**­ RENTING SYSTEM**

**Problem Definition:**

**Renting**, also known as **hiring** or **letting**, is an agreement where a payment is made for the temporary use of a good, service or property owned by another.

**Why rental system?**

Over the years people have had a problem in maintaining and managing their belongings that are of no use to them. They are just kept in their store room because renting things and keeping their records had been a difficult task. So to ease this process, we are devising a system that would provide a platform for people to rent and hire things.

**Problem Description:**

With the emergence of huge global industries and opportunities the lives of people have become very busy, hectic and tiring. With the current paradigm shift in technological field, there is an urgent need to embrace and appreciate the power of technology. The growth in technology has never been constant, which has led the people to seek out new opportunities and keep migrating. In such a busy and dynamic life, it’s never have been easy to find a place to live where you yourself know that you might have to migrate to some other place in future. So, the situation or state compels one to rent furniture/house/cars etc., rather than buying them, which leads to fulfilling our requirements and even saving a dime. Buying these things for a small period of time would be a waste of money and it is very time consuming and cumbersome to shift it to some other place with these things.

Many times, it happens that people end up with buying lots of new things whether be it an auspicious occasion or just a shopping spree. Rental business is a smart idea with a potential of huge profits and good return on investment. So renting things that are of not much use to you, can be a new source of income and have some capital on hand. There are plenty of options in the Rental Business from wedding and party good supplies, rental of different types of equipment and machinery, home staging, mobility equipment and so on.

Our software also provides an opportunity for the technicians to seek out full time and part time jobs. The technicians will be contacted by the customers as per the maintenance requirements of the goods.The rating feature would make it easy for the customers in selection of their goods they want to hire.The customers would also be rating the technicians on basis of their work. The technicians would be required to register on the website updating their credentials and field of specialization. This would reduce their efforts in searching for jobs and invest their valuable time in earning some capital.

The website would also take a step forward in welfare of the society as it would provide a place where the local community within a city could come together, meet and help each other in many ways. Community members can come here to find an apartment to live in, rent their old car, bike ,music system, laptop or furniture, rent any item that they might want or have to offer and make new friends while doing all of the above.

One major problem faced during renting goods and equipments is that of collecting and transferring money.The owner does not always feel good to keep shouting behind tenants for money, hence our website makes it more convenient to do the transactions as it will have an added facility of money transfer. It would also notify the tenant after each month to pay the rent which would take away the pressure from the owner’s shoulder for asking rent again and again. It will also maintain logs of the transactions so that both the owner and tenant could cross-verify anytime needed. It would also save time of the customer as he will not have to go in person to the owner to hand over the money.

The system will provide a common integrated platform for people who want to rent their things and people who want to hire things.It would also provide service and maintenance functionality so that people will not have to run errands to get the equipment or good repaired.

**Problems in Current Situation**

There is no big platform at present where one can rent anything and everything.

Another problem that people faces during renting is they don’t have a written tenancy agreement, so many a times (especially in India) the owner faces difficulties in getting their things back, also it does happen that the things they receive back are not in good conditions.

**Features:**

The rental software will be very easy to operate and user-friendly, which won’t require any special skill set. It only requires an account to use the software.

It will be launched with an aim to provide a quality service to the people who surf online in search of getting anything on rent. The functionalities provided to specific user segment are as below.

**General Features :**

* Peer to peer dealing of things would take place so as to avoid intermediate commission.
* Customers will need to register on the website providing their credentials (Name, address, email ID ,mobile number with OTP verification).
* A legal doc would be created at time of final meeting between tenant and owner (for legal reasons) and would be uploaded to our site which both buyer and seller can access.
* Maintain and track inventory.
* Eliminate guesswork on item availability, know accurately when hires/rentals are due to be returned.
* Maintain short term and long term hires.
* Provide an easy money transfer portal between the owner and customer.
* Notifying customer to pay rent periodically.

**Seller Features:**

* After registering, you can post ads (i.e. photos of things which you want to rent) along with the proper description.
* Seller can set the price according to his instincts and will get notified if any person is interested in getting his/her product on rent.
* The seller is required to give a detailed description (must contain insurance coverance if done) of the things he/she want to rent. Also he/she should mention the tenure for which he wants to rent.
* The system will have a chatting functionality where customers can get in touch with owner to set up the final meeting.
* Owner can give rating to the buyer on the basis of comfort and convenience provided by buyer and the condition in which he gets his product back.

**Buyer Features:**

* Buyer will simply need to register on the portal once.
* After registering buyer can search the products on the basis of his need and the location.
* Buyer can search things in the nearby area, even he can set the radius where he want to see the thing.
* Buyer can give rating to seller at the end of renting period so that next time when someone needs to take something on rent, he/she can see the seller’s rating.
* Buyer can set the price range according to his financial condition.
* Buyer can chat with the seller and can bargain on prices.

**Technician Features:**

* Technician gets notified when the customer requests for the technician.
* Technician can send and receive messages from the customer to remove any discrepancies.
* Technician gets paid(in cash) right after the work is done.
* Technician doesn’t have to face hassles in finding work.

THE ROLE OF OBJECT ORIENTED PROGRAMMING (OOP) The concept of object-oriented modeling is becoming increasingly practical because of its ability to thoroughly represent complex relationships as well as to represent data and data processes in a consistent manner. This concept has been implemented in computer software engineering; ranging from system analysis, system design, operating system, computer programming and database management system.

THE ROLE OF DATABASE MANAGEMENT

All the data including information about buyers, sellers technicians will be stored in some database. The software takes care of the communication between the database and user interface. Since, this is a data-centric software we will need some place to store the data (which includes advertisements, legal documents, buyer and seller’s chat, etc.) , a database will thus be used.

**Operating Environment**

Hardware : Central Server and Personal Workstations

Operating System : Windows XP and above, Linux

Code Standard : The software will be developed in Java. The database management task is done with the help of JDBC.

Libraries : JRE (Java Runtime Environment) needs to be present on the workstation.

User Interface : HTML,CSS, Javascript.

The web portal requires an internet connection so renting and getting things on rent can’t be done when offline.

The software is available only in English.

User can register using email-ID or phone number.