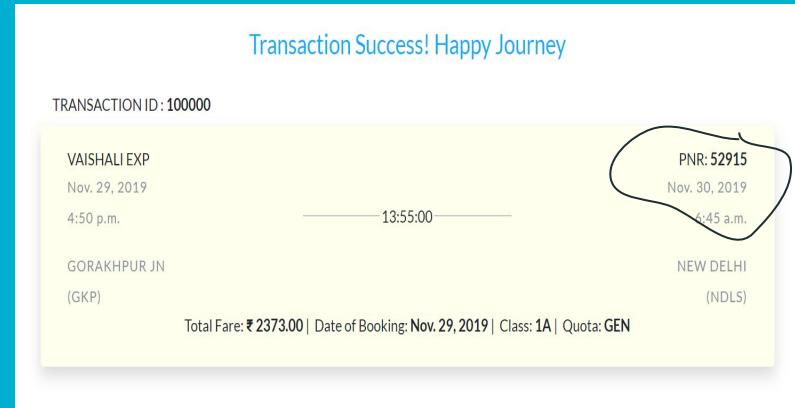
BOOK TICKET

Journey Date:	03/01/2020
Source Station:	Varanasi Junction
Destination Station:	Lokmanya Tilak Terminus
Flexible with Date:	Yes
<input type="button" value="Submit"/>	

S. No.	Train Number	Train Name	Departure Time	Arrival Time	Travel Time	Days of Run	Availability & Fare
1	12553	VAISHALI EXP	4:50 p.m.	6:45 a.m.	13:55	SUN MON TUE WED THU FRI SAT	<input type="button" value="Get"/>
			1A 20	2A 128	3A 216	SL 720	<input type="button" value="Book Now"/> <input type="button" value="Book Now"/> <input type="button" value="Book Now"/> <input type="button" value="Book Now"/>
2	12565	BIHAR S KRANTI	3:50 p.m.	5:35 a.m.	13:45	SUN MON TUE WED THU FRI SAT	<input type="button" value="Get"/>
			1A 32	2A 94	3A 72	SL 1040	<input type="button" value="Book Now"/> <input type="button" value="Book Now"/> <input type="button" value="Book Now"/> <input type="button" value="EMERGE"/>

VAISHALI EXP 4:50 p.m.	13:55:00	2019-11-29 6:45 a.m.
GORAKHPUR JN (GKP)	NEW DELHI (NDLS)	
PASSENGER(S) LIST		
1. <input type="text" value="Name"/>	<input type="text" value="Age"/>	<input type="button" value="Select Gender"/>
2. <input type="text" value="Name"/>	<input type="text" value="Age"/>	<input type="button" value="Select Gender"/>
3. <input type="text" value="Name"/>	<input type="text" value="Age"/>	<input type="button" value="Select Gender"/>
4. <input type="text" value="Name"/>	<input type="text" value="Age"/>	<input type="button" value="Select Gender"/>
5. <input type="text" value="Name"/>	<input type="text" value="Age"/>	<input type="button" value="Select Gender"/>
6. <input type="text" value="Name"/>	<input type="text" value="Age"/>	<input type="button" value="Select Gender"/>

- Upon entering details, the list of trains is displayed, based on the source and destination
- After finding an appropriate train, the user moves to the payment portal.
- The PNR Status of a user can be checked wherein, based on the PNR Number, the query works.



PNR ENQUIRY

PNR Number: Get Status

PNR Status

PNR Number	52915	Date of Journey	Nov. 29, 2019
Train Number	12553	Train Name	VAISHALI EXP
From Station	GKP	To Station	NDLS
Class	1A	No. of Passengers	1
Ticket Fare	₹ 2373.00	Quota	General (GEN)

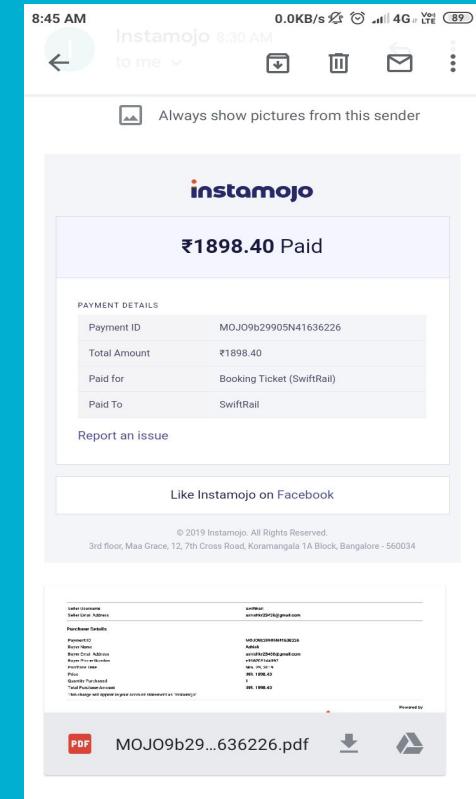
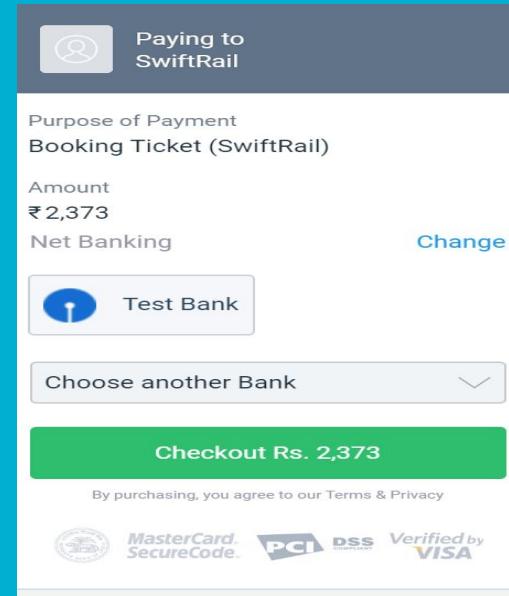
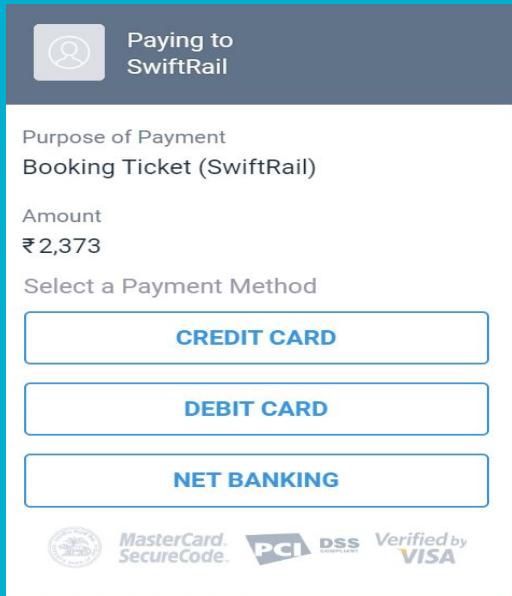
PASSENGER DETAILS

S. No.	Age	Booking Status (Class, Berth No, Quota)	Current Status (Class, Berth No, Quota)	EMERGE
Passenger 1	25	CNF/1A/40/UB/GN	CNF/1A/40/UB/GN	

- PNR Enquiry allows user to enter the unique PNR Number of their transaction.
- The PNR Number is mentioned on the top right corner of the booked ticket.
- The PNR Status displays the fields as given in the image. The PNR Status also includes the details of the passenger alongwith the details of their ticket booking.
- This is one of the newest features on various railway websites.

PAYMENT PORTAL

- The payment portal allows user to make payments online for booking ticket.
- The user is given a transaction ID for every transaction made.
- The user gets a confirmation mail about ticket booking and payment.



TRAIN SCHEDULE

Train Number / Name:

Enter Train Number / Name

Get Schedule

TRAIN BETWEEN STATIONS



Find the trains between two stations

TRAIN SCHEDULE



Find the running schedule of any train

Train Number	Train Name	Source	Destination	Runs On					
12565	BIHAR S KRANTI	DBG	NDLS	SUN MON TUE WED THU FRI SAT					

S.No.	Station Code	Station Name	Arrival Time	Departure Time	Halt Time	Distance	Day
1	DBG	DARBHANGA JN	8:35 a.m.	8:35 a.m.	0:0	0	1
2	SPJ	SAMASTIPUR JN	9:25 a.m.	9:45 a.m.	0:20	38	1
3	MFP	MUZZAFARPUR JN	10:35 a.m.	10:40 a.m.	0:5	90	1
4	HJP	HAJIPUR JN	11:23 a.m.	11:25 a.m.	0:2	143	1
5	SEE	SONPUR JN	11:38 a.m.	11:40 a.m.	0:2	149	1
6	CPR	CHHAPRA	12:45 p.m.	12:50 p.m.	0:5	203	1
7	SV	SIWAN JN	1:40 p.m.	1:45 p.m.	0:5	263	1
8	GKP	GORAKHPUR JN	3:50 p.m.	4:10 p.m.	0:20	383	1

- The Train enquiry tab provides two options : Train between Stations and Train Schedule.
- The Train Schedule page allows the user to enter the number of the Train to be searched
- The output page gives a detailed schedule of the train number specified for the user's perusal.

TRAIN BETWEEN 2 STATIONS

Source Station:

Destination Station:

- This page is the second part of Train enquiry. It asks the user for two fields : The Source and the Destination of their journey.
- Based on the data entered, the display page gives a list of all trains that run between those two stations.
- The train details include the queries as shown in the image.

S. No.	Train Number	Train Name	Origin	Departure Time	Destination	Arrival Time	Travel Time	Days of Run	Classes
1	12553	VAISHALI EXP	GKP	4:50 p.m.	NDLS	6:45 a.m.	13:55	SUN MON TUE WED THU FRI SAT	2A 3A SL
2	12565	BIHAR S KRANTI	GKP	3:50 p.m.	NDLS	5:35 a.m.	13:45	SUN MON TUE WED THU FRI SAT	2A 3A SL

LIVE RUNNING STATUS

Train is running late by 6:40 hours when it crossed HIRANGAON (HNG) at 17:38.

CURRENT STATUS	
Station Name	HIRANGAON
Station Code	HNG
Day	0
Scheduled Arrival	11:26
Actual Arrival	17:38
Delay In Arrival	372M
Scheduled Departure	11:26
Actual Departure	17:38
Delay In Departure	372M

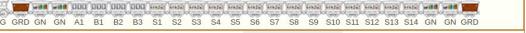
Train Number	Train Name	Source	Destination	Runs On
12942	PARASNATH EXP	ASN	BVC	SUN MON TUE WED THU FRI SAT

S. No.	Station Name	Station Code	Scheduled Arrival	Actual Arrival	Delay In Arrival	Scheduled Departure	Actual Departure	Delay In Departure
1	ASANSOL JN	ASN	00:00	00:00	0M	19:45	19:45	0M
2	DHANBAD JN	DHN	20:43	02:55	372M	20:48	03:00	372M

Welcome to etrain.info :-)

29-Nov-2019 17:52:29 IST

✓ Request Successful. Quick Menu 12942 Train Route Running Status Route Map

PARASNATH EXP (12942) ASANSOL JN to BHAVNAGAR TRMUS	Running Days: THU
Available Classes: 2A 3A SL GN	
Type: Super Fast Zone: WR ARP: 120 Days	
	

Fare Calculator Availability Train Schedule Running Status Running History Route Map

Running Status of: PARASNATH EXP (12942)

Start Date: 28-11-2019 From Station: ASN

⚠ Train is running late by 6:48 Hours when it arrived HIRANGAON (HNG) at 17:47, 29 Nov 2019.

No.	Station Name	Pf	Arrival Departure	Scheduled Time	Actual/Expected Time	Km's to go...
1	ASANSOL JN	-	Arrival Departure 19:45, 28 Nov 2019	22:00, 28 Nov 2019	(-2:15h)	-1029
2	DHANBAD JN	3	Arrival Departure 20:43, 28 Nov 2019	22:56, 28 Nov 2019	(-2:13h)	-970
3	PARASNATH	-	Arrival Departure 21:32, 28 Nov 2019	23:47, 28 Nov 2019	(-2:15h)	-923
4	KODERMA	4	Arrival Departure 22:24, 28 Nov 2019	00:40, 29 Nov 2019	(-2:16h)	-848
5	GAYA JN	1	Arrival Departure 23:53, 28 Nov 2019	01:57, 29 Nov 2019	(-2:04h)	-771
6	ANUGRAHA N ROAD	2	Arrival Departure 00:42, 29 Nov 2019	02:49, 29 Nov 2019	(-2:07h)	-703
7	DEHRI ON SONE	2	Arrival Departure 01:00, 29 Nov 2019	03:04, 29 Nov 2019	(-2:04h)	-686
8	SASARAM	-	Arrival Departure 01:02, 29 Nov 2019	03:07, 29 Nov 2019	(-2:05h)	-668

- The Live Running Status allows the user to search a train.
- Based on the data entered, the display page gives the live running status of the train.
- The Real-time status has been confirmed with SwiftRail's status.

LAST TRANSACTION HISTORY

LAST TRANSACTION HISTORY



Find your Last
Transaction History

BOOKED TICKET HISTORY



Find your Booked Ticket
History

TICKET CANCELLATION HISTORY



Find your Ticket
Cancellation History

Transaction ID	Status
100000	Booked

VAISHALI EXP

Nov. 29, 2019

4:50 p.m.

13:55:00

PNR: 52915

Nov. 30, 2019

6:45 a.m.

GORAKHPUR JN
(GKP)

NEW DELHI
(NDLS)

Total Fare: ₹ 2373.00 | Date of Booking: Nov. 29, 2019 | Class: 1A | Quota: GEN

- These three fields summarise all the booking transactions of the user. In the database, maintained as separate fields, they are interconnected using foreign keys
- This tab is to help the user keep record as well as for proof of transaction.
- The My Transactions tab has drop-down menus if hovered over on the home page and gives separate clicking buttons in the center when clicked separately.

BOOKED TICKET HISTORY

LAST TRANSACTION HISTORY



Find your Last Transaction History

BOOKED TICKET HISTORY



Find your Booked Ticket History

TICKET CANCELLATION HISTORY



Find your Ticket Cancellation History

Booked

PNR Number: 52915

Train Number/Name: 12553 / VAISHALI EXP

From: GORAKHPUR JN (GKP), , 4:50 p.m.

Boarding Station: GORAKHPUR JN (GKP)

Class: 1A

Quota: GEN

Transaction ID: 100000

Booking Date: Nov. 29, 2019

To: NEW DELHI (NDLS), Nov. 30, 2019, 6:45 a.m.

Date Of Boarding: Nov. 29, 2019, 4:50 p.m.

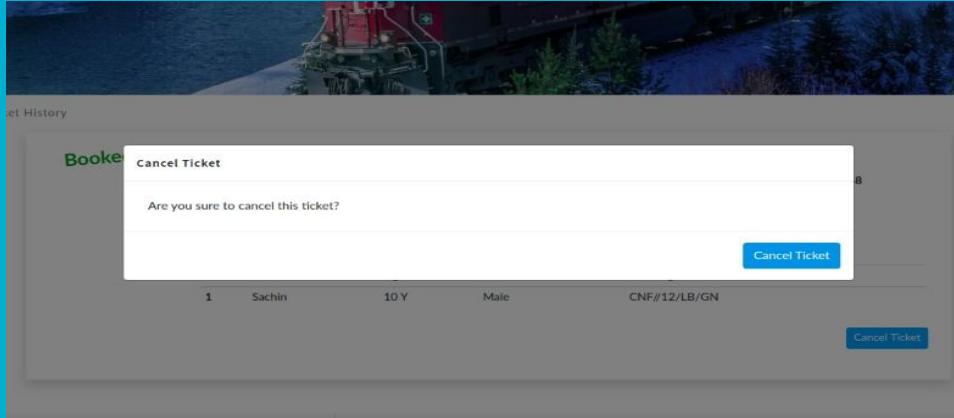
Total Fare: ₹ 2373.00

Ticket Type: E-Ticket

#	Name	Age	Gender	Booking Status
1	manav	25 Y	Male	CNF//40/UB/GN

- These three fields summarise all the booking transactions of the user. In the database, maintained as separate fields.
- This tab is to help the user keep record of the tickets they had booked
- The My Transactions tab has drop-down menus if hovered over on the home page and gives separate clicking buttons in the center when clicked separately.

TICKET CANCEL HISTORY



Cancelled

PNR Number: 71899
Train Number/Name: 12553 / VAISHALI EXP
From: GORAKHPUR JN (GKP), 4:50 p.m.
Boarding Station: GORAKHPUR JN (GKP)
Class: 1A
Quota: GEN

Transaction ID: 100001
Booking Date: Nov.29, 2019
To: NEW DELHI (NDLS), Nov. 30, 2019, 6:45 a.m.
Date Of Boarding: Nov. 29, 2019, 4:50 p.m.
Total Fare: ₹ 2373.00
Ticket Type: E-Ticket

#	Name	Age	Gender	Booking Status
1	Ashish	19 Y	Male	CNF/11/LB/GN

Home / My Transactions / Booked Ticket History

Your ticket has been successfully cancelled. X

SwiftRail
Make your journey hassle-free with SwiftRail. Book your tickets and get all railway informations at a

NAVIGATION

HOME
PNR STATUS
BOOK TICKETS

CONTACT US

PHONE
+91 90000-00000
EMAIL

- The Cancel ticket option gives a prompt to the user whether they really want to cancel it.
- When cancelled, a message is displayed to confirm the cancellation.
- The Cancellation is reflected in the Last Transaction Detail.

MY PROFILE

Name:	SAKSHI JAIN
Username:	manav
Email:	manavmukeshjain12345@gmail.com
Gender	Male
Date of Birth	Feb. 21, 1999
Phone Number	8080007703
Address	IIT BHU Varanasi

[Change Password](#)

Date of Birth Feb. 21, 1999

Change Password

Old Password	<input type="text"/> Enter Old Password
New Password	<input type="text"/> Enter New Password
New Password Confirmation	<input type="text"/> Confirm New Password

[Close](#) [Save changes](#)

- The My Profile Tab, when clicked displays a list of user data that was input during registration.
- A user is allowed to change their password through this. The Change Password dialog box appears when this button is clicked.

OTHER FEATURES

- The Emergency button is a static button which is maintained throughout all the pages of the website. When clicked, it shows a list of nearby officials of nearest stations.
- The Terms of Service list the privacy policy and terms of use of the website. A user must go through before proceeding with the transaction and registration process.
- The logos of various social media website allows user to connect to SwiftRail on these platforms.

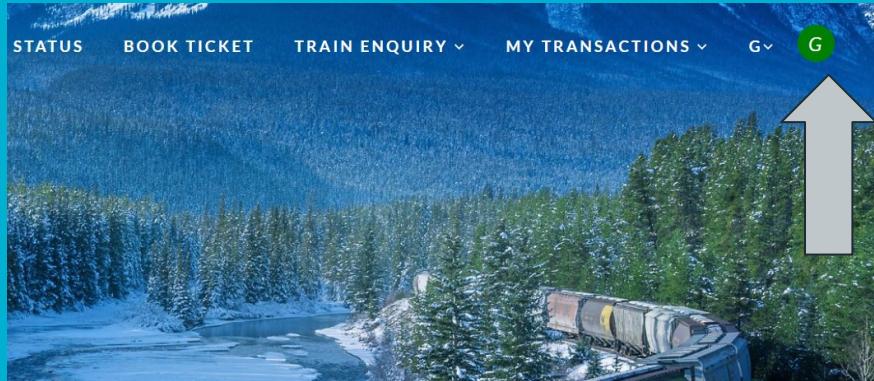


The screenshot shows the footer section of the SwiftRail website. It includes a "SwiftRail" logo with a tagline: "Your one-stop solution for railway enquiry. Book your ticket online and get all railway information in one place." Below the logo is a "CONNECT ON SOCIAL MEDIA" section with icons for Facebook, Twitter, YouTube, and Google+. To the right is a "NAVIGATION" column with links for HOME, PNR STATUS, BOOK TICKETS, TRAIN BETWEEN STATIONS, TRAIN SCHEDULE, and TERMS OF SERVICE. Further right is a "CONTACT US" column with links for PHONE (+91 90000-00000), EMAIL (info@swiftrail.com), and LOCATION (Varanasi, Uttar Pradesh). At the bottom right is a red "EMERGENCY" button. The footer also contains copyright information: "© 2019 SwiftRail. All rights reserved" and the IP address "127.0.0.1:8001".

NEAREST STATION & CONTACT (ACCORDING TO YOUR LOCATION):

Name	MANDUADIH (MUV)
Station Manager	8861233250
Assistant Manager	8667793304
RPF	7279421910
Deputy RPF	6361511046
Head Officer	7953739766

OTHER FEATURES



- The Green circular icon denotes that the user is logged in with the first letter of the first name in it.
- The zoomable location of Varanasi Junction station is displayed.
- The Login with Google and Login with Facebook features allow the user feasibility in logging in on SwiftRail.

SwiftRail

Make your journey hassle-free with SwiftRail. Book your tickets and get all railway informations at a single place.

CONNECT ON SOCIAL MEDIA

NAVIGATION

- HOME
- PNR STATUS
- BOOK TICKETS**
- OPEN STATION
- TERMS & CONDITIONS

CONTACT US

PHONE
+91 90000-0000

EMAIL
info@swiftrail.com

LOCATION

© 2019 SwiftRail. All rights reserved

Login

Forgot password?

Username

Password

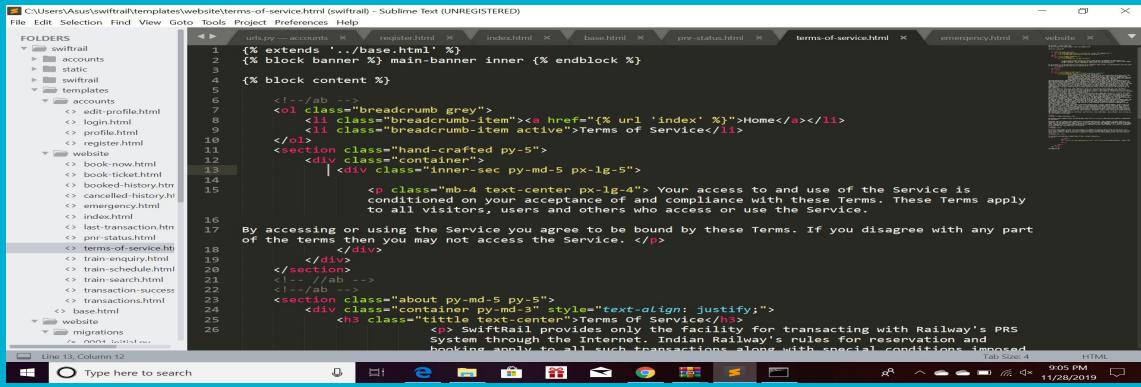
Login with Google

Login with Facebook

Login

Don't have an account? [Register Here](#)

GLIMPSE INTO BACKEND



```
C:\Users\Asus\swiftrail\templates\website\terms-of-service.html (swiftrail) - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
FOLDERS
└── website
    ├── accounts
    ├── static
    └── swiftrail
        ├── templates
        |   ├── accounts
        |   |   ├── edit-profile.html
        |   |   ├── login.html
        |   |   ├── profile.html
        |   |   └── register.html
        |   └── website
        |       ├── book-now.html
        |       ├── book-ticket.html
        |       ├── booked-history.html
        |       ├── cancelled-history.html
        |       ├── emergency.html
        |       ├── index.html
        |       ├── last-transaction.html
        |       ├── pnr-status.html
        |       ├── terms-of-service.html
        |       └── transaction-success.html
        └── migrations
            └── __init__.py
Line 13, Column 12
Type here to search
```

```
1  {% extends "../base.html" %}
2  3  {% block banner %} main-banner inner {% endblock %}
4
5  {% block content %}
6      <!--/ab -->
7      <ol class="breadcrumb grey">
8          <li class="breadcrumb-item"><a href="{% url 'index' %}">Home</a></li>
9          <li class="breadcrumb-item active">Terms of Service</li>
10     </ol>
11     <section class="hand-crafted py-5">
12         <div class="container py-5 px-5">
13             <div class="inner py-2 sec py-md-5 px-1g-5">
14                 <p class="b-4 text-center px-1g-4">Your access to and use of the Service is conditioned on your acceptance of and compliance with these Terms. These Terms apply to all visitors, users and others who access or use the Service.
15
16                 By accessing or using the Service you agree to be bound by these Terms. If you disagree with any part of the Terms then you may not access the service. </p>
17             </div>
18         </div>
19     </section>
20     <!--/ab -->
21     <section class="about py-md-5 py-5">
22         <div class="container py-md-3" style="text-align: justify;">
23             <h3 class="title text-center">Terms of Service</h3>
24             <p>SwiftRail provides only the facility for transacting with Railway's PNR System through the Internet. Indian Railway's rules for reservation and booking apply to all such transactions alongwith special conditions imposed
25             </p>
26         </div>
27     </section>
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
59
60
61
62
63
64
65
66
67
68
69
69
70
71
72
73
74
75
76
77
78
79
79
80
81
82
83
84
85
86
87
87
88
89
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
109
110
111
112
113
114
115
116
117
118
119
119
120
121
122
123
124
125
126
127
128
129
129
130
131
132
133
134
135
136
137
137
138
139
139
140
141
142
143
144
145
145
146
147
147
148
148
149
149
150
151
152
153
153
154
155
155
156
156
157
157
158
158
159
159
160
160
161
161
162
162
163
163
164
164
165
165
166
166
167
167
168
168
169
169
170
170
171
171
172
172
173
173
174
174
175
175
176
176
177
177
178
178
179
179
180
180
181
181
182
182
183
183
184
184
185
185
186
186
187
187
188
188
189
189
190
190
191
191
192
192
193
193
194
194
195
195
196
196
197
197
198
198
199
199
200
200
201
201
202
202
203
203
204
204
205
205
206
206
207
207
208
208
209
209
210
210
211
211
212
212
213
213
214
214
215
215
216
216
217
217
218
218
219
219
220
220
221
221
222
222
223
223
224
224
225
225
226
226
227
227
228
228
229
229
230
230
231
231
232
232
233
233
234
234
235
235
236
236
237
237
238
238
239
239
240
240
241
241
242
242
243
243
244
244
245
245
246
246
247
247
248
248
249
249
250
250
251
251
252
252
253
253
254
254
255
255
256
256
257
257
258
258
259
259
260
260
261
261
262
262
263
263
264
264
265
265
266
266
267
267
268
268
269
269
270
270
271
271
272
272
273
273
274
274
275
275
276
276
277
277
278
278
279
279
280
280
281
281
282
282
283
283
284
284
285
285
286
286
287
287
288
288
289
289
290
290
291
291
292
292
293
293
294
294
295
295
296
296
297
297
298
298
299
299
300
300
301
301
302
302
303
303
304
304
305
305
306
306
307
307
308
308
309
309
310
310
311
311
312
312
313
313
314
314
315
315
316
316
317
317
318
318
319
319
320
320
321
321
322
322
323
323
324
324
325
325
326
326
327
327
328
328
329
329
330
330
331
331
332
332
333
333
334
334
335
335
336
336
337
337
338
338
339
339
340
340
341
341
342
342
343
343
344
344
345
345
346
346
347
347
348
348
349
349
350
350
351
351
352
352
353
353
354
354
355
355
356
356
357
357
358
358
359
359
360
360
361
361
362
362
363
363
364
364
365
365
366
366
367
367
368
368
369
369
370
370
371
371
372
372
373
373
374
374
375
375
376
376
377
377
378
378
379
379
380
380
381
381
382
382
383
383
384
384
385
385
386
386
387
387
388
388
389
389
390
390
391
391
392
392
393
393
394
394
395
395
396
396
397
397
398
398
399
399
400
400
401
401
402
402
403
403
404
404
405
405
406
406
407
407
408
408
409
409
410
410
411
411
412
412
413
413
414
414
415
415
416
416
417
417
418
418
419
419
420
420
421
421
422
422
423
423
424
424
425
425
426
426
427
427
428
428
429
429
430
430
431
431
432
432
433
433
434
434
435
435
436
436
437
437
438
438
439
439
440
440
441
441
442
442
443
443
444
444
445
445
446
446
447
447
448
448
449
449
450
450
451
451
452
452
453
453
454
454
455
455
456
456
457
457
458
458
459
459
460
460
461
461
462
462
463
463
464
464
465
465
466
466
467
467
468
468
469
469
470
470
471
471
472
472
473
473
474
474
475
475
476
476
477
477
478
478
479
479
480
480
481
481
482
482
483
483
484
484
485
485
486
486
487
487
488
488
489
489
490
490
491
491
492
492
493
493
494
494
495
495
496
496
497
497
498
498
499
499
500
500
501
501
502
502
503
503
504
504
505
505
506
506
507
507
508
508
509
509
510
510
511
511
512
512
513
513
514
514
515
515
516
516
517
517
518
518
519
519
520
520
521
521
522
522
523
523
524
524
525
525
526
526
527
527
528
528
529
529
530
530
531
531
532
532
533
533
534
534
535
535
536
536
537
537
538
538
539
539
540
540
541
541
542
542
543
543
544
544
545
545
546
546
547
547
548
548
549
549
550
550
551
551
552
552
553
553
554
554
555
555
556
556
557
557
558
558
559
559
560
560
561
561
562
562
563
563
564
564
565
565
566
566
567
567
568
568
569
569
570
570
571
571
572
572
573
573
574
574
575
575
576
576
577
577
578
578
579
579
580
580
581
581
582
582
583
583
584
584
585
585
586
586
587
587
588
588
589
589
590
590
591
591
592
592
593
593
594
594
595
595
596
596
597
597
598
598
599
599
600
600
601
601
602
602
603
603
604
604
605
605
606
606
607
607
608
608
609
609
610
610
611
611
612
612
613
613
614
614
615
615
616
616
617
617
618
618
619
619
620
620
621
621
622
622
623
623
624
624
625
625
626
626
627
627
628
628
629
629
630
630
631
631
632
632
633
633
634
634
635
635
636
636
637
637
638
638
639
639
640
640
641
641
642
642
643
643
644
644
645
645
646
646
647
647
648
648
649
649
650
650
651
651
652
652
653
653
654
654
655
655
656
656
657
657
658
658
659
659
660
660
661
661
662
662
663
663
664
664
665
665
666
666
667
667
668
668
669
669
670
670
671
671
672
672
673
673
674
674
675
675
676
676
677
677
678
678
679
679
680
680
681
681
682
682
683
683
684
684
685
685
686
686
687
687
688
688
689
689
690
690
691
691
692
692
693
693
694
694
695
695
696
696
697
697
698
698
699
699
700
700
701
701
702
702
703
703
704
704
705
705
706
706
707
707
708
708
709
709
710
710
711
711
712
712
713
713
714
714
715
715
716
716
717
717
718
718
719
719
720
720
721
721
722
722
723
723
724
724
725
725
726
726
727
727
728
728
729
729
730
730
731
731
732
732
733
733
734
734
735
735
736
736
737
737
738
738
739
739
740
740
741
741
742
742
743
743
744
744
745
745
746
746
747
747
748
748
749
749
750
750
751
751
752
752
753
753
754
754
755
755
756
756
757
757
758
758
759
759
760
760
761
761
762
762
763
763
764
764
765
765
766
766
767
767
768
768
769
769
770
770
771
771
772
772
773
773
774
774
775
775
776
776
777
777
778
778
779
779
780
780
781
781
782
782
783
783
784
784
785
785
786
786
787
787
788
788
789
789
790
790
791
791
792
792
793
793
794
794
795
795
796
796
797
797
798
798
799
799
800
800
801
801
802
802
803
803
804
804
805
805
806
806
807
807
808
808
809
809
810
810
811
811
812
812
813
813
814
814
815
815
816
816
817
817
818
818
819
819
820
820
821
821
822
822
823
823
824
824
825
825
826
826
827
827
828
828
829
829
830
830
831
831
832
832
833
833
834
834
835
835
836
836
837
837
838
838
839
839
840
840
841
841
842
842
843
843
844
844
845
845
846
846
847
847
848
848
849
849
850
850
851
851
852
852
853
853
854
854
855
855
856
856
857
857
858
858
859
859
860
860
861
861
862
862
863
863
864
864
865
865
866
866
867
867
868
868
869
869
870
870
871
871
872
872
873
873
874
874
875
875
876
876
877
877
878
878
879
879
880
880
881
881
882
882
883
883
884
884
885
885
886
886
887
887
888
888
889
889
890
890
891
891
892
892
893
893
894
894
895
895
896
896
897
897
898
898
899
899
900
900
901
901
902
902
903
903
904
904
905
905
906
906
907
907
908
908
909
909
910
910
911
911
912
912
913
913
914
914
915
915
916
916
917
917
918
918
919
919
920
920
921
921
922
922
923
923
924
924
925
925
926
926
927
927
928
928
929
929
930
930
931
931
932
932
933
933
934
934
935
935
936
936
937
937
938
938
939
939
940
940
941
941
942
942
943
943
944
944
945
945
946
946
947
947
948
948
949
949
950
950
951
951
952
952
953
953
954
954
955
955
956
956
957
957
958
958
959
959
960
960
961
961
962
962
963
963
964
964
965
965
966
966
967
967
968
968
969
969
970
970
971
971
972
972
973
973
974
974
975
975
976
976
977
977
978
978
979
979
980
980
981
981
982
982
983
983
984
984
985
985
986
986
987
987
988
988
989
989
990
990
991
991
992
992
993
993
994
994
995
995
996
996
997
997
998
998
999
999
1000
1000
1001
1001
1002
1002
1003
1003
1004
1004
1005
1005
1006
1006
1007
1007
1008
1008
1009
1009
1010
1010
1011
1011
1012
1012
1013
1013
1014
1014
1015
1015
1016
1016
1017
1017
1018
1018
1019
1019
1020
1020
1021
1021
1022
1022
1023
1023
1024
1024
1025
1025
1026
1026
1027
1027
1028
1028
1029
1029
1030
1030
1031
1031
1032
1032
1033
1033
1034
1034
1035
1035
1036
1036
1037
1037
1038
1038
1039
1039
1040
1040
1041
1041
1042
1042
1043
1043
1044
1044
1045
1045
1046
1046
1047
1047
1048
1048
1049
1049
1050
1050
1051
1051
1052
1052
1053
1053
1054
1054
1055
1055
1056
1056
1057
1057
1058
1058
1059
1059
1060
1060
1061
1061
1062
1062
1063
1063
1064
1064
1065
1065
1066
1066
1067
1067
1068
1068
1069
1069
1070
1070
1071
1071
1072
1072
1073
1073
1074
1074
1075
1075
1076
1076
1077
1077
1078
1078
1079
1079
1080
1080
1081
1081
1082
1082
1083
1083
1084
1084
1085
1085
1086
1086
1087
1087
1088
1088
1089
1089
1090
1090
1091
1091
1092
1092
1093
1093
1094
1094
1095
1095
1096
1096
1097
1097
1098
1098
1099
1099
1100
1100
1101
1101
1102
1102
1103
1103
1104
1104
1105
1105
1106
1106
1107
1107
1108
1108
1109
1109
1110
1110
1111
1111
1112
1112
1113
1113
1114
1114
1115
1115
1116
1116
1117
1117
1118
1118
1119
1119
1120
1120
1121
1121
1122
1122
1123
1123
1124
1124
1125
1125
1126
1126
1127
1127
1128
1128
1129
1129
1130
1130
1131
1131
1132
1132
1133
1133
1134
1134
1135
1135
1136
1136
1137
1137
1138
1138
1139
1139
1140
1140
1141
1141
1142
1142
1143
1143
1144
1144
1145
1145
1146
1146
1147
1147
1148
1148
1149
1149
1150
1150
1151
1151
1152
1152
1153
1153
1154
1154
1155
1155
1156
1156
1157
1157
1158
1158
1159
1159
1160
1160
1161
1161
1162
1162
1163
1163
1164
1164
1165
1165
1166
1166
1167
1167
1168
1168
1169
1169
1170
1170
1171
1171
1172
1172
1173
1173
1174
1174
1175
1175
1176
1176
1177
1177
1178
1178
1179
1179
1180
1180
1181
1181
1182
1182
1183
1183
1184
1184
1185
1185
1186
1186
1187
1187
1188
1188
1189
1189
1190
1190
1191
1191
1192
1192
1193
1193
1194
1194
1195
1195
1196
1196
1197
1197
1198
1198
1199
1199
1200
1200
1201
1201
1202
1202
1203
1203
1204
1204
1205
1205
1206
1206
1207
1207
1208
1208
1209
1209
1210
1210
1211
1211
1212
1212
1213
1213
1214
1214
1215
1215
1216
1216
1217
1217
1218
1218
1219
1219
1220
1220
1221
1221
1222
1222
1223
1223
1224
1224
1225
1225
1226
1226
1227
1227
1228
1228
1229
1229
1230
1230
1231
1231
1232
1232
1233
1233
1234
1234
1235
1235
1236
1236
1237
1237
1238
1238
1239
1239
1240
1240
1241
1241
1242
1242
1243
1243
1244
1244
1245
1245
1246
1246
1247
1247
1248
1248
1249
1249
1250
1250
1251
1251
1252
1252
1253
1253
1254
1254
1255
1255
1256
1256
1257
1257
1258
1258
1259
1259
1260
1260
1261
1261
1262
1262
1263
1263
1264
1264
1265
1265
1266
1266
1267
1267
1268
1268
1269
1269
1270
1270
1271
1271
1272
1272
1273
1273
1274
1274
1275
1275
1276
1276
1277
1277
1278
1278
1279
1279
1280
1280
1281
1281
1282
1282
1283
1283
1284
1284
1285
1285
1286
1286
1287
1287
1288
1288
1289
1289
1290
1290
1291
1291
1292
1292
1293
1293
1294
1294
1295
1295
1296
1296
1297
1297
1298
1298
1299
1299
1300
1300
1301
1301
1302
1302
1303
1303
1304
1304
1305
1305
1306
1306
1307
1307
1308
1308
1309
1309
1310
1310
1311
1311
1312
1312
1313
1313
1314
1314
1315
1315
1316
1316
1317
1317
1318
1318
1319
1319
1320
1320
1321
1321
1322
1322
1323
1323
1324
1324
1325
1325
1326
1326
1327
1327
1328
1328
1329
1329
1330
1330
1331
1331
1332
1332
1333
1333
1334
1334
1335
1335
1336
1336
1337
1337
1338
1338
1339
1339
1340
1340
1341
1341
1342
1342
1343
1343
1344
1344
1345
1345
1346
1346
1347
1347
1348
1348
1349
1349
1350
1350
1351
1351
1352
1352
1353
1353
1354
1354
1355
1355
1356
1356
1357
1357
1358
1358
1359
1359
1360
1360
1361
1361
1362
1362
1363
1363
1364
1364
1365
1365
1366
1366
1367
1367
1368
1368
1369
1369
1370
1370
1371
1371
1372
1372
1373
1373
1374
1374
1375
1375
1376
1376
1377
1377
1378
1378
1379
1379
1380
1380
1381
1381
1382
1382
1383
1383
1384
1384
1385
1385
1386
1386
1387
1387
1388
1388
1389
1389
1390
1390
1391
1391
1392
1392
1393
1393
1394
1394
1395
1395
1396
1396
1397
1397
1398
1398
1399
1399
1400
1400
1401
1401
1402
1402
1403
1403
1404
1404
1405
1405
1406
1406
1407
1407
1408
1408
1409
1409
1410
1410
1411
1411
1412
1412
1413
1413
1414
1414
1415
1415
1416
1416
1417
1417
1418
1418
1419
1419
1420
1420
1421
1421
1422
1422
1423
1423
1424
1424
1425
1425
1426
1426
142
```

GLIMPSE INTO DATABASE

WEBSITE
Passengers
Stations
Tickets
Train schedules
Train seat charts
Trains

 TRAIN
 16176 - CHENNAI EXP
 12565 - BIHAR S KRANTI
 12553 - VAISHALI EXP
 10103 - MANDOVI EXP

 TRAIN SEAT CHART
 16176 - CHENNAI EXP CHART
 16176 - CHENNAI EXP CHART
 12565 - BIHAR S KRANTI CHART
 12565 - BIHAR S KRANTI CHART
 12553 - VAISHALI EXP CHART
 12553 - VAISHALI EXP CHART
 10103 - MANDOVI EXP CHART
 10103 - MANDOVI EXP CHART

STATION
 VILLUPURAM JN (VM)
 VAIBHAVWADI RD (VBW)
 THIRUVARUR JN (TVR)
 THANE (TNA)
 TINDIVANAM (TMV)
 THIVIM (THVM)
 TIRUPADRI PULYUR (TDPR)
 TUNDLA JN (TDL)
 TAMBARAM (TBM)
 SIRKAZHI (SY)
 SWANTWADI ROAD (SWV)
 SIWAN JN (SV)
 SAMASTIPUR JN (SPJ)
 SINDHUDURG (SNDD)

REQUIREMENTS

The requirements for this project are:

- Python 3.7
- Django 2.2.7 (Used as a backend)
- Instamojo API (For Payment Gateway)
- MySQL Client 1.4.4 (For Database)
- Django Social Auth App (For Facebook Auth, Gmail Auth, etc)
- Python Requests (For accessing Indian Rail API)

DATABASE DESIGN

We have used the following apps, with their respective models to store the data:

1. Accounts - For storing the profile details of the user.
2. Website - For storing the details of stations, trains, train schedules, train seat charts, tickets and passengers.
3. Auth User - For storing the login data of registered users.
4. Python Social Auth - For storing gmail auth and fb auth data.

PROJECT STRUCTURE

1. Accounts App:

Different Views used in this app are:

- i. Login View (for user login)
- ii. Logout View (for user logout)
- iii. Register View (for registering the user)
- iv. Profile View (for creating profile of the user)
- v. Create Profile View (for creating profile in case of social auth)

PROJECT STRUCTURE

2. Website App:

Different Views used in this app are:

- i. Index View (for displaying homepage)
- ii. Terms of Service (for displaying terms of service)
- iii. Emergency (for displaying nearest station details)
- iv. PNR Status View (for displaying PNR Status)
- v. Train Enquiry (for train enquiry)
- vi. Train Schedule (for getting train schedule by train number)
- vii. Train Search (for searching trains between two stations)

PROJECT STRUCTURE

2. Website App:

Different Views used in this app are:

- viii. Book Ticket (first step of ticket booking - for searching trains and displaying availability)
- ix. Book Now (final step of ticket booking - for writing the details of the passengers and payment gateway)
- x. Transaction Success (for displaying booked ticket success)
- xi. Transactions (for displaying all transactions)
- xii. Last Transaction (for displaying last transaction)

PROJECT STRUCTURE

2. Website App:

Different Views used in this app are:

- xiii. Booked History (for displaying history of booked tickets)
- xiv. Cancelled History (for displaying history of cancelled tickets)
- xv. Live Status (for displaying live running status)
- xvi. Ticket Cancel Page (for ticket cancel success page)

PROJECT STRUCTURE

3. Static folder: for static files (css, js, fonts, images)
4. Templates folder: (for html pages of accounts and website app)
 - a. base.html
 - b. Accounts App:
 - i. create-profile.html
 - ii. login.html
 - iii. profile.html
 - iv. register.html
 - c. Website App:
 - i. booked-history.html
 - ii. book-now.html

PROJECT STRUCTURE

4. Templates folder: (for html pages of accounts and website app)
 - c. Website App:
 - iii. book-ticket.html
 - iv. cancelled-history.html
 - v. emergency.html
 - vi. index.html
 - vii. last-transaction.html
 - viii. live-status.html
 - ix. pnr-status.html

PROJECT STRUCTURE

4. Templates folder: (for html pages of accounts and website app)
 - c. Website App:
 - x. terms-of-service.html
 - xi. ticket-cancel-page.html
 - xii. train-enquiry.html
 - xiii. train-schedule.html
 - xiv. train-search.html
 - xv. transactions.html
 - xvi. transaction-success.html
5. script.py (script for adding data to database), my.cnf (config file), pipfile and pipfile.lock (for pipenv)

URL MAPPINGS

1. Accounts App: (/accounts/)

- /login/
- /logout/
- /register/
- /profile/
- /create-profile/
- /oauth/

URL MAPPINGS

2. Website App:

- /
- /pnr-status/
- /live-status/
- /train-enquiry/
- /train-search/
- /train-schedule/
- /book-ticket/
- /book-now/
- /transaction-success/<transaction-id>/

URL MAPPINGS

2. Website App:

- /transactions/
- /transactions/last/
- /transactions/booked/
- /transactions/cancelled/
- /emergency/
- /terms-of-service/
- /ticket-cancel-page/<pnr_no>/

TOOLS & TECHNOLOGIES

1. API Used:
 - a. Instamojo API - For Payment Gateway
 - b. Indian Rail API - For Live Train Status
2. Backend: Django 2.2.7 (Python 3.7)
3. Database: MySQL
4. Authentication (Django Social Auth) :
 - a. Facebook Auth
 - b. Gmail Auth
5. Python Requests (For Indian Rail API - GET requests)

REFERENCES

1. [Official Python Documentation](#)
2. [Official Django Documentation](#)
3. [Instamojo API](#)
4. [Indian Rail API](#)
5. [Django Social Auth](#)
6. [Django Girls Tutorial](#)
7. [Simple Is Better Than Complex](#)

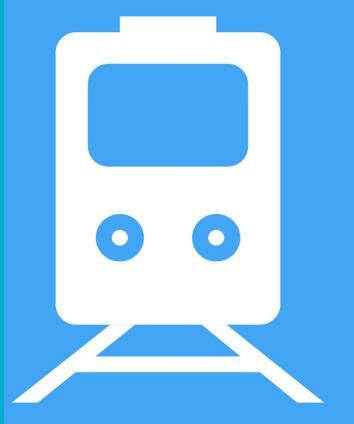
CONTRIBUTORS

The students who contributed to this project are:

1. Ashish Kumar
B. Tech - 18075068

2. Sachin Srivastava
B. Tech - 18075070

3. Manav Mukesh Jain
IDD - 18074021



THANK YOU

Our project is available on GitHub as an Open Source project:

<https://github.com/krashish8/swiftrail>