



#### Car-Toon's Carwash

#### **Issues**

- 1. Current operations are non-computerized
- 2. System tracks sales in aggregate; no individual customer data collected
- 3. Payment only available in person
- 4. Scheduling inefficiencies

### Opportunities

- 1. Collect customer data to improve services and enable marketing strategies
- 2. Wait time reduction and more efficient scheduling

### **Areas of Focus**

- 1. Account creation
- 2. Ordering washes & booking details
- 3. New functionalities (e.g. viewing account activity, purchasing history, admin reports)

## **Project Scope**

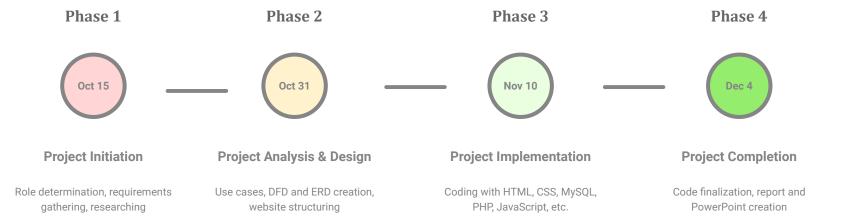
### **Project Objectives**

- Website for ordering wash and detail services for Car-Toon's Carwash
- Build a system that will keep track of bookings and customer information

### **Key Features**

- Customer account creation & login
- Customers account activity
- Customers purchase history
- Buy wash functionality
- Book detail functionality
- Administrative functionalities (e.g. ability to view reports)

# **Project Timeline**



## **Use Cases**

Use Cases		Outcome	
1	Create Customer Account	User account and details are stored in the user datastore	
2	Login as Customer	User is given access to system with personalized information	
3	Buy a Wash	Wash purchase is logged in ordered services datastore	
4	Book a Detail	Detail booking is logged in the ordered services datastore	
5	Login as Admin	Admin is given access to admin pages of system	
6	View Reports	Report is displayed to admin	
7	Update Pricing	Price is updated in database and across system pages	

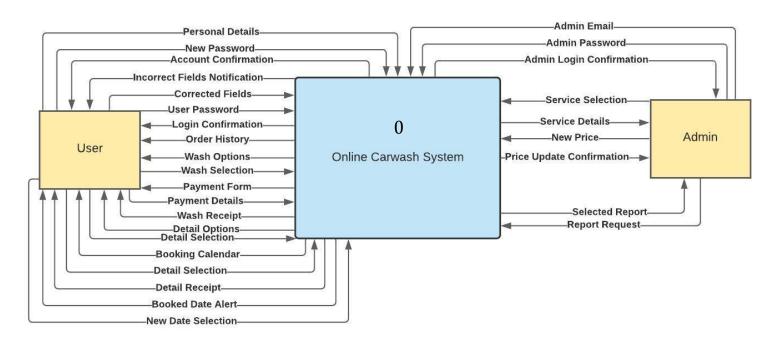
#### **Key Inputs**

- User account info (e.g. name, email, phone)
- Login info
- Wash & detail selection
- Payment info

#### **Key Outputs**

- Confirmations
- Notifications
- Displays (e.g. order history)
- Forms & receipts (payment)
- Reports

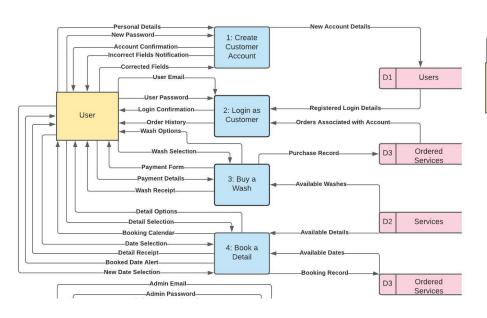
### **Context Diagram**

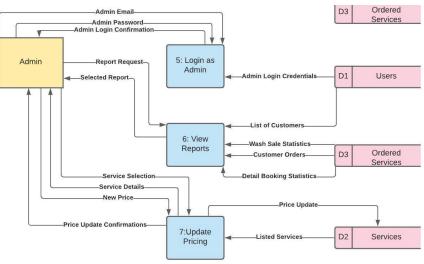


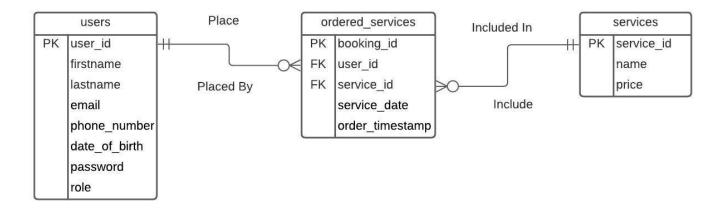
## **DFDs**

### Level 0 Diagram (users)

### Level 0 Diagram (admin)







## **Technical Components**



HTML/ CSS

- Basic content and structure
- Styling of pages

PHP/ MySQL

- PHP Sessions
- Querying and inserting into database
- Database design and data storage

Javascript

Implementation

- Alert boxes
- Confirmation of actions
- Input validation

Introduction Analysis

Walkthrough

Conclusion

## **PHP Sessions**

#### Setting session variables

```
$query = "SELECT * FROM users WHERE
email = '" .$email. "' AND password = '" .$password. "'";

$result = mysqli_query($db,$query);

if (mysqli_num_rows($result)==1)
{
    $row = mysqli_fetch_assoc($result);
    $user_id = $row['user_id'];
    $firstname = $row['firstname'];

$_$ESSSION['email'] = $email;
    $_$ESSSION['user_id'] = $user_id;
    $_$ESSSION['firstname'] = $firstname;
```

### Checking session variables

```
1 <7php
2 session_start();
3
4 if(!isset($_SESSION['email'])||(!isset($_SESSION['user_id']))){
5 header("Location:login.php");
6 }
7 7>
```

#### **Ending session**

```
1 <?php
2 session_start();
3 session_destroy();
4 header('Location: login.php');
5 exit;
6 ?>
```

## **PHP for Bookings**

#### Checks system for booked dates

```
if(mysqli_num_rows($result)==0) {
   if(mysqli_query($db,$sql2)){
     $ SESSION["detail"] = $detail; //will take them to receipt page
     $_SESSION["booking"] = $booking;
     header("Location:detail_receipt.php");
     echo "Error: Unable to add record " .mysqli_error($db);
     echo '<br><a href="details page.html">Click here to try again</a>';
else {
  echo "<script language='javascript'>";
  echo "alert('Sorry that date is booked')";
  echo "</script>";
mysqli_close($db);
```

booking_id	user_id	service_id	service_date	order_timestamp
1	105	6	2020-12-04	2020-11-27 14:15:34
2	105	6	2020-12-08	2020-11-27 14:37:10

```
datalab3.bus.sfu.ca says

Sorry that date is booked

OK
```

## Javascript Validation and Alerts

#### **Login Validation**

```
function validatelogin() {
   var email=document.getElementById("email").value;
   var password=document.getElementById("password").value;

if ((email == ""||email==null)&&(password == ""||password==null)){
   alert("Email and password must be filled out");
   return false;
}

clse if (email == ""||email==null) {
   alert("Email must be filled out");
   return false;
}

else if (password == ""||password==null) {
   alert("Password must be filled out");
   return false;
}

return false;
}
```

#### Wash Validation

```
function validateWash() {
  var wash=document.getElementById("wash").value;

if (wash == "0"){
  alert("Must select a wash");
  return false;
}
```

#### Logout Confirmation

```
datalab3.bus.sfu.ca says

Are you sure you want to log out?

Cancel OK
```

## **Resources Used**

#### **Technical Resources**

- 1. JQuery
- 2. Github
- 3. Repl.it
- 4. Mockaroo

#### Online References

- 1 W3Schools
- 2. StackOverflow
- 3. GeekForGeeks
- 4. Datatables Forum
- 5. FreeCodeCamp

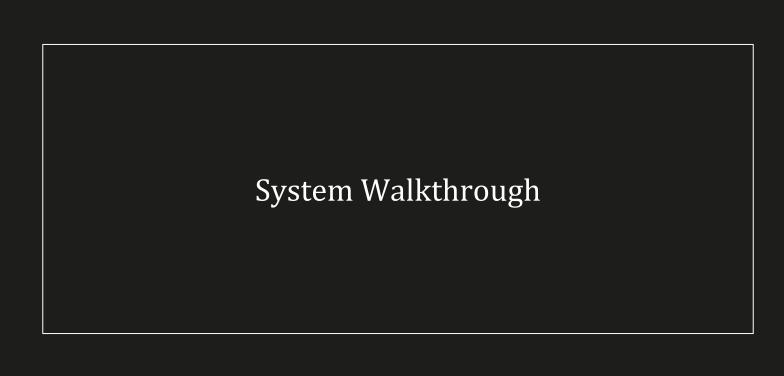












# **Future Improvements**



#### **Planned Future Features**

- Security
- Validation
- Guest Login
- Portability
- Price Updates



