**Requirement Specification**

**Purpose**

The purpose of this project is to develop a fully featured e-commerce website that will allow for the created and sale of products, user account creation and account management and administration of the site. The site will sell electronic cigarettes, nicotine liquid and associated products. The website will then store the relevant data in an access database.

**Scope**

* The primary focus of the website will be for the sale of electronic cigarette products. This will be implemented using ASP .Net.
* In addition to this an administration area will be created that will allow the site manager to add and remove products, add and removes user and also manage user accounts and monitor general usage statistics of the website. The admin should also be able to add and remove offers by creating discount codes and set time-limited specials.
* A checkout will be developed that will allow the user to add and remove products from the checkout area. While each product is added a tally will increase of total cost to allow the user to observe the total value of the items they have selected while still being able to browse the website. There will also be an option to clear checkout if the user would like to change their selections. Extendable checkout module that while browsing does not show items in checkout however when clicked will show total cost and each individual item.
* Product specific special offers will also be implemented. This means that when the offer is set on the specific product the product will then be added to a specific special offers page. This will all be implemented through the admin area.
* Users with registered accounts will be able to leave ratings for each product they have purchased. Each rating will consist of a star rating and an associated comment. All ratings and comments will be displayed for other users to see underneath the product in the products area.
* A customer reward system will be implemented that will allow the user to accumulate points for being a return customer. Once a specific number of points are accumulated the user will be eligible to redeem them for products.
* Discounts will also be applied at the checkout. This will be done through the use of discount codes which will be applied using a text box at the checkout area.
* Users and admins will be able to create accounts that will allow users to manage orders, purchase products, contact the administrator and browse and view previous orders.
* Business information will be provided on the contact page. This will also contain an FAQ to allow users to quickly get answers to some of the most common issues on the website.
* An about page will also be created that provides the user with information about the business.
* A tiered level of access will be implemented to differentiate between user accounts and administrator accounts. This will ensure that users will not be able to access any of the administrator sections of the website which will be kept hidden to all users except those authorised as administrators.
* On access to the website the user will be provided with a DOB input area that will check to ensure the user is over 18 and will only provide access to the website if their DOB shows they are. This will again be verified when a user tries to create an account, if a user is under 18 they will be unable to create an account.
* There will also be a blog area implemented that can be updated by the administrator that will allow them to add latest news, events and topical information. Users who have registered accounts will be able to comment under each of the blog posts and other users will be able to communicate with each other under each post.
* Users will be able to search the website for products.
* Live chat customer support section that allows registered users to message administrators easily while using the site.

**Definitions**

**Database Information:**

|  |  |
| --- | --- |
| **Entity:** | **Users** |

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Field Type** | **Size** |
| **UserID(PK)** | **Integer** | **auto** |
| **First Name** | **String** | **30** |
| **Second Name** | **String** | **30** |
| **Date of Birth** | **Date** | **n/a** |
| **Address** | **String** | **50** |
| **City** | **String** | **25** |
| **County** | **String** | **25** |
| **Country** | **String** | **25** |
| **Postcode** | **String** | **15** |
| **Access Level** | **Boolean** | **n/a** |

|  |  |
| --- | --- |
| **Entity:** | **Products** |

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Field Type** | **Size** |
| **Product ID(PK)** | **Integer** | **auto** |
| **Name** | **String** | **50** |
| **Type** | **String** | **50** |
| **Price** | **Money** | **25** |
| **Sale** | **Boolean** | **25** |
| **Sale Price** | **Money** | **25** |
| **Product Description** | **String** | **n/a** |

|  |  |
| --- | --- |
| **Entity:** | **Orders** |

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Field Type** | **Size** |
| **User ID(PK)** | **Integer** | **Auto** |
| **Order ID(PK)** | **Integer** | **Auto** |
| **Product ID** | **Integer** | **auto** |
| **Quantity** | **Money** | **25** |
| **Item cost** | **Money** | **n/a** |
| **Total Cost** | **Money** | **n/a** |

|  |  |
| --- | --- |
| **Entity:** | **Invoices** |

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Field Type** | **Size** |
| **Invoice Num(PK)** | **Integer** | **Auto** |
| **Order ID(PK)** | **Integer** | **Auto** |
| **Product ID** | **Integer** | **auto** |
| **Quantity** | **Money** | **25** |
| **Item cost** | **Money** | **n/a** |
| **Total Cost** | **Money** | **n/a** |

|  |  |
| --- | --- |
| **Entity:** | **Discount Codes** |

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Field Type** | **Size** |
| **Discount Code** | **String** | **20** |
| **Beginning** | **Date** | **n/a** |
| **Ending** | **Date** | **n/a** |
| **Times Used** | **Integer** | **100** |

**Cart items**

Below we will outline the various items that will be offered for sale on the website. These will include a variety of electronic cigarette components, accessories and nicotine liquid:

**Starter Kits Advanced Kits**

* **SMOK Mag Grip kit - £35.99**
* **VooPoo Mojo 88W TC - £32.99**
* **SMOK Morph with TFV V2 Tank - £64.99**
* **Vaporesso Luxe Vape SKRR Tank - £49.99**
* **VooPoo DRAG 2 - £49.99**
* **VIP Alpha mini base Kit - £24.99**
* **Vype ePen 3 Starter kit vPro - £9.99**
* **SMOK RPM40 Pod Kit - £28.99**
* **SMOK Novo Pod Kit - £12.99**
* **SMOK Vape Pen Nord 19 - £24.99**
* **Vaporesso Sky Solo Plus - £14.99**
* **Vaptio Solo F1 - £15.99**
* **Aspire Zelos 2.0 - £49.99**

**Mods Tanks**

* **Vapor Storm Hawk tank 2ml - £8.99**
* **Horizontech Falcon King - £18.99**
* **Aspire Tigon Tank – £19.99**
* **Vaporesso SKRR tank - £24.99**
* **Aspire Cleito - £12.99**
* **Asprite Atlantis Evo - £18.99**
* **Uwell Crown Mini tank - £9.99**
* **Aspire Athos Tank - £19.99**
* **Freemax Mesh Pro - £17.99**
* **Wismec Reuleaux RX GEN3 - £34.99**
* **Vaptio Super Bat mod - £29.99**
* **Aspire K-Lite Mod - £19.99**
* **Eleaf iStick Power 80w - £27.99**
* **Eleaf iKuu i80 - £23.99**
* **PAX 3 vaporizer mod - £169.99**
* **Famovape Magma 200W - £29.99**
* **Eleaf iStick t80 - £36.99**

**Coils Accessories**

* **Aspire Tigon Coils (Pack of 5) - £9.99**
* **Aspire PockeX Coils (Pack of 5) - £13.49**
* **Aspire Nautilus Coils (Pack of 5) - £7.99**
* **Aspire Breeze Coils (Pack of 5) - £7.99**
* **SMOK Nord Coils (Pack of 5) - £14.99**
* **SMOK TFV12 V12 Prince mesh(Pack of 3) - £7.00**
* **Smok Vape Pen 22 (Pack of 5) - £5.99**
* **SMOK RPM40 Coils (Pack of 5) - £10.99**
* **SMOK TFV8 Baby (Pack of 3) - £6.99**
* **Aspire Tigon Coils (Pack of 5) - £9.99**
* **Aspire PockeX Coils (Pack of 5) - £13.49**
* **Aspire Nautilus Coils (Pack of 5) - £7.99**
* **Aspire Breeze Coils (Pack of 5) - £7.99**
* **SMOK Nord Coils (Pack of 5) - £14.99**
* **SMOK TFV12 V12 Prince mesh(Pack of 3) - £7.00**
* **Smok Vape Pen 22 (Pack of 5) - £5.99**
* **SMOK RPM40 Coils (Pack of 5) - £10.99**
* **SMOK TFV8 Baby (Pack of 3) - £6.99**

**Functional Specification**

Outlined below is the functional specification for the website. Each item is listen in order of its importance, in relation to its inclusion in the project. Items marked with M – Mandatory will be essential items for the operation of the system. Items marked with a D- Desirable will be items we would hope to include in the website and finally L- Luxury items marked with an L will be included provided the time and resources are available.

|  |  |  |
| --- | --- | --- |
| **Item #** | **Description** | **Rating** |
| **1** | **Administrator - Add/Remove Products** | **M** |
| **2** | **Administrator - Add/Remove Users** | **M** |
| **3** | **Administrator – Add/Remove Offers** | **M** |
| **4** | **Checkout – Select/Deselect Products, clear checkout, total item value displayed** | **M** |
| **5** | **Checkout – Discount code application** | **M** |
| **6** | **About page – Provides the user with information about the business** | **M** |
| **7** | **Contact Page including FAQ** | **M** |
| **8** | **Users – Create account** | **M** |
| **9** | **Users – Manage orders and view previous orders** | **M** |
| **10** | **Users – Customer rewards implemented using purchase points** | **D** |
| **11** | **Users – Leave ratings and comments** | **D** |
| **12** | **Age verification – Checks user is over 18 when arriving at site** | **M** |
| **13** | **Blog area – Updated by administrator with latest news and information** | **D** |
| **14** | **Product search** | **M** |
| **15** | **Administrator live chat area for customer support** | **L** |

**Inputs**

**Outputs**

**Processes**

**System Constraints**

* The project must be completed within 9 weeks to be submitted on the 10th January.
* Regular users must have a limited level of access compared to those who are administrators.
* Site must implement a tiered level of access that prevents regular users from having the same management functionality as an administrator.
* Required to use a Microsoft Access database.
* All user information collected on the website, including new users and product and purchase information must also be stored on a database.
* Website must be developed using ASP .NET framework.
* Products may not be sold to under 18s therefore an extra layer of verification is required to ensure the users are of an appropriate age.

**Project Schedule**