

Gourmet Express

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ABSTRACT

This project aims at successfully delivering healthy and quality food to all the passengers travelling by train throughout the country as per the actual running status of that train. Our service will use the train number and the start date at originating station of the train as the prime query tools to display the list of stations as per the running status of the train. The PNR will be used only as a tool for verifying the passengers' details. This way even if the train is running late by any number of hours, passengers can easily order food without worrying about the list of stations being flushed out which happens with the current service. These details will be transferred to our service providers and further the process will begin to deliver quality service to the passengers on-board. Collaborated outlets/restaurants will deliver ordered meals to the passengers at their respective berths/seats.

Keyword: - PNR, Delivery Status, API, Vendors

1. Introduction

E- Catering system has been introduced in railways a few years ago to allow passengers to order meal as per their choice, which will be delivered at their choice of stations from popular private caterers of that particular city. It was introduced to provide better quality food with affordable prices just by using the application and web service.

Recently, Pantry in Indian Railways has been in the headlines quite a few times due to its bad quality, stale and unhygienic food. Many reports have confirmed that on various occasions dead lizards, cockroaches and insects are found in food which is being served to the passengers through pantry. This led Railway think about the Pantry system in ongoing trains and let them develop a new system for serving food to the passengers which is e-catering IRCTC. Things were better than before but with time there were some flaws that were hindering the service.

The problem arises when the train is delayed by some hours and the passenger wants to book his food at any point of time during the journey at any of the upcoming stations, the stations which are now far behind the scheduled time, will not be displayed for selection. This will force the passengers to opt for the unhealthy/unhygienic food provided by the pantry (if it exists in the train), otherwise step down on the stations and purchase something to eat.

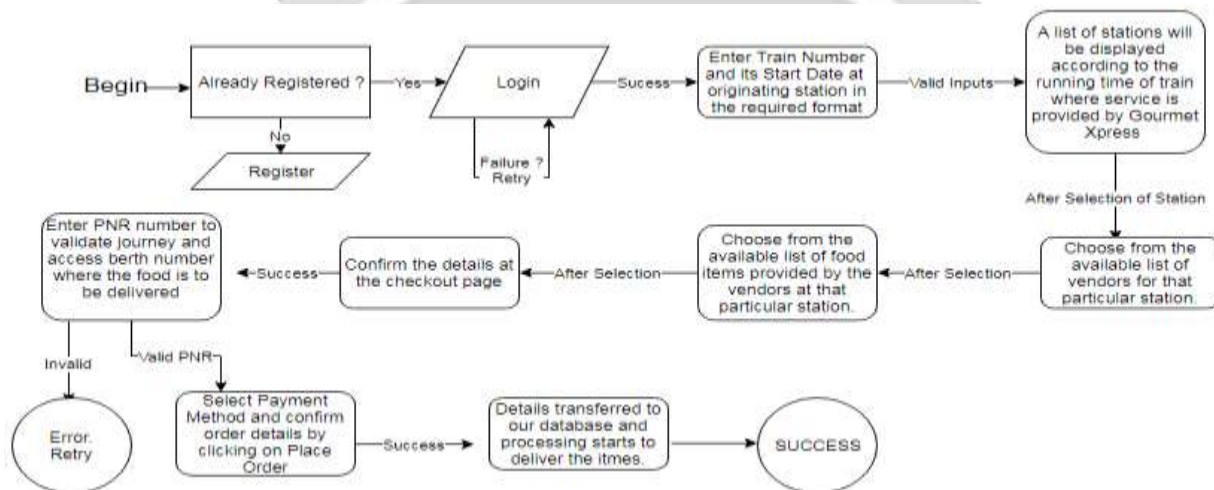
This project aims at successfully delivering healthy and quality food to all the passengers travelling by train throughout the country as per the actual running status of that train. Our service will use the train number and the start date at originating station of the train as the prime query tools to display the list of stations as per the running status of the train. The PNR will be used only as a tool for verifying the passengers' details. This way even if the train is running late by any number of hours, passengers can easily order food without worrying about the list of stations being flushed out which happens with the current service. These details will be transferred to our service

providers and further the process will begin to deliver quality service to the passengers on-board. Collaborated outlets/restaurants will deliver ordered meals to the passengers at their respective berths/seats.

2. Features and Resources

- 1) Application under development on Android Studio.
- 2) Java programming language along with XML for designing.
- 3) Application Programmable Interface (API) used as a gateway to access details of the train and passengers.
- 4) JSON strings to be formatted and displayed in desired layouts.
- 5) SQLite (default database of Android Studio) used to manage and modify user data.
- 6) Application developed on API level 19, suitable for KitKat versions (4.4) and above.
- 7) This will target nearly 96% of the available a
- 8) Easy to use interface and graphic layouts.
- 9) Response from railway API takes minimum time (approximately 9667ms == 9.6 seconds on a healthy connection).

3. Project Design



1. Register:

The starting step initiated for the user is registration of his name number user id and password. This helps in saving the user details for moving on to the next page for login and for further reference. It saves the details of the user in the database and helps it in future when he/she wants to book the food again. The basic steps involved in register are:

- i. Name
- ii. User id
- iii. Password
- iv. Confirm

After completing these steps the customer saves his details successfully and he/she is eligible for the login procedure.

2. Login:

At the login step the user has to enter his user id and password for securely entering his page, where he can find his details. After the login he can select his train number and date for the booking purpose. If there is any error in the user id or the password the user would be asked to retry login. This helps in avoiding any fake user to enter the application.

3. Train details

- i. The next step after the secure login is entering the train number and the start date of the train from the originating station. To continue this process the user has to keep some points in mind: .The user should make sure that the queried date of the train is not beyond 2-3 last running instances .
- i. The user should enter a valid train number of 5 digits. If there are less than 5 digits, no trains will be displayed.
- ii. The name of the train for confirmation will also be added in the upcoming updates. When the date and train number are correctly entered in the required format, these entries will be converted to a string format and added along in the URL to fetch the data in the required format.

4. Station details:

This displays a list of all the stations of the train according to the running time. It shows the status of the train , the delay time of the train, arrival time of the train at the particular station, departure time of the train, station name.

At this point the user can select the station where he wants to book his/her food.

5. Vendor:

After selecting the station the user will be forwarded to the vendors' page. At this page the user can select any vendor of his choice from the available list of vendors at that station. After selecting the vendor from the list the user will be forwarded to the menu item page where the list of food items will be listed for the user. He/she can select any item from the given list.. There is a list of items mentioned below the name of the meal so that the customer could get to know which meal he should order.

The quantity of the food present is also mentioned in the list for the customer. After selecting the items from the food list he/she should confirm to move on for the further steps.

6. Confirmation and PNR:

After the food selection and confirm the user is displayed a PNR page. At this page the user has to enter the PNR for the conformation of the food and it helps to know all the required details like seat number. PNR is necessary for a user because it helps for the vendor to know few very important details like:

1. Seat of the passenger
2. To confirm whether the passenger is not a fake.
3. To know the train details (name, platform no).
4. For the conformation of the delivery.

If there is any error in the PNR of the train then the user is automatically redirected on the same page with an error message to reenter the PNR to move on to the next page. It helps in catching any fake user.

7. Valid PNR and payment:

After the successful entry of the PNR the user is displayed a page about the payment option. At this page all the options for the payment is displayed for the user. After the payment method is selected the final list is displayed whit all the customer details including:

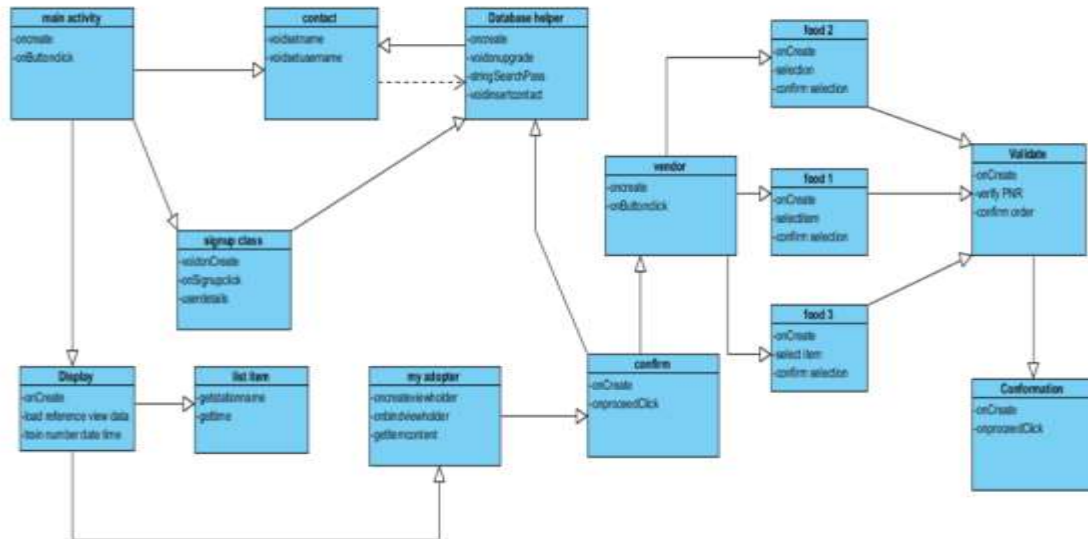
- i. Date of delivery
- ii. Amount to be paid
- iii. List of meals selected
- iv. Seat number and PNR details
- v. Name of customer

After the successful payment the user will receive a message of confirmation and all the details of the user will be saved in the database. All the details are sent to the vendor and a confirmation message from vendor is received

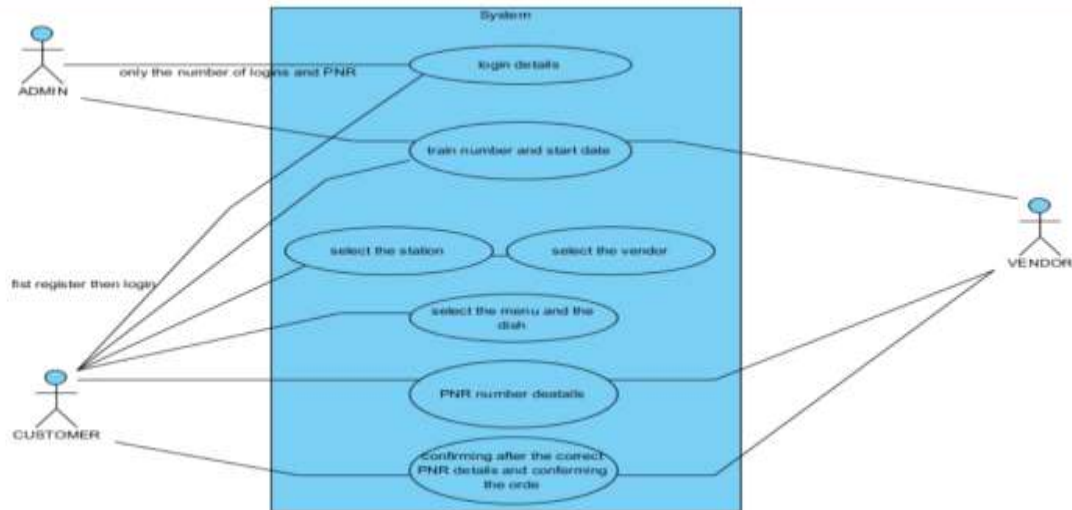
from the vendor. Finally ordered successfully is displayed on the page and the user is redirected to the main login page.

5. UML Diagrams

I. CLASS DIAGRAM



II. USE CASE DIAGRAM



6. CONCLUSIONS

This project will assure that quality food is delivered round the clock to the passengers from their preferred outlets on board irrespective of any delays or any other excuses.

1. Enhanced UI and more security features.
2. Display of previous order details for every account.
3. Improved feedback and error reporting system.
4. Addition of Indian Railway enquiry system, such as PNR status, live status of train, Seat birth availability and many more.
5. Addition of digital payment system for easy and convenient transactions.
6. Expanding services to an extent so that not only major cities but also smaller cities and towns have vendors under contract for delivery of food.

7. REFERENCES

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