**PROBLEM STATEMENT**

Need: With the ever increasing population and the not so fast growing infrastructure, the railway reservation system needs a supporting portal to manage the physical rush. This calls for a railway reservation system for manipulation of data keeping in mind the following major points:

* A 2 level system i.e. Administrator & User wherein

Administrator Rights

* Add trains into the database as per the running schedule.
* Add the information about the train, route, number of classes and respective fair, and availability of tickets, departure date and other such information.
* Store and retrieve information about the various bookings done till date.
* Keep track of all passengers and thus schedule their journey accordingly.
* Maintain records of passengers travelling in the different trains on different dates reaching different destinations in the system.
* However Admin doesn’t have power to DELETE or MODIFY.

User Rights

* Have a look on all trains in the database.
* Book a ticket according to Boarding Point & Destination Point.
* Gets a confirmed ticket with important details mentioned such as PNR, Name of Passengers, Age of passengers, Travel date and so on.
* Gets options to get Concession based on AGE criteria.
* Can Cancel a ticket and claim the Refund amount.
* However Admin doesn’t have power to DELETE or MODIFY.

Constraints & Limitations

Administrator Level

* Only adding a Train is allowed. No deletion/Modification is possible.
* A train has 2 stations only Boarding point & Destination point.

User Level

* Cancellation means cancellation of whole PNR.
* Everyone on a PNR has to travel on same class.
* No reservation for any category.
* Only 1 booking on a particular journey allowed per User.

Softwares involved

* WAMP server v2.5
  + Interfacing using PHP.
  + Database Management using MySQL.