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### **Problem Statement-1: Credit Card Processing**

#### **ProblemStatement:**

Credit card processing through offline involves the merchant collecting order information (including credit card numbers), storing this in a database on your site, and entering it using their on-site merchant credit card processing system. Takes time to manually enter credit card information for each order. This solution creates following cons: · Insecure – there is a possibility that a skilled hacker could break into the database and steal an entire list of credit card numbers, thereby damaging the merchant's reputation with current client. · There is a higher risk of customer charge backs with no signature · Higher risk of fraud for using stolen credit cards · Many discerning online shoppers will not give their credit card to an "untrusted" online merchant (you may want to consider being part of the Better Business Bureau or similar organization to add credibility). So there is a need of online and trusted credit card processing

### **Software Requirement Specification:**

### **INTRODUCTION:**

A credit card is a small plastic card issued to users as a system of payment. It allows its holder to buy goods and services based on the holder's promise to pay for these goods and services. The issuer of the card creates a revolving account and grants a line of credit to the consumer (or the user) from which the user can borrow money for payment to a merchant or as a cash advance to the user. When a purchase is made the merchant swipes the card. The information goes to a gateway processor, which either accepts or rejects the transaction. If it is accepted, the transaction is held until the end of the business day. The merchant then re enters the transaction via the gateway processor, the data is logged, and the debt is transferred to the account. The use of an ATM for cash advance is a similar process. If you are selling to consumers, merchant services will allow you to expand your customer base and provide a more convenient method of payment than cash or checks. And if you are interested in selling over the Internet, accepting credit card processing is a must. Accepting credit cards allows funds to be transferred to your bank account in less than a week. This can be a welcome relief for businesses that experience a tight cash flow. The two purchase options for Credit Card Processing facility are: Validation only Credit card processing (which secures deposits at the time of booking) With

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either option, credit card accounts entered during booking are validated to assure that the account is active and in good standing. The credit card processing option also allows properties to process credit card deposits.

#### **PURPOSE**:

When customers complete their shopping cart, their credit card is preauthorized and the order is entered into the Sales Order. Credit Card Processing dials out and obtains a credit card payment. Within five minutes the customer receives an e-mail receipt and the message to his registered mobile number.

#### INTENDED AUDIENCE AND READING SUGGESTIONS:

The document is intended for all the different kinds of customers and the developer (designers, testers, maintainers etc). The reader is assumed to have basic knowledge of banking accounts and account Services and how to use the credit card.

### **PROJECT SCOPE:**

- Automatically connects to your financial network for credit card authorizations and settlements.
- Integrates with Sales Order, Accounts Receivable, and e-Business Manager Support for dial-up (modem) connections or secure Internet connections through TCP/IP and SSL
- Compliant with Visa and MasterCard Electronic Commerce Indicator (ECI) regulations.
- Multiple address verification options available

### **TECHNOLOGIES TO BE USED:**

- HTML
- JSP
- Javascript
- Java 1.6

### TOOLS TO BE USED:

- Eclipse IDE (Integrated Development Environment)
- Rational Rose tool (for developing UML Patterns)

#### **PRODUCT PERSPECTIVE:**

This solution involves solving various kinds of problems that have occurred while doing the credit card processing and providing the secured and hacker free processing systems.

#### **SOFTWARE INTERFACE:**

- Front End Client The applicant and Administrator online interface is built using JSP and HTML. The Administrators's local interface is built using Java.
- Web Server Glassfish application server(SQL Corporation)
- Back End SQL database.

#### **HARDWARE INTERFACE:**

The server is directly connected to the client systems. The client systems have access to the database in the server.

#### **SYSTEM FUNCTIONS**:

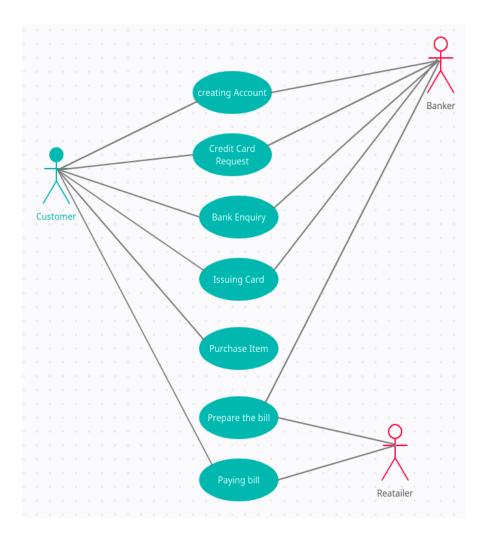
- 1. Accept credit card numbers on the web, store them in a database, then process them offline
- 2. Credit card processing with CCP
- 3. Credit card processing with a third-party credit card processing company 2.5

### **USER CHARACTERISTICS:**

- 1) User/Customer They are the people who desires to purchase the goods using credit card.
- 2) Authorization Service Validate the credit card payments to ensure that the card number is valid and the card has not expired Deposit processing to apply the deposit payment to the card Prepare Credit card transaction reports that show authorization codes, amounts, and error/success messages

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Roll No.: 18WH1A1234	Date:
CONSTRAINTS:	
	ssor Must suite for higher-volume sites Cheaper y be very fast Must provide fraud prevention measures
<b>Design Phase And Testing Phase Docu</b>	ment : Credit Card Processing:
<ul> <li>preparing bills, purchasing items.</li> <li>The actor use the use case are denoted b</li> <li>The creating account use case creates the password, address, mobile number.</li> <li>The customer requests for credit card by</li> <li>Once the customer submits his request the credit card only</li> </ul>	omer, Banker and Retailer. it card request, issue card, bank enquiry, paying bill, y arrow. e account for the user by taking details like name, r providing details like name and account number. the bank will enqire his details. if all the customer credentials are valid. om the retailer and the retailer will prepare the bill and nk.



## **DOCUMENTATION OF CLASS DIAGRAM**

### **BANKER**

- The banker have attributes like banker id, banker name, banker branch.
- The banker has to credit the payment from the customers account and verify the customers account and update the customers account up to date and also issue the credit card whenever necessary.

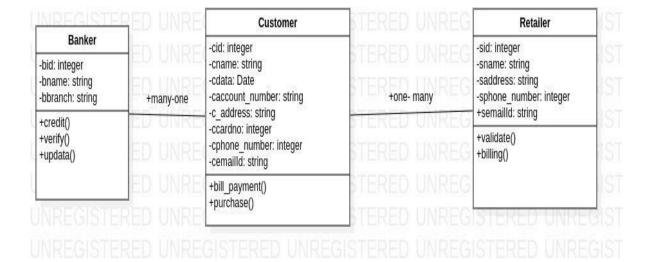
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#### **CUSTOMER**

- Customer have attributes like customer id, customer name, customer data, customer number, customer account number, customer address, credit card number and email id.
- The customer will be purchasing the items from the retailer and makes the bill payment.

#### **RETAILER**

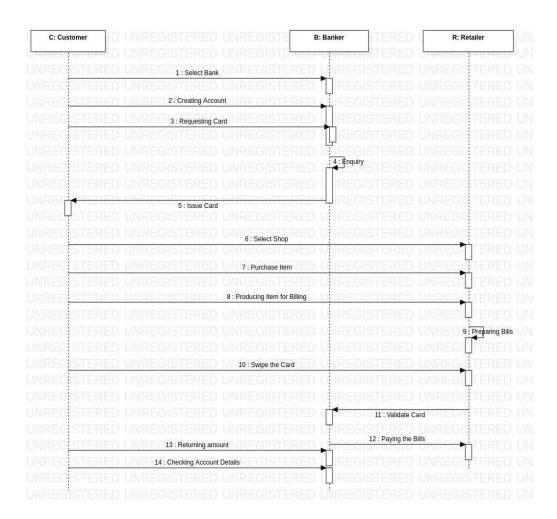
- Retailer have attributes like id, address, shop name, phone number and email id.
- The retailer will be validating the credit card and bill the payment.



### **DOCUMENTATION OF SEQUENCE DIAGRAM**

- The customer selects the bank and create an account
- The customer request bank to issue a credit card
- The bank will enquire the customer details and bank will issue the card only if all the credentials are valid.
- The customer will be purchasing the item from any shop and the item will be sent for billing

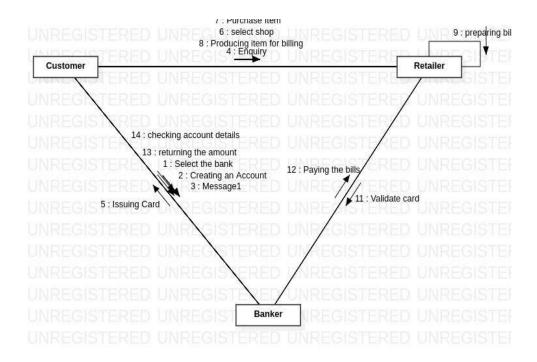
- The retailer then prepare the bill for the selected item. Based on the bill the customer will be swiping the credit card.
- The retailer will be validating the card with the bank account, if the card is valid the payment would be successful.
- The money will be deducted from the customers account and the customer will check the transactions.



### DOCUMENTATION OF COLLABARATION DIAGRAM

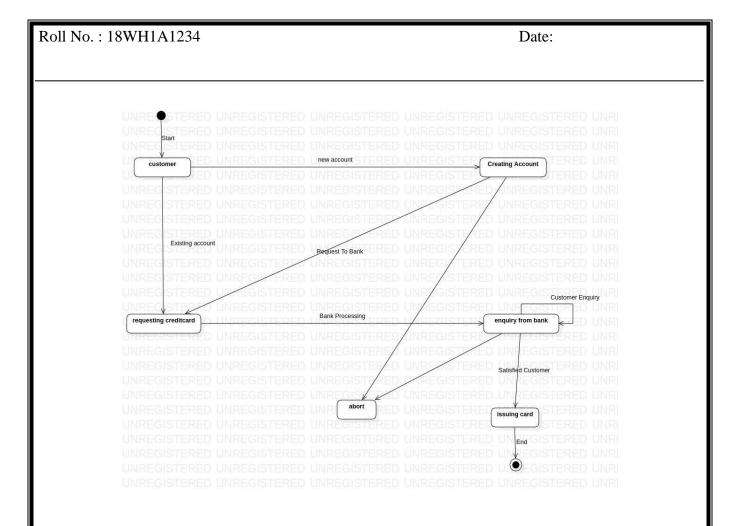
- The Customer, Banker and Retailer are all shown in the sequence
- The customer creates the bank account and requests for the credit card from the bank

• After customer purchase any item retailer will be validating the customers credit card with bank account and the payment would be successful.



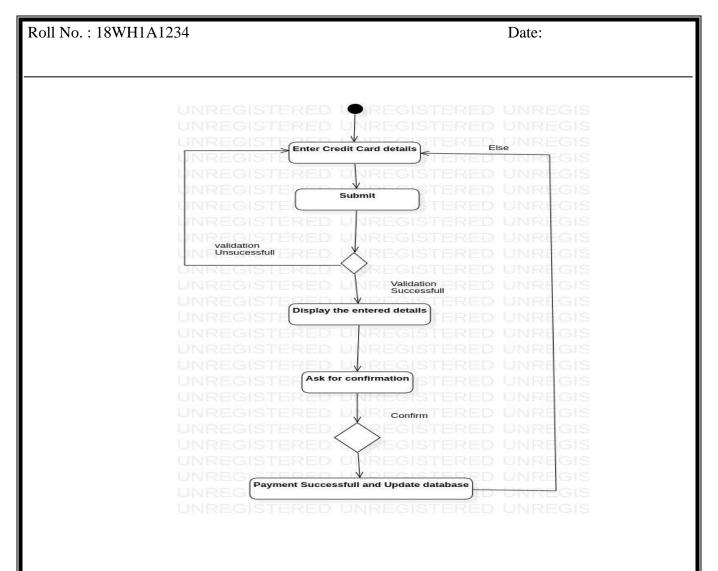
### **DOCUMENTATION OF STATE CHART DIAGRAM**

- The states of the credit card processing are shown in the state chart diagram
- The customer state represents what are operations done by the customer like creating account, requesting credit card etc.
- The creating account state allows the customer to create the account in the bank. In this state all the customer details will be taken.
- In requesting credit card state the customer requests to issue the credit card from the bank.
- Based on the customer details the enquiry from bank state will be checking all the customer details.
- If all the customer details are valid the Issuing card state will be issuing the card for the customer if not the bank will abort the process.



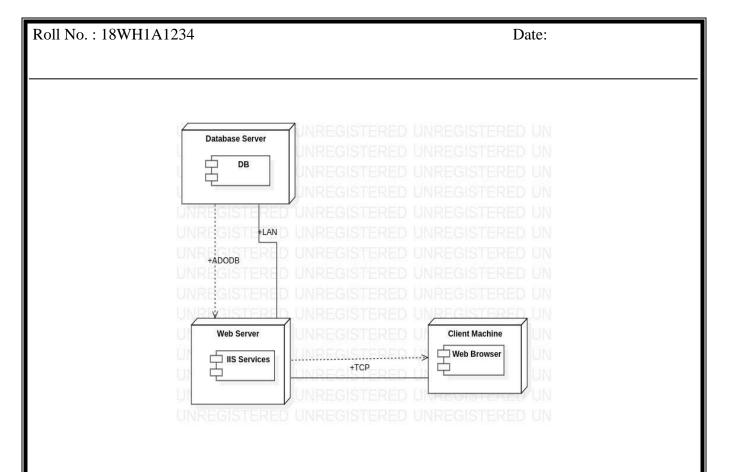
### **DOCUMENTATION OF ACTIVITY DIAGRAM**

- The activities in the credit card processing system are Enter the credit card details, Submiting the details, Asking for confirmation, Payment successfull and update database.
- In enter credit card details activity the customer will be entering the credit card details and submitting them, if the details are correct then it will be displaying all the details or else it will be asked to enter all the details again.
- Once the correct details are entered and confirmed then the payment would be successful and it is updated in the database.



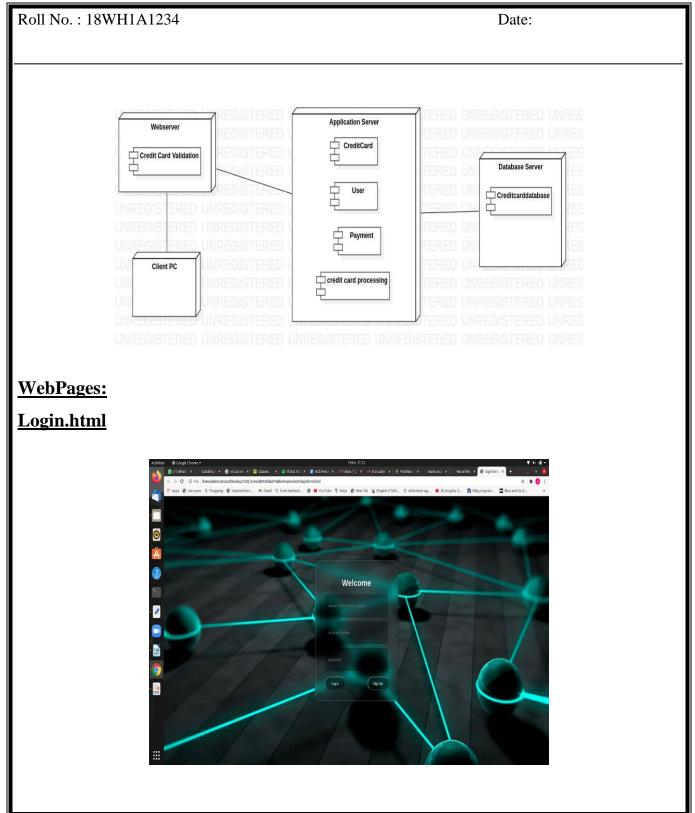
### **DOCUMENTATION OF COMPONENT DIAGRAM**

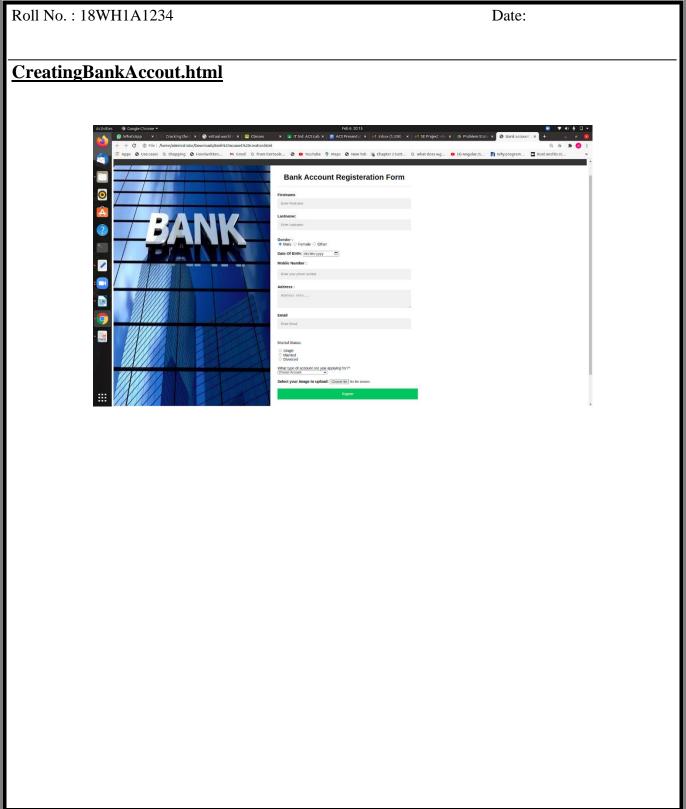
- The components in the credit card processing system are Database server, The web server and the client machine.
- The client machine will be consisting all the credit card details the user is entering in the web browser.
- The web server and the database server are depending on the details entered by the client machine.



### **DOCUMENTATION OF DEPLOYMENT DIAGRAM**

- The device node is the data base server and application server and execution environment node are web server.
- Inside the application server all the details entered by the user in the web server are processed and validated based on the details present in the database server.







Roll No.: 18WH1A1234 Date: **CreditCardPayment.html** <!DOCTYPE html> <html lang="en"> <head> <meta charset="UTF-8"> <title>Payment checkout form UI</title> k rel="stylesheet" href="creditCardPayment.css"> </head> <body> <div class="wrapper"> <div class="checkout\_wrapper"> <div class="product\_info"> <img src="credit.png" alt="product"> </div> <div class="checkout\_form"> Payment Section <div class="details"> <div class="section"> <input type="text" placeholder="Card Number"> </div> <div class="section"> <input type="text" placeholder="Cardholder Name">

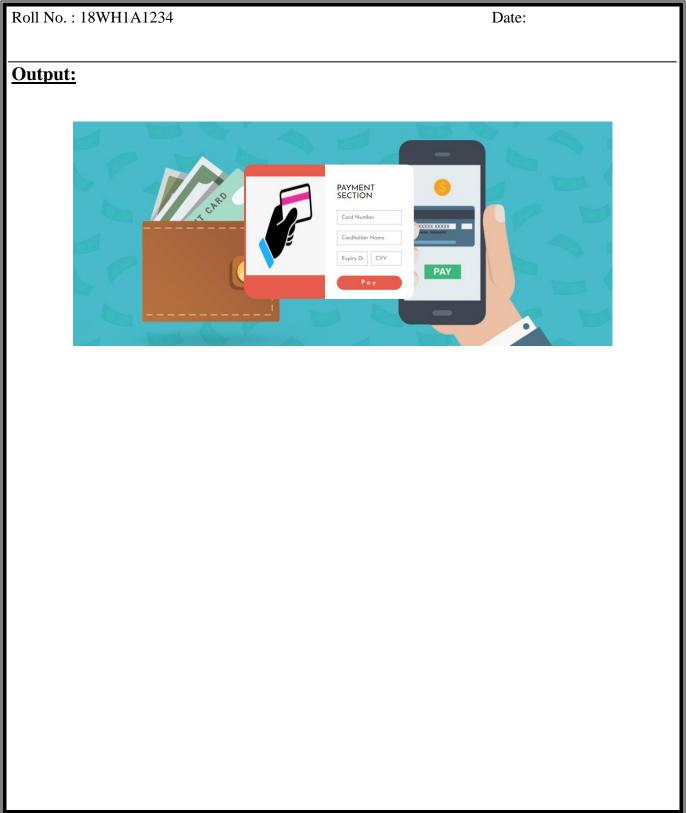
```
Roll No.: 18WH1A1234
                                                                      Date:
    </div>
    <div class="section last_section">
     <div class="item">
      <input type="text" placeholder="Expiry Date">
     </div>
     <div class="item">
      <input type="text" placeholder="CVV">
     </div>
    </div>
    <div class="btn">
     <a href="#">Pay</a>
    </div>
   </div>
  </div>
 </div>
</div>
</body>
</html>
```

Roll No.: 18WH1A1234 Date: **CreditCardPayment.css** @import url('https://fonts.googleapis.com/css?family=Josefin+Sans'); \*{ margin: 0; padding: 0; box-sizing: border-box; outline: none; text-decoration: none; font-family: 'Josefin Sans', sans-serif; body{ background: url("CreditBg.jpg") no-repeat center center; background-size: cover; width: 100%; height: 100vh; .wrapper{ position: absolute; top: 50%; left: 50%; transform: translate(-50%,-50%);

```
Roll No.: 18WH1A1234
                                                                       Date:
 width: 500px;
height: 350px;
.checkout_wrapper{
 width: 430px;
height: 340px;
 display: flex;
.checkout_wrapper .product_info{
 width: 50%;
 background: #e85c4d;
 border-top-left-radius: 20px;
 border-bottom-left-radius: 30px;
 position: relative;
.checkout_wrapper .product_info img{
 width: 200px;
height: 250px;
 margin-top: 30px;
margin-left: 5px;
```

```
Roll No.: 18WH1A1234
                                                                        Date:
.checkout_wrapper .checkout_form{
 width: 55%;
 background: #fff;
 padding: 50px 30px;
 border-top-right-radius: 20px;
border-bottom-right-radius: 20px;
.checkout_form p{
 margin-bottom: 25px;
 font-size: 20px;
text-transform: uppercase;
.checkout_form .details .section{
margin-bottom: 15px;
.checkout_form .details .section input[type="text"]{
 width: 100%;
 padding: 10px;
border: 2px solid #dddddd;
.checkout_form .details .section input[type="text"]:focus{
```

```
Roll No.: 18WH1A1234
                                                                          Date:
border: 2px solid #e85c4d;
.checkout_form .details .section.last_section{
 display: flex;
justify-content: space-between;
.checkout_form .details .section.last_section .item{
 width: 48%;
.checkout_form .details .btn{
background: #e85c4d;
 padding: 10px;
 border-radius: 25px;
 text-align: center;
 margin-top: 25px;
.checkout_form .details .btn a{
 color: #fff;
 letter-spacing: 5px;
 display: block;
```



Roll No.: 18WH1A1234	Date:

#### **Problem Statement-2: Courier Mangement System**

#### **ProblemStatement:**

Courier management system atomizes the courier services. Using this system Courier agent can computerize his daily activities such as booking a courier, employee records details, tracking courier delivery, salary management of employees.

This system is also keeping track of booked courier item. Which item is not delivered? Which item is returned? This system is also store information of pickup centers.

What problem Courier service management system will solve.

This system minimizes manual work of keeping records of the courier. User can get any information related to delivery item online. Every item can be tracked using this system.

### **Software Requirement Specification:**

#### **INTRODUCTION:**

Parcel Delivery is the delivery management system which allows for sending the couriers from one place to another place. It allows for the customers to buy any things and deliver that using the courier management system. It also helps to provide the solutions for better tracking of the parcel delivery and provide the proof at the time of the delivery of the courier so that there will be no chance of damage. It also takes the feedback of the customer at each end inorder to improve their delivery options and deliver the item within the time provided.

The main purpose of the Software Requirements Specification document is to maintain all the functions and the specifications of 'Courier Management

System'. Besides it contains detailed descriptions of all the requirements Specified.

### INTENDED AUDIENCE AND READING SUGGESTIONS

This intended audience of this document includes all stakeholders of CMS project who are supposed to review and sign-off this document. The primary stakeholders of the system include registered users, guest users, administrator, pickup staff, delivery staff etc. The ready should have the basic knowledge about the delivery system and identify where the parcel is there.

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#### PROJECT SCOPE

The project named 'Parcel Delivery System' aims at implementing a software system that would manage the essential activities of any courier company and to maintain their details systematically. The traditional manual methods of calculation of rate of consignment, creating periodical reports, billing etc are made easier, faster and accurate in the proposed system. The system shall allow the user to login from anywhere, track their consignment, complaint about their consignment if any etc. The system also shall enable administrator to generate periodical reports, modify details, and manage complaints. Various functions like pickup, delivery, consignment rate calculation etc. are also included in the system. It also enables the sending the messages to the customer regarding their project delivery and time to time feedback of the delivery. The ultimate aim is to ensure the smooth and efficient functioning of the courier company by managing its resources and utilities effectively

#### TECHNOLOGIES TO BE USED

- HTML
- JSP
- Javascript
- Java 1.6

#### TOOLS TO BE USED

- Eclipse IDE (Integrated Development Environment)
- Rational Rose tool (for developing UML Patterns)

#### PRODUCT PERSPECTIVE

Parcel Delivery System is independent and totally self. The Parcel Delivery System is an application which is totally customizable and can be used by any courier company with minimal configuration changes.

#### PRODUCT FUNCTIONS

The project aims at developing interactive software based system that would almost completely automate the essential processes of courier management system. The various functionalities to be dealt by system are classified into different modules. The proposed software shall have the following modules or functions:

#### USER CHARACTERISTICS

Roll No.: 18WH1A1234	Date:	

Parcel Delivery System is a web based online data entry and display system. All users interact with the system using user friendly Graphical User Interfaces (GUI). The formats of various GUIs like screens, web pages and reports of the system shall be furnished in the design document

#### HARDWARE INTERFACE

We are using the "Positioning and Tracking Sensors" for tracking each place wherever our consignment is travelling.

#### **SOFTWARE INTERFACE**

- Parcel Delivery system should integrate online payment interface to enable online transactions using net banking/debit card/credit card.
- We are going to use Survey Sparrow Software for implementing the feedback option

#### **CONSTRAINTS:**

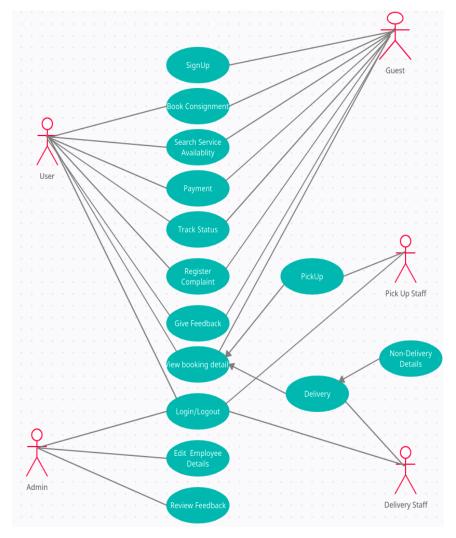
- a. Regulatory Policies: There are no regulatory policies.
- b. Hardware Limitations: There are no hardware limitations.
- c. Interfaces to other application: An external interface for online bill payment is provided.
- d. Parallel operations: There are no parallel operations.
- e. Audit Functions: There shall be no audit functions.
- f. Control Functions: There shall be no control functions.
- g. Safety and Security Considerations: The password and a valid username are the security issues. Data protection shall be satisfied by the backup process at the server side.
- h. Reliability Requirements: Total number of bugs in the system shall not exceed 1% of the total line number of code, except connection reliability which is out of range.
- i. Criticality of the Application: The server applications shall be available 365 days.

### **Design Phase And Testing Phase Document: Parcel Delivery**

### DOCUMENTATION OF USE CASE DIAGRAM

- Actors in the use case diagram are user, guest, admin, pick up staff, delivery staff.
- The use cases are signup, book consignment, search service availability, payment, track status, register compliant, give feedback, view booking detail, login/logout, edit employee details, review feedback, pickup, delivery, non-delivery details.
- The actor use the use case are denoted by arrow.
- The signup use case helps user in registering an account by taking details of the user.

- Then the user can login and books consignment and can also search availability of the pick up staff.
- The track status helps the user to track his/her consignment.
- The complaint use case is used to raise a complaint at the time of delivery.
- Once the delivery is successful the feedback use case is used to give feedback by the user.



## **DOCUMENTATION OF CLASS DIAGRAM**

#### **CUSTOMER**

- The customer have attributes like customer id, name, email, address and password.
- The customer can be added in to the parcel delivery system by registering, we can search for particular customer using this id.

#### REGISTRATION

- The registration have attributes like user id, name, address, email, consignment details and status of the consignment.
- The user who are registered are added to the system and we can search for particular user based on id.

#### **COURIER**

- The courier have attributes such as courier id, type, destination and the product id inside the courier.
- The user can add courier for delivery and also can make required changes according to his preference and can also cancel the courier delivery.

#### **DELIVERY**

- The delivery have attributes like delivery id, address, description of delivery, date and type of delivery.
- The user can add courier for delivery and also can make required changes according to his preference and can also cancel the consignment delivery.

#### **TRACKING**

- The tracking have attributes like user id, tracking id, name, location, email.
- The user can track his consignment based on his user id and identify the location where consignment is present.

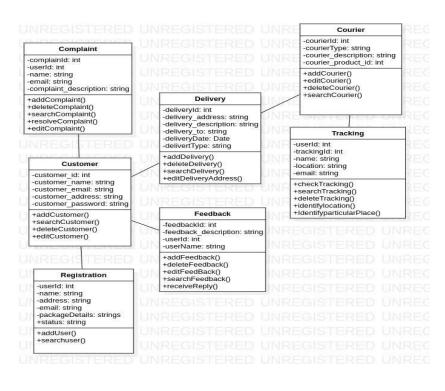
### <u>COMPLAINT</u>

- The complaint have attributes such as complaint id, user id, name and complaint description.
- The user can make a complaint based on the consignment delivery, user can also edit the complaint whenever required and also delete the complaint if it is resolved.

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#### **FEEDBACK**

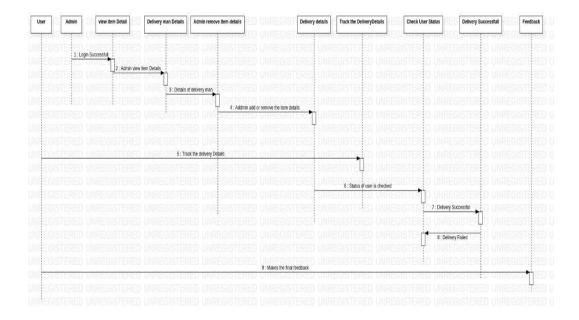
- The feedback have attributes such as feedback id, description, user id, user name.
- After the successful delivery the user can give the feedback based on his experience.



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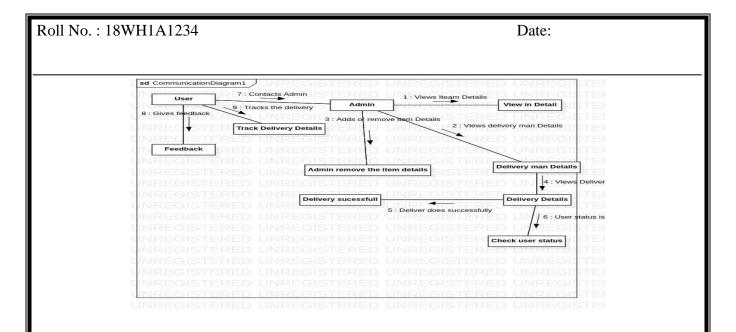
#### **DOCUMENTATION OF SEQUENCE DIAGRAM**

- The admin will be viewing the consignment details which are to be send for delivery.
- Based on the consignment details the admin will be checking for the delivery man details
- If there are no delivery staff available the admin have the ability to remove the consignment delivery.
- If delivery staff are available then the delivery man will be given delivery details and checking the user status.
- On the other side the user will be tracking the delivery details.
- Once the delivery is successful the user will be giving feedback.



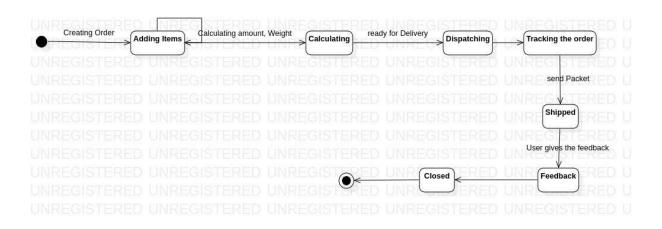
### DOCUMENTATION OF COLLABARATION DIAGRAM

- The user, admin delivery details, tracking of delivery and feedback all are in sequence.
- The user will be booking his/her consignment for delivery.
- Based on the user details the admin will be checking for the delivery staff and sends the consignment for delivery.
- The user will be tracking the consignment and once the delivery is successful the user can submit the feedback.



#### **DOCUMENTATION OF STATE CHART DIAGRAM**

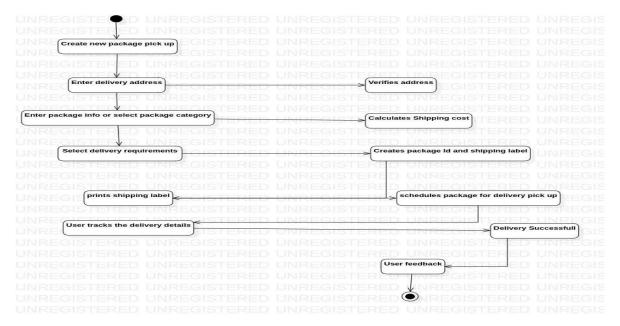
- The states of parcel delivery system are shown in the state chart diagram.
- Adding items represents the user creating order for the delivery of users consignment.
- In the calculating state the admin will be calculating the weight and amount for the delivery of consignment.
- Once the calculating state is completed the consignment is ready for delivery in the dispatching state.
- The user will be tracking his order in the tracking order consignment state.
- Once the delivery is successful then the system is in shipped state.
- The feedback state is meant for the user to give his feedback.



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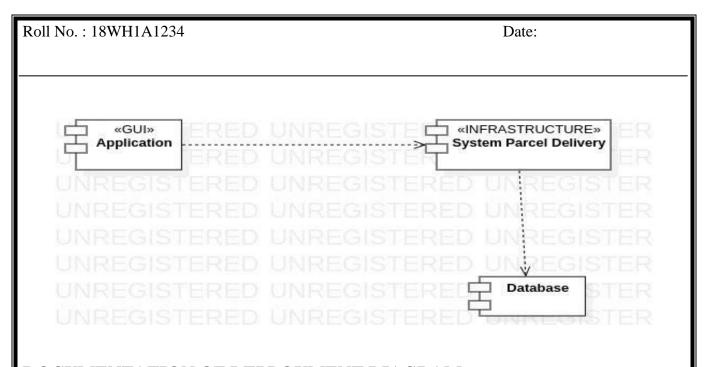
#### **DOCUMENTATION OF ACTIVITY DIAGRAM**

- The activities in the parcel delivery system are shown in the figure below.
- The user will be creating his new package for delivery in the first phase of the system.
- Then the user enters the delivery details and consignment details, based on the delivery and consignment details the admin will be verifying users address and calculates the shipping cost
- The user will be selecting his delivery requirements in the next phase and based on his requirements the consignment id and shipping label is generated.
- The package is then scheduled for delivery pick up and will be sent for delivery, based on the
  pick up staff details the user can track consignment and can give feedback after delivery is
  successful.



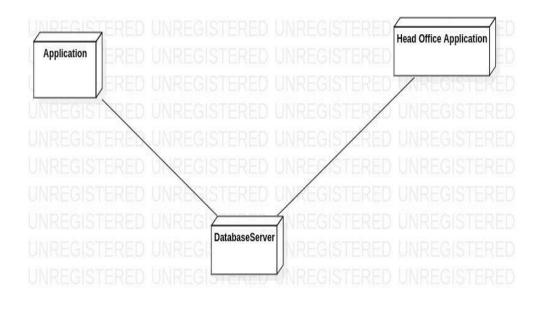
### DOCUMENTATION OF COMPONENT DIAGRAM

- The components in the parcel delivery system are shown in the below figure.
- The infrastructure of parcel delivery system is consisting of all the details regarding the consignment delivery which is depending on the data base server.



### **DOCUMENTATION OF DEPLOYMENT DIAGRAM**

- The device node is the data base server and application server and execution environment node are web server.
- Inside the application server all the details entered by the user in the web server are processed and based on the details entered by the user the data has been stored inside the database server.



Roll No. : 18WH1A1234	Date:
WebPages:	
ParcelDeliveryRegistration.html	
html	
<html></html>	
<head></head>	
<pre><meta content="width=device-width,&lt;/pre&gt;&lt;/td&gt;&lt;td&gt;initial-scale=1" name="viewport"/></pre>	
<style></td><td></td></tr><tr><td>body {</td><td></td></tr><tr><td>background-</td><td></td></tr><tr><td>image:url("https://i.guim.co.uk/img/media/3ed1a62c9896</td><td></td></tr><tr><td>_2700/master/4500.jpg?width=445&quality=45&auto=f</td><td>ormat&fit=max&dpr=2&s=9608baecd476efb7</td></tr><tr><td>4e53bf4dac8a6961");</td><td></td></tr><tr><td>}</td><td></td></tr><tr><td>* {</td><td></td></tr><tr><td>box-sizing: border-box;</td><td></td></tr><tr><td>}</td><td></td></tr><tr><td>h1{</td><td></td></tr><tr><td>text-align:center;</td><td></td></tr><tr><td>} /* Add modding to containing */</td><td></td></tr><tr><td>/* Add padding to containers */ .container {</td><td></td></tr><tr><td>padding: 16px;</td><td></td></tr><tr><td>background-color: white;</td><td></td></tr><tr><td>margin: 0 auto;</td><td></td></tr><tr><td>width: 800px;</td><td></td></tr><tr><td>}</td><td></td></tr><tr><td>/* Full-width input fields */</td><td></td></tr><tr><td>input[type=text], input[type=password] {</td><td></td></tr><tr><td>width: 100%;</td><td></td></tr><tr><td>padding: 15px;</td><td></td></tr></tbody></table></style>	

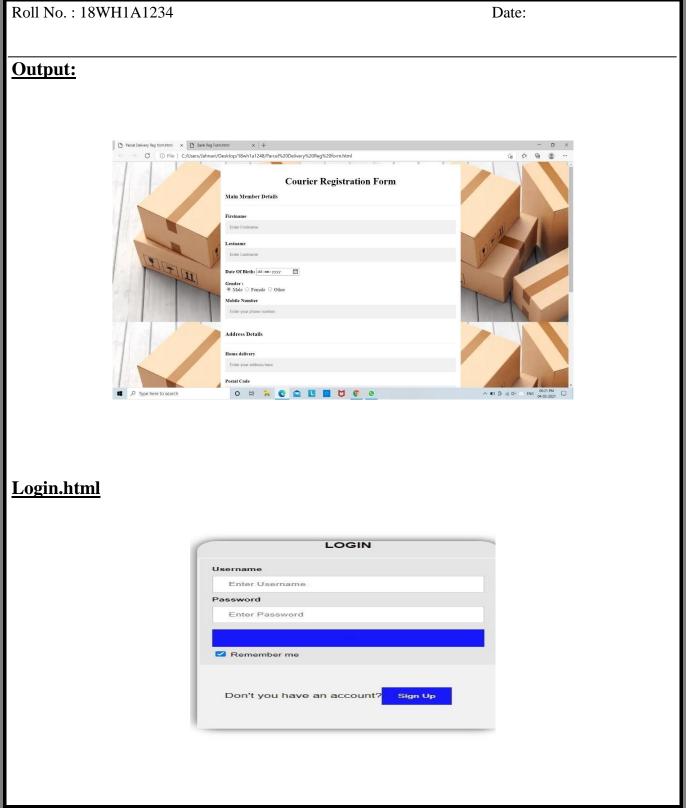
margin: 5px 0 22px 0;

```
Roll No.: 18WH1A1234
                                                                           Date:
display: inline-block;
border: none;
background: #f1f1f1;
input[type=text]:focus, input[type=password]:focus {
background-color: #ddd;
outline: none;
/* Overwrite default styles of hr */
hr {
border: 1px solid #f1f1f1;
margin-bottom: 25px;
/* Set a style for the submit button */
.registerbtn {
background-color: #4CAF50;
color: white;
padding: 16px 20px;
margin: 8px 0;
border: none;
cursor: pointer;
width: 100%;
opacity: 0.9;
.registerbtn:hover {
opacity: 1;
/* Add a blue text color to links */
a {
color: dodgerblue;
/* Set a grey background color and center the text of the "sign in" section */
.signin {
background-color: #f1f1f1;
```

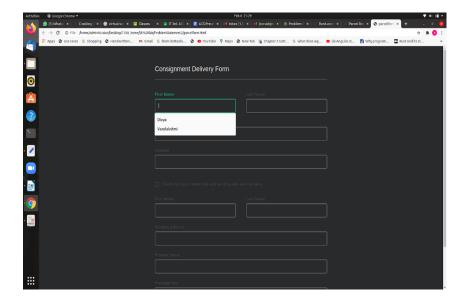
```
Roll No.: 18WH1A1234
                                                                     Date:
text-align: center;
</style>
</head>
<body>
<form action="/action_page.php">
 <div class="container">
<h1>Courier Registration Form</h1>
<h3>Main Member Details</h3>
<hr>
<label><b>Firstname</b></label>
<input type="text" name="firstname" placeholder= "Enter Firstname" size="15" required />
<label><b>Lastname</b></label>
<input type="text" name="lastname" placeholder="Enter Lastname" size="15"required />
<label for="birthday"><b>Date Of Birth:</b></label>
<input type="date" id="birthday" name="birthday" size="15"required />
</br>
</br>
<label>
<b>Gender :</b>
</label><br>
<input type="radio" value="Male" name="gender" checked > Male
<input type="radio" value="Female" name="gender"> Female
<input type="radio" value="Others" name="gender"> Other
</br>
</br>
<label>
<b>Mobile Number</b>
</label>
<input type="text" name="phone" placeholder="Enter your phone number" size="10"/ required>
<h3>Address Details</h3>
<hr>
<label>
<b>Home delivery</b>
```

## BVRIT HYDERABAD College of Engineering for women

Roll No. : 18WH1A1234	Date:
<pre><input name="address" placeholder="E&lt;/pre&gt;&lt;/td&gt;&lt;td&gt;nter your address here" required="" size="10" type="text"/></pre>	
<label></label>	
<b>Postal Code</b>	
<pre><input name="postal code" placeholder="&lt;/pre" type="text"/></pre>	="Enter postal code" size="10"/ required>
<label for="email"><b>Email</b></label>	
<pre><input name<="" placeholder="Enter Email" pre="" type="text"/></pre>	e="email" id="email" required>
<h3>Other Information</h3>	
<hr/>	
<label></label>	
<b>Additional Comments</b>	
<pre><input name="Comments" placeholder="&lt;/pre" type="text"/></pre>	="Comments" size="30"/ required>
Sy creating an account you agree to our <a href="&lt;/td"><td>="#"&gt;Terms &amp; Privacy</td></a> .	="#">Terms & Privacy
<pre><button class="registerbtn" type="submit">Registe</button></pre>	r
<pre><div class="container signin"></div></pre>	
Already have an account? <a href="#">Sign in</a>	.
	_



# ParcelDeliveryForm.html



# ParcelPayment.html

