ONLINE AUCTION SYSTEM

A CAPSTONE PROJECT REPORT

Submitted in partial fulfillment of the requirement for the award of the Degree of

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING

by

ROHITH REDDY DIRISALA(19BCE7303) HRUTHIK YADAV MADATI (19BCN7092)

Under the Guidance of

DR. AJAY KUMAR MALLICK



SCHOOL OF COMPUTER SCIENCE AND ENGINEERING VIT-AP UNIVERSITY AMARAVATI- 522237

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CERTIFICATE

This is to certify that the Capstone Project work titled "ONLINE AUCTION SYSTEM" that is being submitted by Rohith Reddy Dirisala(19BCE7303) & Hruthik Yadav Madati(19BCN7092), is in partial fulfillment of the requirements for the award of Bachelor of Technology, is a record of bonafide work done under my guidance. The contents of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for award of any degree or diploma and the same is certified.

Ajay kumar Mallick Guide

The thesis is satisfactory / unsatisfactory

Internal Examiner External Examiner

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B. Tech. CSE

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CHAPTER 1

INTRODUCTION

1.1 MOTIVATION

In our work an efficient system is presented which can facilitate easy bidding and listing of various items worldwide .Traditional Auction houses have been around for a very long time. But they have certain shortcomings such as the scope of the bidding which is mostly restricted to local population. So, we are building a website for the auctions to be available for larger section of people and can be completed effectively.

The system is designed to allow users to set up their products for auctions and bidders to register and bid for various products available for bidding. Since the items are put to bidding online, we cannot the verify the entities put by regular users online. Hence, we are considering to allow the items of enterprises only to be put on the website for bidding.[1] This ensures the quality of the products put on the website.

1.2 OBJECTIVES

The following are the objectives of this project:

- To design an efficient system which can automatically manage the listed items for bidding and help sellers from remote places to list their items online for bidding
- The Auction system is built to facilitate many users to concurrently bid on a certain item/service
- It simplifies the process of auction by handling all the transactions between the user and the seller using a robust web application system

1.3 NOVELTY

The primary distinction between a traditional auction and an online auction is convenience. In an online auction, a user can simply find any interesting items to bid on using the category as a parameter. It is very effective when compared to traditional auction sessions where items are revealed only during the session so the bidders cannot plan their bids beforehand. Most of the bids will be impulsive and irrational.

Another factor we could find contrasting is the cost of maintenance and the manpower involved behind it. Online Auction System totally nullifies the maintenance cost and manpower as there is no such entities involved in running an auction system except computing resources[5] and a few skilled programming personnel.

The difference can also be seen when we consider the diversity of the userbase. Generally in online auction systems, we can find users from various communities, places participating in the bidding process simultaneously. But in traditional auction houses, most of the users will be from the same locality or community.

CHAPTER-2

ONLINE AUCTION SYSTEM

2.1 Proposed System

The following block diagram (figure 1) shows the system architecture of this project.

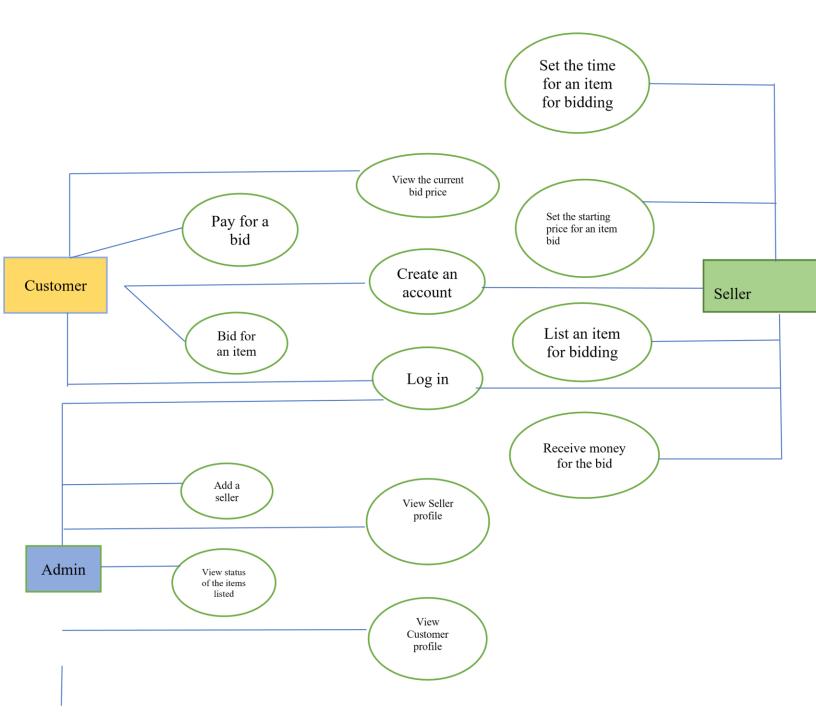


Figure 1 System Use-case Diagram of the system[7]

ER Diagram

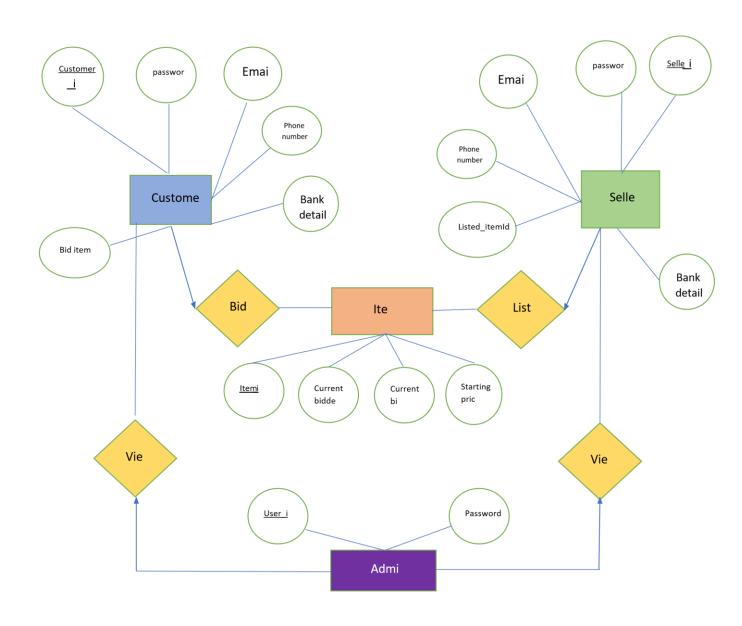


Figure 2 ER diagram of the proposed system [3]

2.2 Working Methodology

The system has two sets of users

- 1. Users
- 2. Sellers

Depending on the type of users , various functionalities are embedded in the system[2]

Users have the majority of the functionality in the website since everything in the system is designed around the user accounts . One of the primary feature of the user account type is the Bidding functinality which enables the user accounts to bid on any item of their choice unless they have the required credits in their account. Some other features include viewing the seller of a particular bid , time remaining for the bid, current bid amount . The user can also view their information stored in the database[3].

Sellers have very limited functionality given that it is not intended for any bidding activites. It is just used for listing an item, viewing the listed items, viewing the current Bid amount, current Bidder. The sellers also could view their information stored on the database [3] using the view account Info option.

2.3 Application:

This section describes the software details of the system:

The overview of the web application could be divided into three components for our easy understanding

- I. Frontend/Client side
- II. Backend/Server side (using linux-based Ec2 instances [5]) III. Database (using mysql powered rds instance [6])

I. Frontend/Client side

Login page:

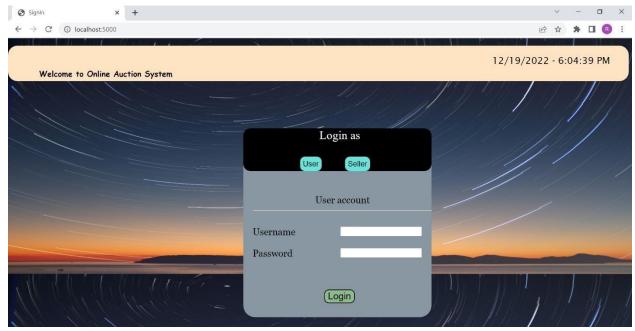


Figure3: Index/Login page of the website (both user and seller) [1]

- A element is used to display the live time at the top right corner of the
 page using a javascript function which keeps on executing every 500 milliseconds
 to display the live time accurately.
- A form is created for two different types of account namely user and seller which
 has two post methods for each separate type.
- The two forms transistion without a page reload with the help of javascript display properties .

User login Page:

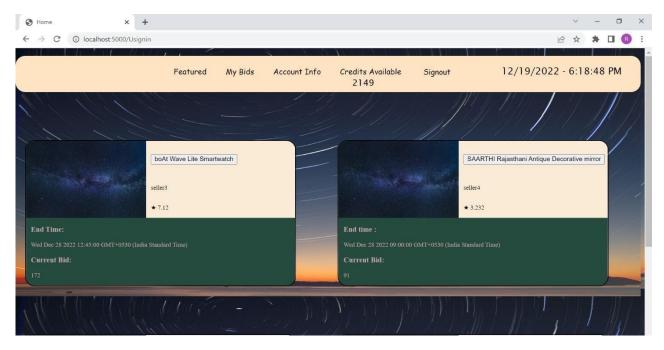


Figure 4: Home page of the user displaying various elements [1]

- This is the **home page** for a User
- The **navigation bar[1]** consists of
 - Featured
 - My Bids
 - Account Info
 - ☐ Credis Available to a user
 - ☐ Signout button
 - ☐ Live time element
- The navigation bar helps the user to navigate through various modules with ease without having to reload the page entirely
- Then the ongoing Bids are displayed using a <div> template [1] and styled using external css file

Seller Login page:

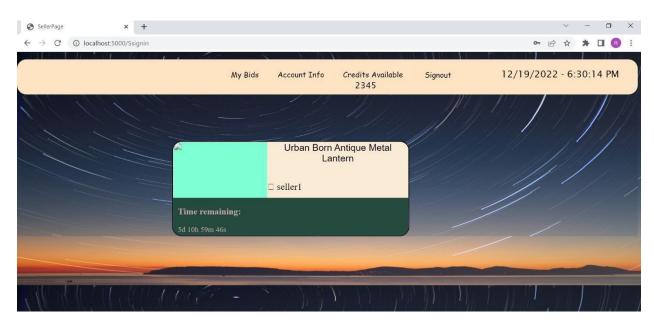


Figure 5: Home page of the seller displaying various elements [1]

- Here the navigation bar consists of
 - ☐ My Bids
 - AccountInfo
 - ☐ Credits Available
 - ☐ Signout
 - \square The Bids of the seller are display using a div element [1] to display the **Bid**

title, time remaining

Full Bid page:

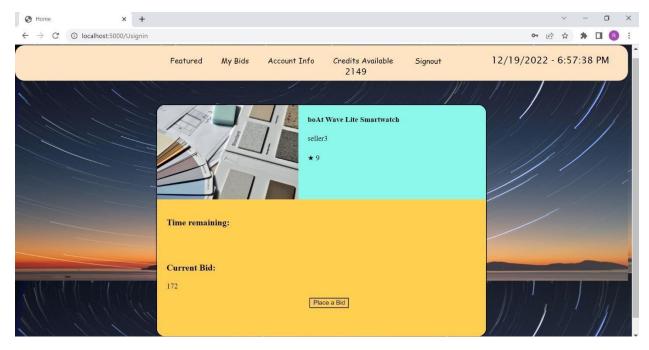


Figure6: Full bid page which displays all the information of a bid [1]

☐ The Full Bid page consists of a **<div>** element[1] which has ○ Image container for storing image ○ Title field ○ Time field ○ Bid field , which is used to invoke functions related to Bidding

Database:

Table1: mysql table consisting of details of all the items in bidding

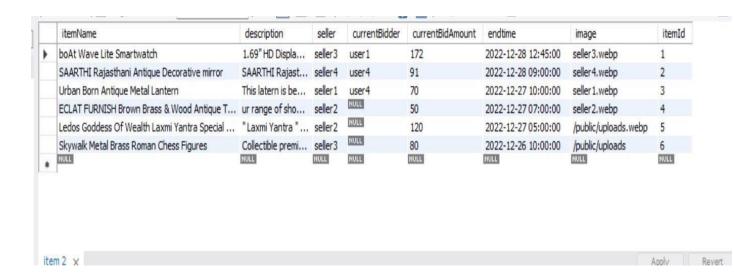


Table2: mysql table consisting of all users and their information

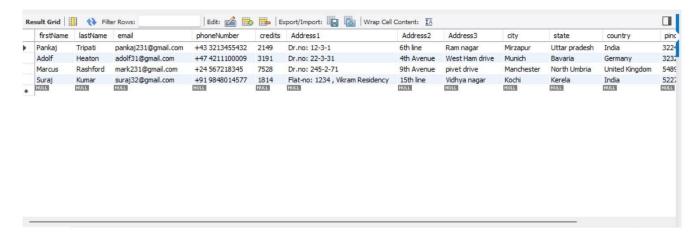
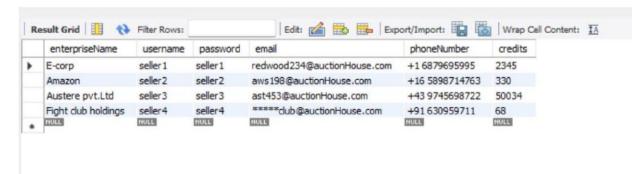


Figure8

Table3: mysql table consisting of all sellers and their information

Basic Routing used on Server side

After referencing various techniques from reference material [1]] we created the following routes for navigation of the website using expressjs [4]



App.post('/'): used to display index page on starting the server[4]

App.post('/userSignIn'): used to validate the data taken from the userlogin form

App.post('/sellerSignin'): used to validate the data taken from the seller login form

App.post('/bidPlace'): used to validate the user credits[4] and if successful bids an item in the favour of the user logged in

App.post('/signOut'): redirects the user back to login page/index page

Chapter-3

3.1 Result Analysis

Bidding:

The bidding process which is crucial to the functioning of the application is shown in the below figure.

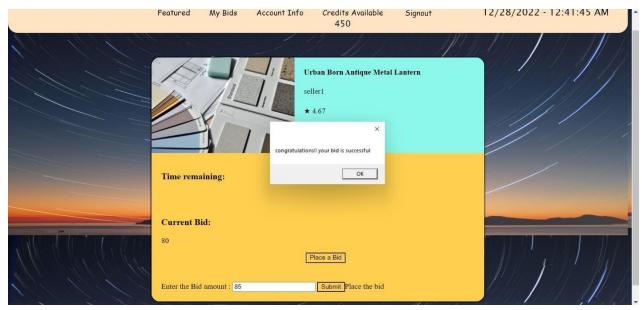
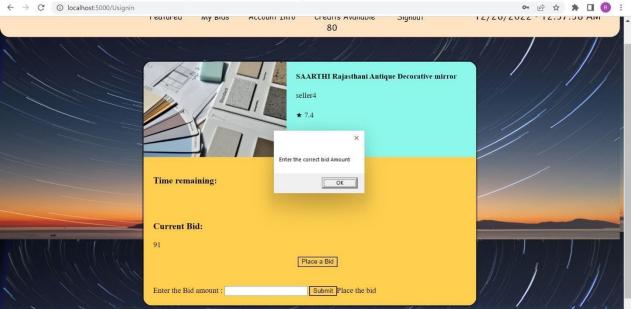


Figure 7: Entering the correct bid amount for a particular bid item

When the bid amount is entered, the data is sent to the server using post method [4] then the server checks if the bid amount entered is higher than the current bid and also if the user could afford the bid (i.e whether the user has the required no of credits in his account). If the bid amount passes these two parameters, then the bid data is updated and the respective changes are also made in the database.

But when the given data doesn't satisfy any one of two conditions, then the bid is cancelled and a error message is shown to correct the bid amount.

Figure 8: Entering the incorrect bid am



for an item

ount

When the bidding time is over, the "current bid" amount will be reflected in the account of the seller and the respective changes will be made in the database [3]. Since the input is processed in the backend(Server) [4], the input validation[1] is much secured and reliable.

3.2 Conclusion and Future Work

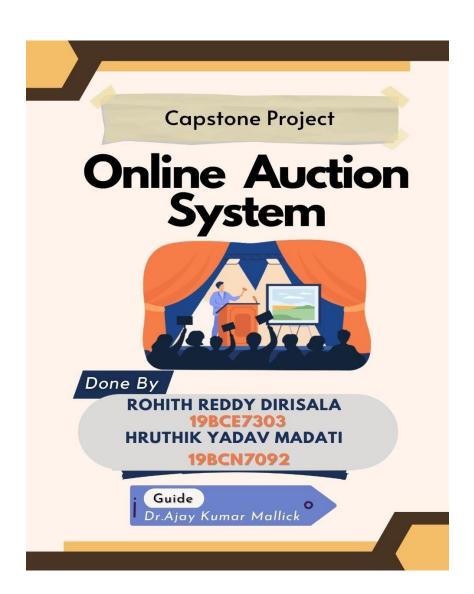
Through the implementation of this project, we tried to replicate all the functions of an auction house through our web application[1]. Since all the businesses are trying to function virtually these past few years, this would be a perfect solution for auction houses to sustain their business even during critical times like pandemics etc. It also enables users irrespective of their location to bid on any item they want instantly. This could also become a huge advantage to the sellers as they get more bids coming in for their listed items when compared to bids in auction houses.

Although there is also so much room for improvement in this project as this could be used to take the whole auction house experience online. We could use some machine learning algorithms to find the user's engagement levels with the application and find which type of items are users more intrested in . We could also introduce services instead of products from trusted retailers so that there would be a variety of entities for users to bid on.

Chapter-4

Appendix

4.1 Poster:



4.2 Source code:

Index.js file:

```
const { application, request } = require('express');
const mysql=require('mysql'); const
express=require('express'); const ejs =
require('ejs'); const
multer=require('multer'); const
app=express(); app.set('view engine', 'ejs');
app.set('views','./views');
app.use(express.static('public'));
app.use(express.json()); var bodyParser
= require('body-parser'); const { render
} = require('pug'); let
alert=require('alert'); let window=require('window');
app.use(bodyParser.json());
app.use(bodyParser.urlencoded({extend:false}));
//database connection const db =
mysql.createConnection({
         : "auctiondatabase.c5xfieorp2bw.ap-south-1.rds.amazonaws.com",
                          password: "Rohith1290",
       : "rohith26721",
                                                       port
                                                             : "3306",
                                                                           database
user
: "auctionHouse"
 });
 db.connect(function(err){
  console.log("Connected!");
  });
app.listen(5000);
//PAGE ROUTES....
```

```
let uname; let
              let
sname;
EnameSeller; let
itemId; let path;
let iName; let
iDescription; let
iSeller;
              let
iImage;
              let
iTime;
              let
iName1;
              let
iSeller1;
              let
iTime1;
              let
iName2;
              let
iSeller2;
              let
iTime2;
              let
iName3;
              let
iSeller3;
              let
iTime3;
              let
iName4;
              let
iSeller4;
              let
iTime4;
              let
iAmount1;
              let
iAmount2;
              let
iAmount3;
              let
iAmount4;
              let
creditsUser;
              let
iUser1;
              let
iUser2;
              let
iUser3;
              let
iUser4;
              let
cBidname;
              let
cSeller;
              let
cEndTime;
app.get('/',functi
on(req,res){
res.render("index.ejs");
});
```

```
// user signin route....
// variable to take in userlogin values at the time of login request
app.post('/Usignin',function(req,res){
uname=req.body.UserName;
pword=(req.body.PassWord);
var firstnameUser;
var lastnameUser;
                     var
emailUser;
phonenumberUser;
                      var
address1User;
                 var
address2User;
                 var
address3User;
                 var
cityUser;
            var stateUser;
  var countryUser;
var pincodeUser;
usernameUser;
  var passwordUser;
  db.query("select
                                                                                        ?
                               from
                                         userInfo
                                                       where
                                                                  username
",[uname],function(err,results,fields){
firstnameUser=results[0].firstName;
lastnameUser=results[0].lastName;
                                     emailUser=results[0].email;
phonenumberUser=(results[0].phoneNumber);
  creditsUser=results[0].credits;
                                   address1User=results[0].Address1;
address2User=results[0].Address2;
address3User=results[0].Address3;
  cityUser=results[0].city;
                             stateUser=results[0].state;
countryUser=results[0].country;
pincodeUser=results[0].pincode;
  creditsUser=results[0].credits;
  });
```

```
db.query("select * from item",function(err,result,fields){
if(err)
          console.log("value not
updated");
iName1=result[0].itemName;
                            iTime1=result[0].endtime;
iSeller1=result[0].seller;
iUser1=result[0].currentBidder;
   iAmount1=result[0].currentBidAmount;
   iName2=result[1].itemName;
                                    iSeller2=result[1].seller;
iTime2=result[1].endtime;
iUser2=result[1].currentBidder;
   iAmount2=result[1].currentBidAmount;
   iName3=result[2].itemName;
iSeller3=result[2].seller;
                            iUser3=result[2].currentBidder;
iTime3=result[2].endtime;
   iAmount3=result[2].currentBidAmount;
   iName4=result[3].itemName;
iSeller4=result[3].seller;
                            iUser4=result[3].currentBidder;
iTime4=result[3].endtime;
   iAmount4=result[3].currentBidAmount;
   });
  db.query("select * from userInfo where username = ? and password =
?",[uname,pword], function(err, result, fields) {
if(err){
    console.log("error evaded");
    res.redirect('/');
   }
if(result.length>0){
res.render("UserLogin.ejs",
                                 {"firstname"
: firstnameUser,
```

```
"lastname": lastnameUser,
     "email" : emailUser,
      "phonenumber":phonenumberUser,
      "credits": creditsUser,
      "address1": address1User,
      "address2": address2User,
      "address3": address3User,
      "city": cityUser,
      "state" : stateUser,
      "country": countryUser,
      "pincode": pincodeUser,
      "username" : uname,
      "password": pword,
      "credits": creditsUser,
      "name1":iName1,
      "seller1":iSeller1,
      "time1":iTime1,
      "name2":iName2,
      "seller2":iSeller2,
      "time2":iTime2,
      "name3":iName3,
      "seller3":iSeller3,
      "time3":iTime3,
      "name4":iName4,
      "seller4":iSeller4,
      "time4":iTime4,
      "amount1":iAmount1,
      "amount2":iAmount2,
      "amount3":iAmount3,
      "amount4":iAmount4,
     });
     console.log("user logged in successfully");
     }
            else
res.sendStatus(404);
                         res.end();
```

```
});
});
// Seller signin route ...
app.post('/Ssignin',function(req,res){
sname=req.body.Sid;
  let spword=(req.body.SPwd);
  db.query("select
                                                                                         ?
                                         sellerInfo
                               from
                                                        where
                                                                   username
",[sname],function(err,results,fields){
EnameSeller=results[0].enterpriseName;
emailSeller=results[0].email;
   phonenumberSeller=(results[0].phoneNumber);
   creditsSeller=results[0].credits;
    });
   db.query("select * from item where seller = ? ",[sname],function(err,result,fields){
iName=result[0].itemName;
                                  iDescription=result[0].description;
iSeller=result[0].seller;
                             iImage=result[0].image;
     iTime=result[0].endtime;
     });
  db.query("select * from sellerInfo where username = ? and password
= ?",[sname,spword], function(err, result, fields) {
     if(result.length>0){
      res.render("sellerLogin.ejs",
\{"enterpriseName": EnameSeller\;,\;
     "email": emailSeller,
      "phonenumber":phonenumberSeller,
      "credits": creditsSeller,
      "username": sname,
      "password": spword,
      "itemName" :iName.
```

```
"description": iDescription,
      "seller": iSeller,
      "image": iImage,
      "time": iTime
    });
     console.log("seller logged in successfully");
     else
     res.sendStatus(404);
    });
});
app.post('/item1Bid',function(req,res){
let bid=req.body.item1BidAmount;
 let prevUser;
 if(bid>iAmount1&&creditsUser>=bid){
  creditsUser=creditsUser-bid;
                         userInfo
                                     SET
                                             credits
  db.query("UPDATE
                                                                WHERE
                                                                            (username
= ?);",[iAmount1,iUser1]);
  db.query("UPDATE item SET currentBidder = ?, currentBidAmount = ? WHERE
(itemId = '1');",[uname,bid]);
  db.query("UPDATE
                         userInfo
                                     SET
                                             credits
                                                            ?
                                                                WHERE
                                                       =
                                                                            (username
= ?);",[creditsUser,uname]);
  alert("congratulations!! your bid is successful");
 } else{
  alert("Enter the correct bid Amount");
  res.redirect('/Usignin');
 }
});
app.post('/item2Bid',function(req,res){ let
bid=req.body.item2BidAmount;
if(bid>iAmount2&&creditsUser>=bid){
  creditsUser=creditsUser-bid;
  db.query("UPDATE
                         userInfo
                                     SET
                                             credits
                                                                WHERE
                                                                            (username
= ?);",[iAmount2,iUser2]);
  db.query("UPDATE item SET currentBidder = ?, currentBidAmount = ? WHERE
(itemId = '2');",[uname,bid]);
  db.query("UPDATE
                         userInfo
                                     SET
                                             credits
                                                            ?
                                                                WHERE
                                                                            (username
                                          26
```

```
= ?);",[creditsUser,uname]);
  alert("congratulations!! your bid is successful");
 } else{
  alert("Enter the correct bid Amount");
 }
});
app.post('/item3Bid',function(req,res){ let
bid=req.body.item3BidAmount;
if(bid>iAmount3&&creditsUser>=bid){
  creditsUser=creditsUser-bid;
  db.query("UPDATE
                                     SET
                                                           ?
                         userInfo
                                             credits
                                                                WHERE
                                                                            (username
= ?);",[iAmount3,iUser3]);
  db.query("UPDATE item SET currentBidder = ?, currentBidAmount = ? WHERE
(itemId = '3');",[uname,bid]);
  db.query("UPDATE
                         userInfo
                                     SET
                                             credits
                                                            ?
                                                                WHERE
                                                                            (username
= ?);",[creditsUser,uname]);
  alert("congratulations!! your bid is successful");
 } else{
  alert("Enter the correct bid Amount");
 }
})
app.post('/item4Bid',function(req,res){ let
bid=req.body.item4BidAmount;
if(bid>iAmount4&&creditsUser>=bid){
  creditsUser=creditsUser-bid;
  db.query("UPDATE
                         userInfo
                                     SET
                                             credits
                                                       =
                                                            ?
                                                                WHERE
                                                                            (username
= ?);",[iAmount4,iUser4]);
  db.query("UPDATE item SET currentBidder = ?, currentBidAmount = ? WHERE
(itemId = '4');",[uname,bid]);
  db.query("UPDATE
                         userInfo
                                     SET
                                             credits
                                                            ?
                                                                WHERE
                                                                            (username
= ?);",[creditsUser,uname]);
  alert("congratulations!! your bid is successful");
 } else{
  alert("Enter the correct bid Amount");
})
```

```
app.get('/signout',function(req,res){
res.render("index.ejs");
})
app.post('/addBid',function(req,res){ var
newBidName=req.body.newBidName; var newBidId=req.body.newBidId;
 var newBidDescription=req.body.newBidDescription;
const newBidT=req.body.newBidTime;
 var newBidAmount=req.body.newBidAmount;
 var imageLocation='/public/uploads';
 db.query("insert
                                          into
                                                                         item
Location, newBidId], function(err, results, fields){
  });
});
View files:
Index.ejs:
<!DOCTYPE html>
<html>
  <head>
    <title>
      SignIn
                </title>
<meta charset="utf-8"
                       http-equiv="X-UA-compatible" content="IE-edge"
name="viewport" content="width=device-width,initial-scale=1.0">
<link rel="stylesheet" href="styles.css" >
```

```
<script src="myscript.js"></script> <script</pre>
type="text/javascript">
window.history.forward();
                         function
noBack() {
window.history.forward();
</script>
  </head>
  <body><div class="nav">
      style="float:right;margin-left:40px;"><span id="time"></span>
           style="padding-bottom:20px;margin-right:50%;font-family:cursive;font-size:
20px;float:center;"><h5>Welcome to Online Auction System</h5>
      </div>
    <div class="body">
    <div class="form1">
      <div id="loginLabel">
      <label style="margin-left:10px;">Login as </label><br><br>
      <button
                                         class="LoginButton"
onclick="LoginForm()">User</button><button class="LoginButton"
onclick="SignUpForm()">Seller</button></div>
      <div class="form-box">
        <form id="loginForm" action="/Usignin" method="post">
          <label style="margin-left:35%;">User account</label><br><br><br>
          <label>Username </label><input id="Uid" class="inputFields" type="text"</pre>
required="required" name="UserName"><br><br>
          <label>Password
                                                           id="UPwd"
                                         </label><input
class="inputFields" type="password" required="required"
name="PassWord"><br><br><br>
          <input target="blank" type="submit" value="Login" id='ULoginSubmit'</pre>
class="submitButton" style="margin-bottom:30px;">
        </form>
        <form id="signup" style="display:none" action="/Ssignin" method="post">
                   style="margin-left:35%;">Seller
                                                   account</label><br><hr><br>
          <label
<label>Username </label><input id="Sid" name="Sid" class="inputFields" type="text"</pre>
required="required" ><br><br>
          <label>Password
                                         </label><input
                                                           id="SPwd"
```

userLogin.ejs:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8"
                             http-equiv="X-UA-compatible"
                                                          content="IE-edge"
name="viewport" content="width=device-width,initial-scale=1.0">
    <link rel="stylesheet" href="styles.css">
    <script src="myscript.js"></script>
                                      <script
type="text/javascript" >
function preventBack()
        window.history.forward();
      setTimeout("preventBack()", 0);
window.onunload=function(){null};
    </script>
    <title>
      Home
    </title>
  </head>
  <body>
    <div class="nav">
      <span id="time"></span>
```

```
style="margin-right:100px"><form action="/signout" method="get"><input</pre>
tvpe="submit"
                 value="Signout" style="background-color:rgb(177, 171, 171);
border:none;background-color:bisque;
cursor:pointer;fontfamily:cursive;fontsize:medium;">
      </form>
             id="credits info"><button class="b1" id="creditsInfo"
      li
                                                                   >Credits
Available</br/>button><br/>br>&nbsp &nbsp <span style="font-size:18px;"
id="creditsAvailable" style="display:none;"><%=credits %></span>
      id="account_info"><button class="b1" onclick="AcInfoDisplay()">Account
Info</button>
      id="bidsMenu"><button class="b1" onclick="BidsDisplay()">My
Bids</button>
                            id="featuredBids"><button
                                                                       class="b1"
      li
onclick="featuredBidsDisplay()">Featured</button>
    </div>
    <div id="featuredbids" >
      <div class="area">
        <div class="bidImageContainer">
           <img class="image" src="backgroundImage1.jpg">
                                                              </div>
    <div class="bidTitleContainer">
      <div class="ProductName"
                                    style="margin:10px;"><h4><Button
onclick="FullDisplay1()"><%=name1%></Button></h4></div>
        <div class="SellerName" style="margin:10px;"> <%=seller1%></div>
<div class="Rating" style="margin:10px;">&#9733; 7.12</div>
                                                              </div>
    <div class="bidVariablesContainer">
      <div class="TimerContainer">
        <h3>End Time: </h3><%=time1%>
        </div>
        <div class="BidAmountContainer">
        <h3>Current Bid: </h3><%=amount1%>
        </div>
    </div>
  </div>
  <div class="area">
    <div class="bidImageContainer">
      <img class="image" src="backgroundImage1.jpg">
</div>
```

```
<div class="bidTitleContainer">
            class="ProductName"
  <div
                                    style="margin:10px;"><h4><Button
onclick="FullDisplay2()"><%=name2%></Button></h4></div>
    <div class="SellerName" style="margin:10px;"> <%=seller2%></div>
    <div class="Rating" style="margin:10px;">&#9733; 3.232</div> </div>
<div class="bidVariablesContainer">
  <div class="TimerContainer">
    <h3>End time : </h3><%=time2%>
    </div>
    <div class="BidAmountContainer">
    <h3>Current Bid: </h3><%=amount2%>
    </div>
</div>
</div>
<div class="area">
  <div class="bidImageContainer">
    <img class="image" src="backgroundImage1.jpg">
</div>
<div class="bidTitleContainer">
<div
                class="ProductName"
                                                style="margin:10px;"><h4><Button
onclick="FullDisplay3()"><%=name3%>></Button></h4></div>
<div class="SellerName" style="margin:10px;"><%=seller3%></div>
  <div class="Rating" style="margin:10px;">&#9733; 9.9</div> </div>
<div class="bidVariablesContainer">
<div class="TimerContainer">
  <h3>end Time: </h3><%=time3%>
  </div>
  <div class="BidAmountContainer">
  <h3>Current Bid: </h3><%=amount3%>
  </div>
</div>
</div>
<div class="area">
  <div class="bidImageContainer">
    <img class="image" src="backgroundImage1.jpg">
</div>
<div class="bidTitleContainer">
                class="ProductName"
<div
                                                style="margin:10px;"><h4><Button
```

```
onclick="FullDisplay4()"><%=name4%></Button></h4></div>
                                                              <div
class="SellerName" style="margin:10px;"> <%=seller4%></div>
  <div class="Rating" style="margin:10px;">&#9733; 7.12</div> </div>
<div class="bidVariablesContainer">
<div class="TimerContainer">
  <h3>end Time : </h3><%=time4%>
  </div>
  <div class="BidAmountContainer">
  <h3>Current Bid: </h3><%=amount4%>
  </div>
</div>
</div>
</div>
  <div id="CurrentBids" >
    <div class="area">
      <div class="bidImageContainer">
  <img class="image" src="https://images.pexels.com/photos/159045/the-interior-
oftherepair-interior-design-
159045.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=2">
  </div>
  <div class="bidTitleContainer">
    <div class="ProductName"><button style="border:none; background:none;" >Urban
Born Antique Metal Lantern</br/>/button></div>
    <div class="SellerName">&#xf007;seller1 </div>
  </div>
  <div class="bidVariablesContainer"><div class="TimerContainer">
    <h3>End time </h3>2022-12-27 10:00:00
    </div>
    </div>
</div>
</div>
<div id="BidDetails1">
  <div class="FullImageContainer">
    <img class="FullImage"
src="https://images.pexels.com/photos/159045/theinteriorof-the-repair-interior-design-
```

```
159045.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=2">
  </div>
  <div class="FullTitleContainer">
            class="ProductName"
style="margin:20px;"><h4><%=name1%></button></h4></div>
<div class="SellerName" style="margin:20px;"><%=seller1%></div>
    <div class="Rating" style="margin:20px;">&#9733; 9</div>
<div class="FullVariablesContainer">
<div class="TimerContainer">
<h3>Time
                                   </h3><span
                                                         id="days1"></span><span
                 remaining:
id="hours1"></span><span id ="minutes1"></span><span id ="seconds1"></span>
</div><br><br>>
<div class="BidAmountContainer">
<h3>Current Bid: </h3><%=amount1%> </div>
<div class="BidButton" style="margin-left:40%;margin-bottom:40px">
  <button style= "background:none;" onclick="PlaceBid()" id="disableButton1">Place a
Bid</button>
 </div>
<div id="Placebid" style="display:none">
  <form
              action="/item1Bid" method="post"><label>Enter the Bid amount :
</label><input name="item1BidAmount"type="number" required="required">
  <input style="background:none" type="submit">Place the bid</button></form>
</div>
</div>
</div>
<div id="BidDetails2">
  <div class="FullImageContainer">
    <img class="FullImage"</pre>
src="https://images.pexels.com/photos/159045/theinteriorof-the-repair-interior-design-
159045.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=2">
  </div>
  <div class="FullTitleContainer">
                                                              class="ProductName"
style="margin:20px;"><h4><%=name2%></button></h4></div>
    <div class="SellerName" style="margin:20px;"><%=seller2%></div>
    <div class="Rating" style="margin:20px;">&#9733; 7.4</div>
                                                                </div>
<div class="FullVariablesContainer">
```

```
<div class="TimerContainer">
<h3>Time
                                  </h3><span
                 remaining:
                                                         id="days2"></span><span
id="hours2"></span><span id ="minutes2"></span><span id ="seconds2"></span>
</div><br><br>>
<div class="BidAmountContainer">
<h3>Current Bid: </h3><%=amount2%>
</div>
<div class="BidButton" style="margin-left:40%;margin-bottom:40px">
  <button style= "background:none;" onclick="PlaceBid2()" id="disableButton1">Place a
Bid</button>
 </div>
<div id="Placebid2" style="display:none">
            action="/item2Bid" method="post"><label>Enter the Bid amount :
</label><input name="item2BidAmount"type="number" required="required">
    <input style="background:none" type="submit">Place the bid</button></form>
</div>
</div>
</div>
<div id="BidDetails3">
  <div class="FullImageContainer">
    <img class="FullImage"
src="https://images.pexels.com/photos/159045/theinteriorof-the-repair-interior-design-
159045.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=2">
  </div>
  <div class="FullTitleContainer">
            class="ProductName"
    <div
style="margin:20px;"><h4><%=name3%></button></h4></div>
    <div class="SellerName" style="margin:20px;"><%=seller3%></div>
    <div class="Rating" style="margin:20px;">&#9733; 4.67</div>
</div>
<div class="FullVariablesContainer">
<div class="TimerContainer">
<h3>Time
                 remaining:
                                  </h3><span
                                                         id="days3"></span><span
id="hours3"></span><span id ="minutes3"></span><span id ="seconds3"></span>
</div><br><br>>
<div class="BidAmountContainer">
<h3>Current Bid: </h3><%=amount3%>
</div>
```

```
<div class="BidButton" style="margin-left:40%;margin-bottom:40px">
  <button style= "background:none;" onclick="PlaceBid3()" id="disableButton1">Place a
Bid</button>
 </div>
<div id="Placebid3" style="display:none">
              action="/item3Bid" method="post"><label>Enter the Bid amount :
</label><input name="item3BidAmount"type="number" required="required">
    <input style="background:none" type="submit">Place the bid</button></form>
</div>
</div>
</div>
<div id="BidDetails4">
  <div class="FullImageContainer">
    <img class="FullImage"
src="https://images.pexels.com/photos/159045/theinteriorof-the-repair-interior-design-
159045.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=2">
  <div class="FullTitleContainer">
    <div
                                                              class="ProductName"
style="margin:20px;"><h4><%=name4%></button></h4></div>
    <div class="SellerName" style="margin:20px;"><%=seller4%></div>
    <div class="Rating" style="margin:20px;">&#9733; 3.19</div>
</div>
<div class="FullVariablesContainer">
<div class="TimerContainer">
<h3>Time
                 remaining:
                                   </h3><span
                                                          id="days4"></span><span
id="hours4"></span><span id ="minutes4"></span><span id ="seconds4"></span>
</div><br><br>>
<div class="BidAmountContainer">
<h3>Current Bid: </h3><%=amount4%>
</div>
<div class="BidButton" style="margin-left:40%;margin-bottom:40px">
  <button style= "background:none;" onclick="PlaceBid4()" id="disableButton1">Place a
Bid</button>
 </div>
<div id="Placebid4" style="display:none">
              action="/item4Bid" method="post"><label>Enter the Bid amount :
  <form
</label><input name="item4BidAmount"type="number" required="required">
```

```
<input style="background:none" type="submit">Place the bid</button></form>
</div>
</div>
</div>
<div class="accountInfo">
Username
  <%= username %>
 Password
  <%= password %>
 First Name
  <%= firstname %>
 Last-Name
 <%= lastname %>
 E-mail 
  <%= email %>
 Address 
  Line1
  <%= address1 %>
 Line2
  <%= address2 %>
```

```
Line3
  <%= address3 %>
 City
  <%= city %>
 State/UT
  <%= state %>
 Country
  <%= country %>
 Pincode
  <%= pincode %>
 Phone number
  <%= phonenumber %>
 </div>
</body>
</html>
```

sellerLogin.ejs:

```
<!DOCTYPE html>
<html>
    <head>
        <title>SellerPage</title>
        link rel="stylesheet" href="styles1.css">
```

```
<script src="myscript.js"></script>
    <script>
                    let countDownDate=new
Date('2022-12-25');
var myfunc = setInterval(function() {
var now = new Date().getTime();
var timeleft = countDownDate - now;
// Calculating the days, hours, minutes and seconds left var days =
Math.floor(timeleft / (1000 * 60 * 60 * 24)); var hours = Math.floor((timeleft
% (1000 * 60 * 60 * 24)) / (1000 * 60 * 60)); var minutes =
Math.floor((timeleft % (1000 * 60 * 60)) / (1000 * 60)); var seconds =
Math.floor((timeleft % (1000 * 60)) / 1000);
// Result is output to the specific element
document.getElementById("daysM").innerHTML = days + "d "
document.getElementById("hoursM").innerHTML = hours + "h "
document.getElementById("minutesM").innerHTML = minutes + "m "
document.getElementById("secondsM").innerHTML = seconds + "s "
// Display the message when countdown is over if
(timeleft < 0) {
clearInterval(myfunc);
  document.getElementById("daysM").innerHTML = ""
document.getElementById("hoursM").innerHTML = ""
document.getElementById("minutesM").innerHTML = ""
document.getElementById("secondsM").innerHTML = ""
document.getElementById("end").innerHTML = "TIME UP!!"; } },500);
    </script>
  </head>
  <body>
    <div class="nav">
       style="float:right;"><span id="time"></span>
         style="margin-right:100px"><form action="/signout" method="get"><input</pre>
type="submit" value="Signout" style="background-color:rgb(177, 171, 171);
```

```
border:none;background-color:bisque;
cursor:pointer;fontfamily:cursive;fontsize:medium;">
           </form>
             id="credits_info"><button class="b1" id="creditsInfo"
      li
                                                                   >Credits
Available</br/>button><br/>br>&nbsp &nbsp <span style="font-size:18px;"
id="creditsAvailable" style="display:none;"><%= credits %></span>
      id="account_info"><button class="b1" onclick="ScInfoDisplay()">Account
Info</button>
      li
            id="BidAdd"
                              style="display:none"><button
                                                             class="b1"
onclick="AddingBid()"> Add New Item</button>
      id="bidsMenu"><button class="b1" onclick="sellerCurrentBidsDisplay()">My
Bids</button>
    </div>
    <div id="sellerCurrentBids" >
      <div class="area">
        <div class="bidImageContainer">
    <image class="image" typ="image/jpeg" src="seller4.jpg">
    </div>
    <div class="bidTitleContainer">
      <div class="ProductName"><button style="border:none; background:none;</pre>
fontsize:20px;" ><%= itemName %></button></div><br>
      <div class="SellerName" style="font-size:20px">&#xf007; <%= seller %></div>
    </div>
    <div class="bidVariablesContainer"><div class="TimerContainer">
      <h3>Time remaining:
                              </h3><span
                                                 id="daysM"></span><span
id="hoursM"></span>
       <span
                  id="minutesM"></span> <span id="secondsM"></span> <span
id="end"></span><span id="gettime" ></span>
      </div>
      <div class="BidAmountContainer">
      <h3>Current Bid: </h3>&#8377 99393
      </div></div>
  </div>
</div>
  <div id="bidAddMenu" style="display:none;">
```

```
<h3 style="text-align:center;margin-bottom:40px;">Enter the Item Details</h3>
<form id="bidAddForm" action="/addBid" method="post" enctype="multipart/formdata" >
<label>Name</label><input
                       name="newBidName"
                                            class="inputFields" type="text"
required="required"><br><br><br>
  <label>Bid Id</label><input name="newBidId" class="inputFields" type="text"</pre>
required="required"><br><br><br>
  <label>Product Description</label><input id="newBidDescription"</pre>
name="newBidDescription" class="inputFields" type="text" ><br><hr>
  <label>Bid
               Starting
                          Amount</label><input
id="newBidStartingAmount" name="newBidAmount" class="inputFields"
type="number" required="required"><br><hr>
  <label>
          End Time</label><input id="newBidEndTime" class="inputFields"
name="newBidTime" type="datetime-local" required="required"><br><hr>
<label>Image</label><input id="newBimage" name="newimage" class="inputFields"</pre>
<input type="submit" value="List the Item" id="ItemList" class="submitButton"</pre>
style="margin-left:35%;">
 </form>
 </div>
 <div id="SellerAccountInfo" style="display:none;" >
   Username
       <%= username %>
     \langle tr \rangle
       Password
       <%= password %>
     Enterprise-Name
       <%= enterpriseName %>
     Business E-mail 
       <%= email %>
```

```
Telephone number
        <%= phonenumber %>
      </div>
  </body>
</html>
CSS file:
Styles.css:
body,html{
backgroundimage:url('sky.jpg');
fontfamily:'cursive';
                   margin-top:0;
margin-left:0;
              background-
size:1500px 500px;
} .body{
position:absolute;
 height: 500px;
} button:hover{ cursor:pointer;
/*navigation menu*/
.nav{
       paddingtop:0;
margintop:0;
width:100%;
             height:75px;
background-color: bisque;
position:static;
  border-radius:20px;
}
```

```
.navigation_menu li{
display:inline;
textdecoration:none;
width:auto; liststyle:none;
float:right; font-size:20px;
float:right; padding:0px;
margin-top:20px; margin-
right:40px;
font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode',
Geneva, Verdana, sans-serif;
.navigation_menu li button{ font-
size: medium; fontfamily:cursive;
width:auto; height:100%;
border:none; background-
color:bisque; padding:0;
.b1:hover{ background-color:rgb(177,
  171, 171);
  cursor:pointer;
}
/*Signin page*/
#time{
         fontweight:400;
font-size:20px; }
#time:hover{
                backgroundcolor:none;
}
.LoginButton{ text-decoration: none;
background-color: rgb(105, 229, 220);
font-size:medium; margin-left:20px;
margin-right:30px; cursor: pointer;
height:30px; border:none;
borderradius:10px; } #loginLabel{
  text-align: center;
margin-top: 0;
                 marginbottom:
50px;
        background-
```

```
color:white;
color:black;
border-radius:
        font-size: 25px;
15px;
}
.form1{ width:400px; font-
  size:20px; margin-
  left:500px; margin-top:
  100px;
  backgroundcolor:rgb(136,
  151,
  162);
           border-
radius: 25px;
}
.form-box{
  font-family: Georgia, 'Times New Roman', Times, serif;
  margin-left:20px;
                   cursor:pointer;
.submitButton{
border-radius:10px;
                      margin-left:
                 font-size: 20px;
40%;
margintop: 20px;
                     background-
          darkseagreen;
color:
.inputFields{
                 margin-left:20px;
margin-right:20px;
                    float:right;
}
/* Featured Bids styling here
#featuredbids{
display:grid;
marginleft:0px;
                  grid-
template:
       'p q'
       'r s';
} .area{ marginleft:20px;
marginright:10px;
width:560px;
```

```
fontsize:small;
height:300px; margin-
top:100px; border:2px solid
black;
         border-
radius:20px;
overflow:hidden;
display:grid;
grid-template-areas: 'a b b'
               'c c c';
}
.bidImageContainer{
                       gridarea:a;
backgroundcolor:aquamarine;
height:160px;
                width:250px;
margin:0;
           padding:0;
  overflow:hidden;
            height:160px; width:250px;
} .image{
.bidTitleContainer{
                      grid-area:b;
background-color:antiquewhite;
width:340px;
               height:160px;
                                margin:0;
padding:0;
}
.bidVariablesContainer{
  padding-left:10px;
  gridarea:c; color:rgb(194,
  168, 168); background-
  color: rgb(36, 75, 62);
  height:auto;
}
.bidTitleContainer{
                      display:grid;
grid-templateareas:
         'g'
         'h';
```

```
}
.ProductName{ grid-
area:g; margin:10px; }
.SellerName{
gridarea:h;
margin:10px; }
/*Current bids menu here*/
#CurrentBids{
display:none;
                       }
.Currentarea{
marginleft:20px;
marginright:10px;
width:90%;
margintop:100px;
marginleft:50px;
border:2px solid black;
borderradius:20px;
overflow:hidden;
}
/*Bid Details page*/
#BidDetails1{ display:none;
  margin-top:50px;
  marginleft:300px;
  marginright:300px; padding:0;
  grid-template:
      'm n'
                 'o o';
border-radius:20px;
border:2px solid black;
overflow:hidden;
#BidDetails2{
                 display:none;
margintop:50px;
marginleft:300px;
marginright:300px;
             grid-template:
padding:0;
```

```
'm n'
                    'o o';
border-radius:20px;
border:2px solid black;
overflow:hidden;
#BidDetails3{
display:none;
margintop:50px;
marginleft:300px;
marginright:300px;
padding:0;
                    grid-
template:
      'm n'
                 'o o';
border-radius:20px;
border:2px solid black;
overflow:hidden; }
#BidDetails4{ display:none;
  margin-top:50px;
  marginleft:300px;
  marginright:300px;
  padding:0;
               gridtemplate:
      'm n'
                 'o o';
border-radius:20px;
border:2px solid black;
overflow:hidden; }
.FullImageContainer{
grid-area:m;
background-color: blue;
width:300px;
height:200px;
margin:0px; }
.FullImage{
width:300px;
height:200px; }
.FullTitleContainer{
                       grid-area:n;
                                     margin-
           background-color: rgb(140, 248,
left:0px;
235); margin:0px;
width:500px;
}
.FullVariablesContainer{
                           gridarea:o;
  float:left;
```

```
background-color: rgb(255, 208, 79);
padding:20px; } .accountInfo{
                               margin-top:
        margin-left: 35%;
40px;
#ACinfo{ width:70%;
  height:500px;
}
#ACinfo
                      td{
fontsize:20px;
margin:10px;
padding:10px;
                      .c1{
background-color:
                     grey;
color:beige
               }
                      .c2{
background-color: white; }
/* Bid Add menu*/
#bidAddMenu{
  background-color:antiquewhite;
display:block;
                marginleft:30%;
margin-right:30%;
                    border-
radius:20px;
paddingbottom:10px; }
#bidAddForm{
  margin-left:10%; } /*
seller info */
#SellerAccountInfo{
margin-left:35%;
margin-right:20%;
margin-top:50px; }
#SCinfo{
            font-
size:18px; }
#SCinfo td{
padding:10px;}
```

4.3 REFERENCES

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