

# **Ratelt-OnlineProduct Review**

—Web Programming Languages (CS6314.002)

## Description

Online product review web application built to serve as a centralized repository for product information and their reviews. The application's user interface was built using bootstrap along with jQuery for a seamless user experience. The web application was built with smallest components which serve a single functionality to maintain modularity of code. The client made requests to a PHP server using Ajax to retrieve data from a MySQL server. We have implemented the required core functionality as mentioned below:

### I. Login & Registration

Instead of md5 and legacy hashing techniques, we have used Password\_BCRYPT hashing technique for encrypting password. We have included PASSWORD\_HASH method for implementing the above algorithm. Also, we made sure that the password is strong enough for registering the user.

### II. Navigation Header

A fixed header available in every page of the application with links to homepage, categories page, clickable subcategory list in a dropdown, search field and login option.

### III. Home Page

A carousel which displayed the top products voted by different users based on the product's average rating. Popular categories window which showcased the categories with the most reviews provided by users.

### IV. Search Functionality

A helpful search functionality to find products based on their title and provide relevant filters which can be applied to the queried products.

### V. Category and Subcategory Page

List of categories and subcategories displayed in a user-friendly manner with relevant images as part of their div. If an admin is logged in, edit, delete and add functionalities are presented for managing categories and subcategories.

## VI. ProductListPage

List of products displayed for a particular category and subcategory along with pagination functionality. To the left side of the page, filters on brand and features are available to find relative products. When admin is logged in, edit, delete and add functionalities are presented to manage products.

## VII. WishList

A personal wish list for users to store products of their liking in a centralized place for future references.

## VIII. ProductPage

Hosts the details of products such as total reviews, average rating, product description, product title and price of the product. Below the product, a list of reviews are available for reference to users. If a user is logged in, he can add the product to his wish list and write a review for the same. User's review for that product is listed at the top with update and delete options available for that owner alone.

## IX. Admin

Admin and users share the same interface but admin gets access to functionalities such as edit, add and delete options for categories, subcategories and products.

# Database Design

## Tables

### BRAND

```
CREATE TABLE `BRAND` (
  `id` int(11) NOT NULL,
  `name` varchar(60) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

## CATEGORY

```
CREATE TABLE `CATEGORY` (  
  `id` int(11) NOT NULL,  
  `name` varchar(60) NOT NULL,  
  `deletedyn` varchar(1) NOT NULL,  
  `image` varchar(64) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

## FEATURES

```
CREATE TABLE `FEATURES` (  
  `id` int(11) NOT NULL,  
  `name` varchar(60) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

## PRODUCT

```
CREATE TABLE `PRODUCT` (  
  `id` int(11) NOT NULL,  
  `name` varchar(1000) NOT NULL,  
  `categoryid` int(11) NOT NULL,  
  `subcategoryid` int(11) NOT NULL,  
  `brandid` int(11) NOT NULL,  
  `price` decimal(10,0) NOT NULL,  
  `date` date NOT NULL,  
  `content` longtext NOT NULL,  
  `deletedyn` varchar(1) NOT NULL,  
  `images` varchar(400) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

## PRODUCT\_FEATURES

```
CREATE TABLE `PRODUCT_FEATURES` (  
  `id` int(11) NOT NULL,  
  `productid` int(11) NOT NULL,  
  `featureid` int(11) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

## REVIEW

```
CREATE TABLE `REVIEW` (  
  `id` int(11) NOT NULL,  
  `productid` int(11) NOT NULL,  
  `userid` int(11) NOT NULL,  
  `rating` decimal(10,0) NOT NULL,  
  `feedback` longtext NOT NULL,  
  `datereviewed` datetime NOT NULL,  
  `deletedyn` varchar(1) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

## ROLES

```
CREATETABLE`ROLES`(  
  `id`int(11)NOTNULL,  
  `rolename`varchar(400)NOTNULL,  
  `adminrights`varchar(2)NOTNULL  
)ENGINE=InnoDBDEFAULTCHARSET=latin1;
```

## SUBCATEGORY

```
CREATETABLE`SUBCATEGORY`(  
  `id`int(11)NOTNULL,  
  `categoryid`int(11)NOTNULL,  
  `name`varchar(60)NOTNULL,  
  `deletedyn`varchar(1)NOTNULL,  
  `image`varchar(64)NOTNULL  
)ENGINE=InnoDBDEFAULTCHARSET=latin1;
```

## USERS

```
CREATETABLE`USERS`(  
  `id`int(11)NOTNULL,  
  `username`varchar(60)NOTNULL,  
  `fname`varchar(400)NOTNULL,  
  `lname`varchar(400)NOTNULL,  
  `password`varchar(400)NOTNULL,  
  `email`varchar(400)NOTNULL,  
  `roleid`int(11)NOTNULL,  
  `review_count`int(11)NOTNULL  
)ENGINE=InnoDBDEFAULTCHARSET=latin1;
```

## WISHLIST

```
CREATETABLE`WISHLIST`(  
  `id`int(11)NOTNULL,  
  `userid`int(11)NOTNULL,  
  `productid`int(11)NOTNULL,  
  `deletedyn`varchar(1)NOTNULL  
)ENGINE=InnoDBDEFAULTCHARSET=latin1;
```

## INDEXES/REFERENTIALINTEGRITY

## BRAND

```
ALTERTABLE`brand`  
ADDPRIMARYKEY(`id`),  
ADDUNIQUEKEY`name`(`name`);
```

## CATEGORY

```
ALTERTABLE`category`  
ADDPRIMARYKEY(`id`),  
ADDUNIQUEKEY`name`(`name`);
```

## FEATURES

```
ALTERTABLE`features`  
ADDPRIMARYKEY(`id`),  
ADDUNIQUEKEY`name`(`name`);
```

## PRODUCT

```
ALTERTABLE`product`  
ADDPRIMARYKEY(`id`),  
ADDKEY`brandid`(`brandid`),  
ADDKEY`categoryid`(`categoryid`),  
ADDKEY`subcategoryid`(`subcategoryid`);
```

## PRODUCT\_FEATURES

```
ALTERTABLE`product_features`  
ADDPRIMARYKEY(`id`),  
ADDKEY`featureid`(`featureid`),  
ADDKEY`productid`(`productid`);
```

## REVIEW

```
ALTERTABLE`review`  
ADDPRIMARYKEY(`id`),  
ADDKEY`userid`(`userid`),  
ADDKEY`productid_2`(`productid`),  
ADDKEY`userid_2`(`userid`);
```

## ROLES

```
ALTERTABLE`roles`  
ADDPRIMARYKEY(`id`);
```

## SUBCATEGORY

```
ALTERTABLE`subcategory`  
ADDPRIMARYKEY(`id`),  
ADDKEY`categoryid`(`categoryid`);
```

## USERS

```
ALTERTABLE`users`  
ADDPRIMARYKEY(`id`),  
ADDKEY`roleid`(`roleid`);
```

## WISHLIST

```
ALTERTABLE`wishlist`  
ADDPRIMARYKEY(`id`),  
ADDKEY`productid`(`productid`),  
ADDKEY`userid`(`userid`);
```

## AUTO\_INCREMENTfordumpedtables

## BRAND

```
ALTERTABLE`brand`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=43;
```

## CATEGORY

```
ALTERTABLE`category`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=11;
```

## FEATURES

```
ALTERTABLE`features`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=43;
```

## PRODUCT

```
ALTERTABLE`product`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=45;
```

## PRODUCT\_FEATURES

```
ALTERTABLE`product_features`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=59;
```

## REVIEW

```
ALTERTABLE`review`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=30;
```

## ROLES

```
ALTERTABLE`roles`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=3;
```

## SUBCATEGORY

```
ALTERTABLE`subcategory`  
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=48;
```

## USERS

```
ALTERTABLE`users`
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=17;
```

## WISHLIST

```
ALTERTABLE`wishlist`
MODIFY`id`int(11)NOTNULLAUTO_INCREMENT,AUTO_INCREMENT=18;
```

### Constraintsfordumpedtables

## PRODUCT

```
ALTERTABLE`product`
ADDCONSTRAINT`product_ibfk_1`FOREIGNKEY(`brandid`)REFERENCES`brand`(`id`)ON
DELETECASCADEONUPDATECASCADE,
ADDCONSTRAINT`product_ibfk_2`FOREIGNKEY(`categoryid`)REFERENCES`category`(`id`)ON
DELETECASCADEONUPDATECASCADE,
ADDCONSTRAINT`product_ibfk_3`FOREIGNKEY(`subcategoryid`)REFERENCES
`subcategory`(`id`)ONDELETECASCADEONUPDATECASCADE;
```

## PRODUCT\_FEATURES

```
ALTERTABLE`product_features`
ADDCONSTRAINT`product_features_ibfk_1`FOREIGNKEY(`featureid`)REFERENCES
`features`(`id`)ONDELETECASCADEONUPDATECASCADE,
ADDCONSTRAINT`product_features_ibfk_2`FOREIGNKEY(`productid`)
REFERENCES`product`(`id`)ONDELETECASCADEONUPDATECASCADE;
```

## REVIEW

```
ALTERTABLE`review`
ADDCONSTRAINT`review_ibfk_1`FOREIGNKEY(`productid`)REFERENCES`product`(`id`)ON
DELETECASCADEONUPDATECASCADE,
ADDCONSTRAINT`review_ibfk_2`FOREIGNKEY(`userid`)REFERENCES`users`(`id`)
ONDELETECASCADEONUPDATECASCADE;
```

## SUBCATEGORY

```
ALTERTABLE`subcategory`
ADDCONSTRAINT`subcategory_ibfk_1`FOREIGNKEY(`categoryid`)
REFERENCES`category`(`id`)ONDELETECASCADEONUPDATECASCADE;
```

## USERS

```
ALTERTABLE`users`
ADDCONSTRAINT`users_ibfk_1`FOREIGNKEY(`roleid`)REFERENCES`roles`(`id`)
ONDELETECASCADEONUPDATECASCADE;
```



## WISHLIST

```
ALTER TABLE `wishlist`  
  ADD CONSTRAINT `wishlist_ibfk_1` FOREIGN KEY (`productid`) REFERENCES `product` (`id`) ON  
  DELETE CASCADE ON UPDATE CASCADE;  
  ADD CONSTRAINT `wishlist_ibfk_2` FOREIGN KEY (`userid`) REFERENCES `users` (`id`)  
  ON DELETE CASCADE ON UPDATE CASCADE;
```

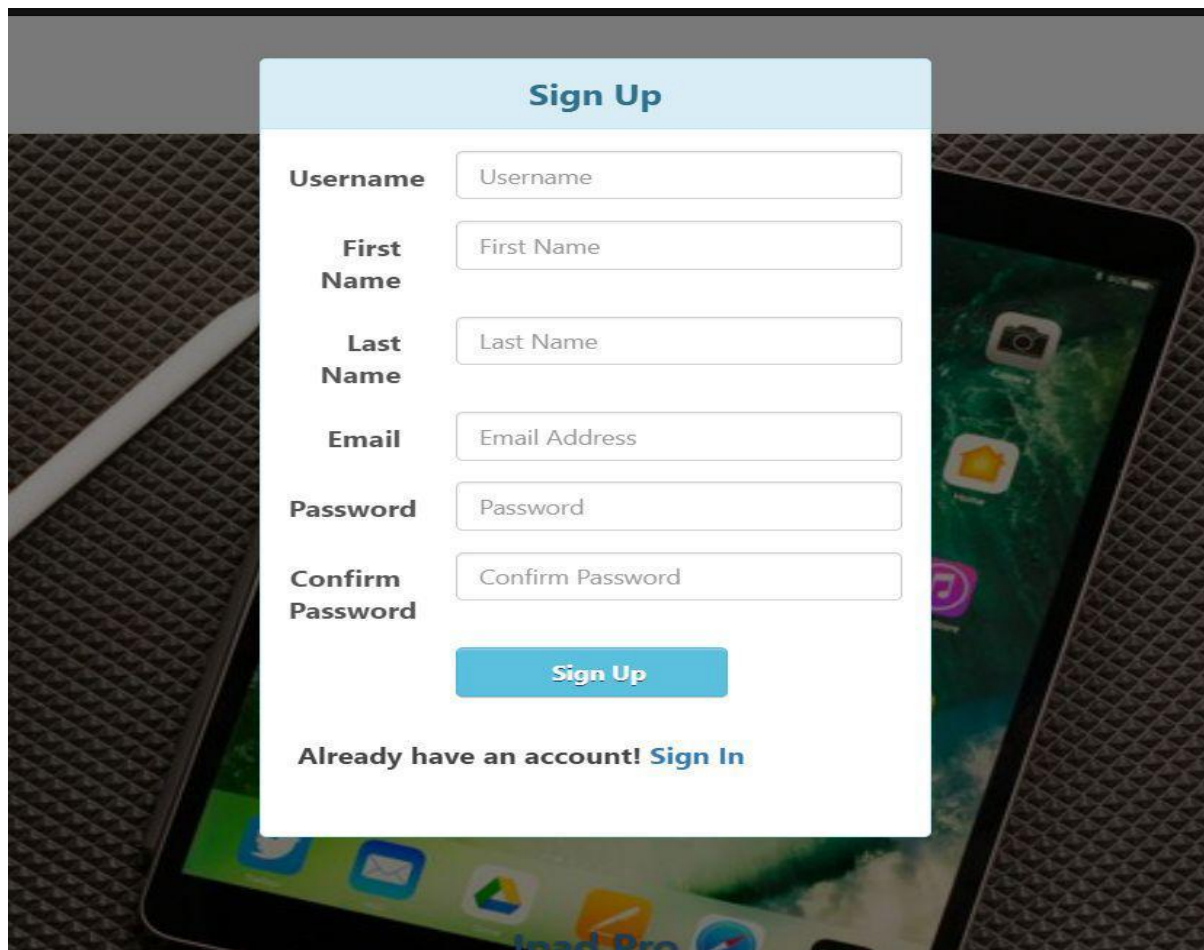
## Languages/Frameworks used

ClientSide: HTML, CSS, AJAX, JQuery

ServerSide: PHP, MySQL

## Screenshots

### Register



**Sign Up**

**Username**

**First Name**

**Last Name**

**Email**

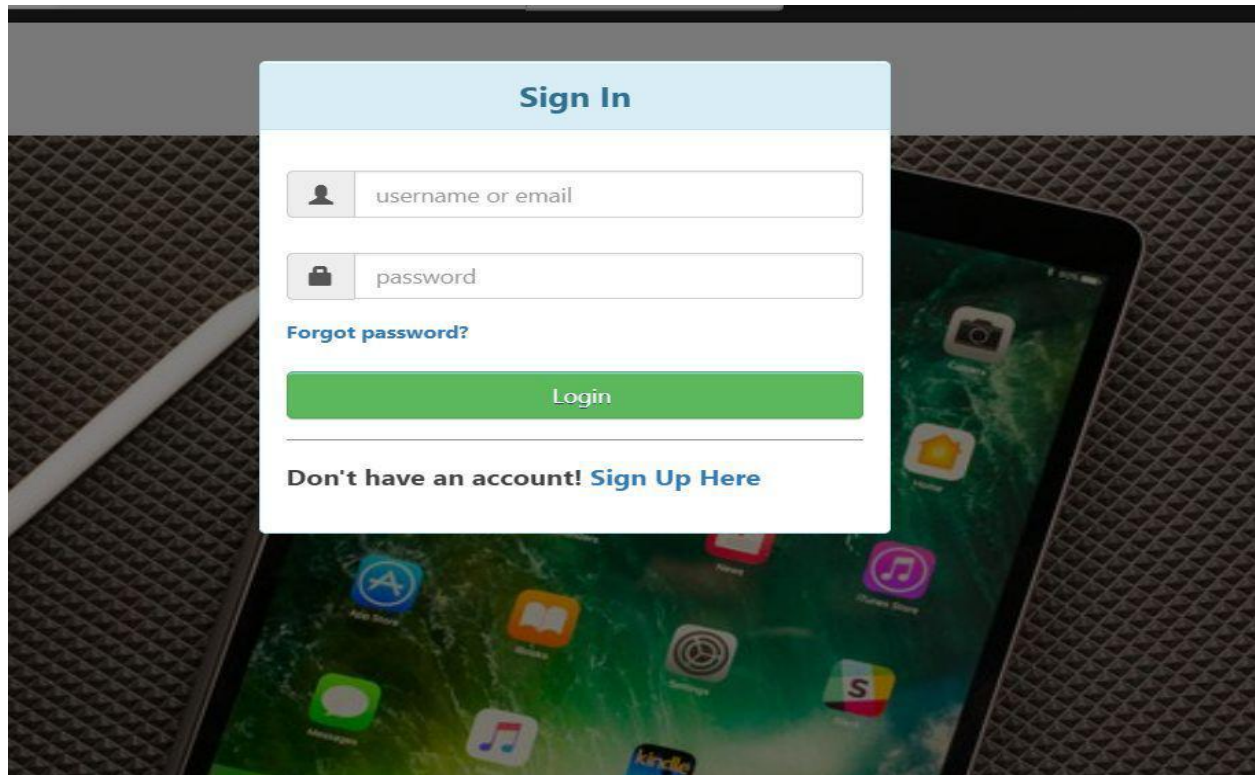
**Password**

**Confirm Password**

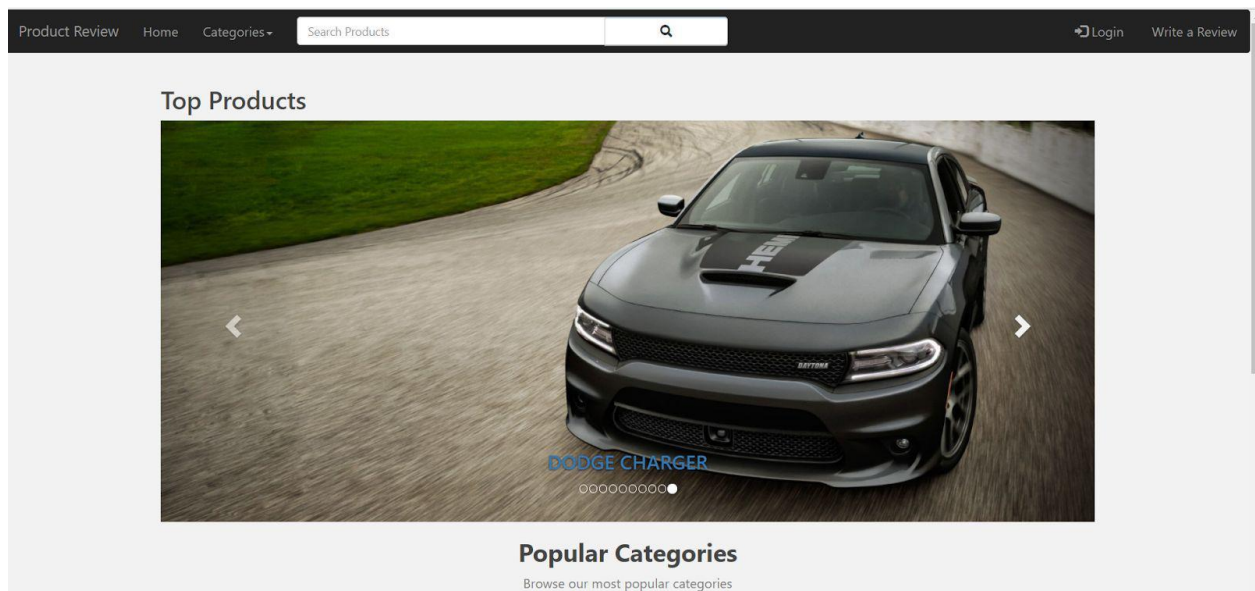
**Sign Up**

Already have an account! [Sign In](#)

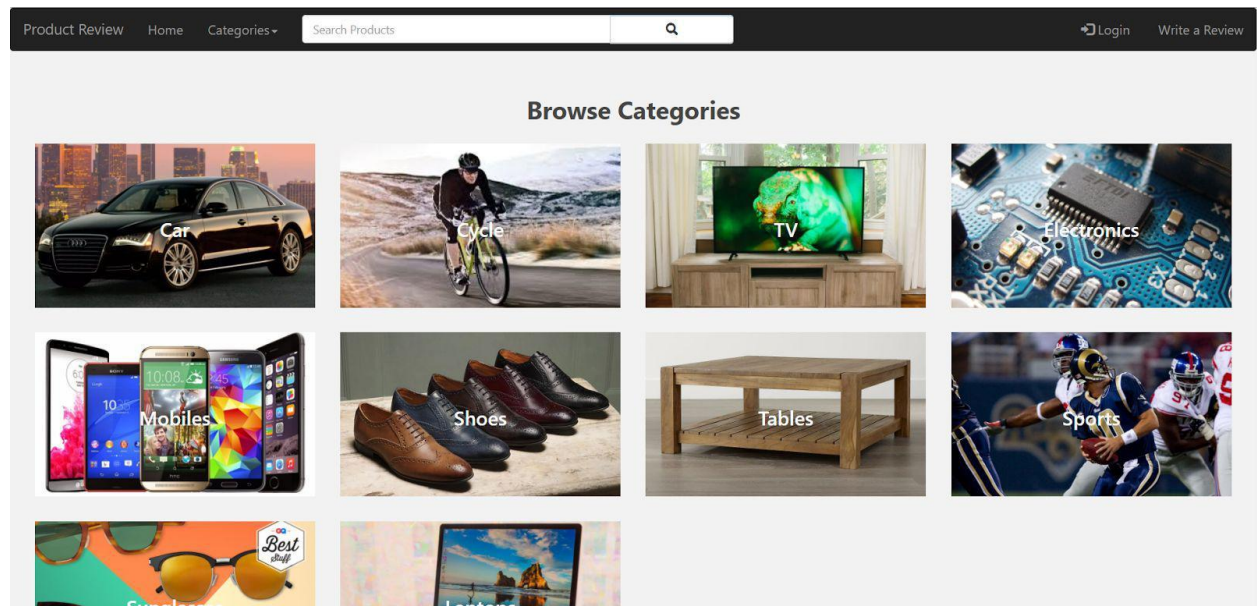
## Login:



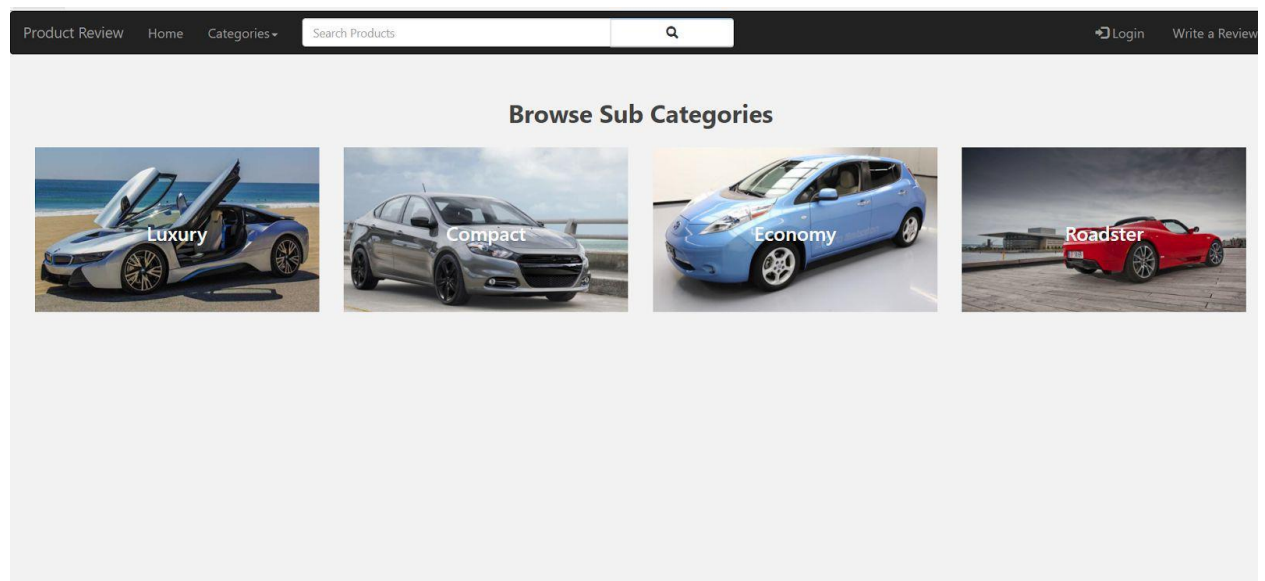
## Home:



## Category:



## Subcategory:



## Productlist:

[Product Review](#)
[Home](#)
[Categories ▾](#)


[Login](#)
[Write a Review](#)


**Brands**

- ☐ AUDI
- ☐ Mercedes
- ☐ MiniCooper
- ☐ Ford
- ☐ Ferrari
- ☐ chevrolet


**Features**

- ☐ Comfortable seats
- ☐ Power driver seat
- ☐ Forward-collision warning
- ☐ comfortable
- ☐ family
- ☐ PowerWindows
- ☐ Automatic
- ☐ v8
- ☐ Fastest


### Browse Products




AUDI A8  
Brand : AUDI




Benz  
Brand : Mercedes




Countrymen  
Brand : MiniCooper




Q5  
Brand : AUDI




R8  
Brand : AUDI



Mustang  
Brand : Ford



Fury  
Brand : Ferrari




Camero  
Brand : chevrolet

## Productdetail:

[Product Review](#)
[Home](#)
[Categories ▾](#)


[Login](#)
[Write a Review](#)



### AUDI A8

( 6 reviews )  
★★★★★

PRICE  
2000\$

[Write a Review](#)

[Add To Wishlist](#)

### Product Reviews

**Username:** mukesh1234

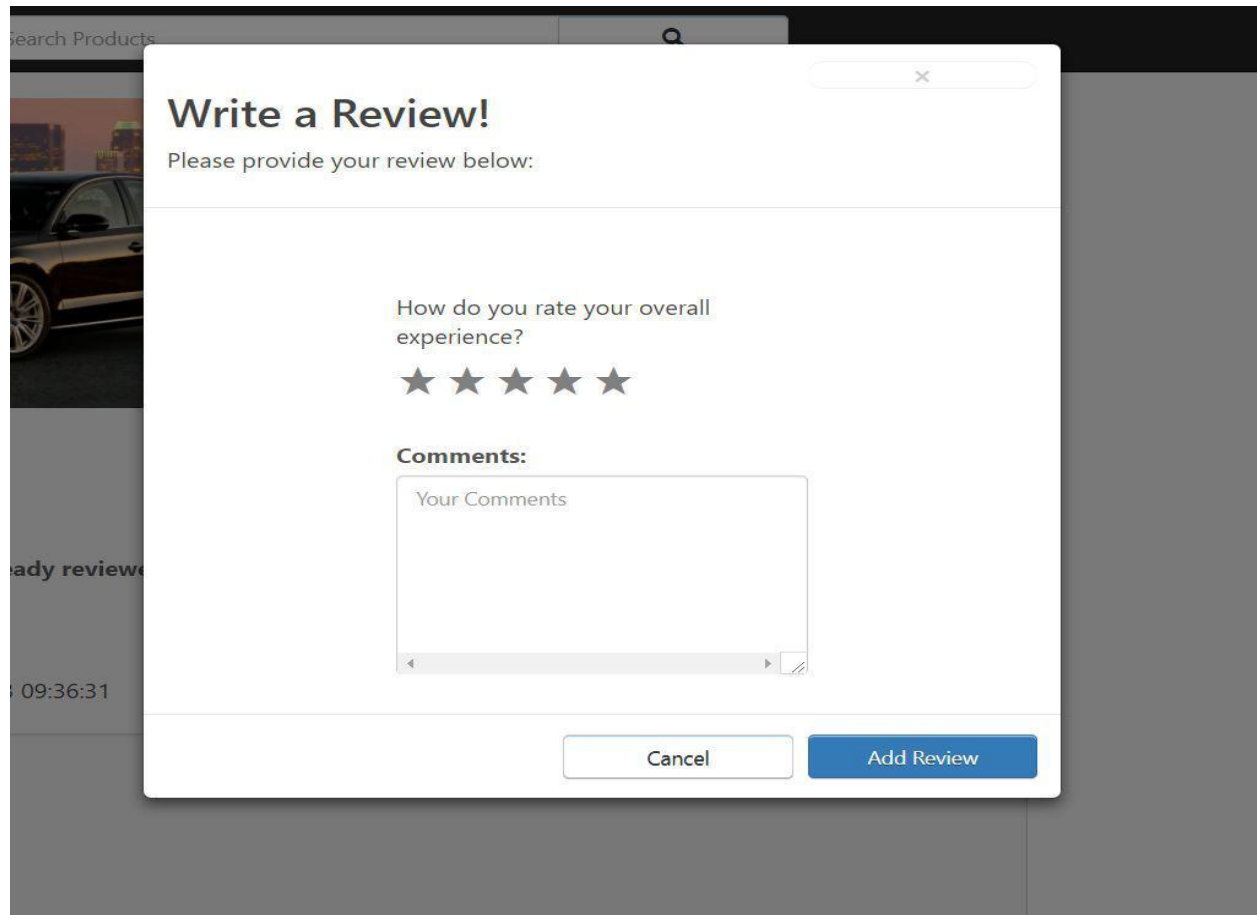
★★★★★

**Reviewed on:** 2017-12-06 12:31:39

**Comment**

Good product

**Username:** mukesh1

**Review:**

A screenshot of a web application showing a modal window for writing a review. The modal is titled "Write a Review!" and has a close button (X) in the top right corner. Below the title, it says "Please provide your review below:". The main content area contains a rating question: "How do you rate your overall experience?" followed by five stars. Below the stars is a section labeled "Comments:" with a text area containing the placeholder "Your Comments". At the bottom of the modal are two buttons: "Cancel" and "Add Review". The background shows a blurred view of a car and a search bar.

Search Products

Write a Review!

Please provide your review below:

How do you rate your overall experience?

★ ★ ★ ★ ★

**Comments:**

Your Comments

Cancel Add Review


09:36:31




Wishlist:

[Product Review](#) [Home](#) [Categories ▾](#)  [Q](#) [kgaswin93 ▾](#) [Write a Review](#)

### My Wishlist



Audi A8  
Brand : AUDI  
[Remove wish](#)



Camaro  
Brand : chevrolet  
[Remove wish](#)