



MURDOCH
UNIVERSITY
PERTH, WESTERN AUSTRALIA

**School of Engineering and
Information Technology**

**ICT286 MAJOR ASSIGNMENT TWO
CHECK LIST**

Group Members (full name and student number):

Member 1: Mitchell Panicciari - 32674186

Member 2: Lachlan Blackhall - 32667253

Tutor's Name: Mohammad Alhabashneh

Assignment Due Date: 7/Nov/2016 12:00PM **Date Submitted:** 7/Nov/2016

Your assignment should meet the following requirements. Please confirm this (by ticking boxes) before submitting your assignment.

- ✓ All details above are complete.
- ✓ The archive file (a zip file) contains the file Assignment2.doc.
- ✓ The archive file contains a sub-directory named "WebApp" which contains all files related to the web application.
- ✓ The archive file contains a sub-directory named "MobileApp" which contains the files for the mobile application.
- ✓ The documentation was prepared according to Documentation Requirements specified in Major Assignment 2's question sheet.
- ✓ This archive file will be submitted to ICT286 Unit LMS.
- ✓ We have kept a copy of this assignment, including this archive file.
- ✓ Our web application is hosted on the server ceto.murdoch.edu.au. Our web application's url is

✓ We have signed the Group Declaration in the next page.

Group Declaration

As a group assignment, each member of the group is expected to make an equal contribution to the assignment and receives the same mark for the assignment.

However, we recognise that on some occasions and due to various reasons, the actual contributions to the assignment from the two members could be unequal despite the best efforts of each member.

In this case, we can still accept your assignment provided that all members of the group reach an agreement on their percentages of contribution to the assignment, and the agreement accurately reflects the real contribution by each member. In such a case, a member's mark is linked to his or her agreed contribution to the assignment and is calculated using the following formula:

$$\text{A member's mark} = \text{minimum (group mark x the member's percentage of contribution x 2, group mark + 10, 100)}$$

On some rare occasions, the two members of the group fail to reach an agreement on their contributions to the assignment. In such a case, in order for your assignment to be marked, each member of the group must complete a detailed *Task Breakdown List* and state his or her own claim of the percentage of contribution to the assignment. Your tutor will then award each member a mark based on his assessment of the quality of the assignment as whole as well as his assessment of that member's contribution to the assignment.

Please complete and sign *one* of the three declarations below:

*We have made an **equal** contribution to this assignment. We understand that each of us will receive the same mark for this assignment.*

Signature (member 1): mpanicciari Date: 06/11/2016

Signature (member 2): lblackhall Date: 06/11/2016

The task description: Your task is to design and implement a web and a mobile application for a fictitious company so that it can conduct its trade over the Internet.

The fictitious company for which your application will be designed must meet all requirements specified in the next section.

You are required to use the following technologies to implement the web and mobile application: HTML5, CSS, JavaScript, PHP, MySQL, and Apache Cordova. You should use Ajax technology to speed up the application and to reduce unnecessary page loading, eg, searching, user authentication, and database update. You must not use any web content management framework/system to create this application unless you have obtained a written approval from the Unit Coordinator.

Discussion of your solution: For our solution we chose to make our whole site a one page application just for ease of use and to cut down on loads times. The navigation is always going to be consistent because we use the one page and have a section inside the body loaded to different HTML using Ajax. The result of our solution does meet our expectations and has come out a lot better than we first expected the simple look of the site allows for users to navigate and find what they want easily.

We believe a strong point of our solution is that it is very easy to add new features as it is very modular our scripts are separated and we are using Ajax to load html into our page without having it refreshed. Almost everything has its own element and container which allows for changing of elements with ease without needing to change a lot.

An improvement that could be made to our solution would be how the layout is we found it difficult to have the login area fit in nicely with the surrounding elements, once you have logged in the way the buttons are aligned does not look as good as it could in our opinion.

Self-diagnosis and evaluation:

Features fully working:

Our solution contains the basic information about the company as created in the fictitious company description, it is accessible via a button on the nav bar this button is named about us and contains all necessary information.

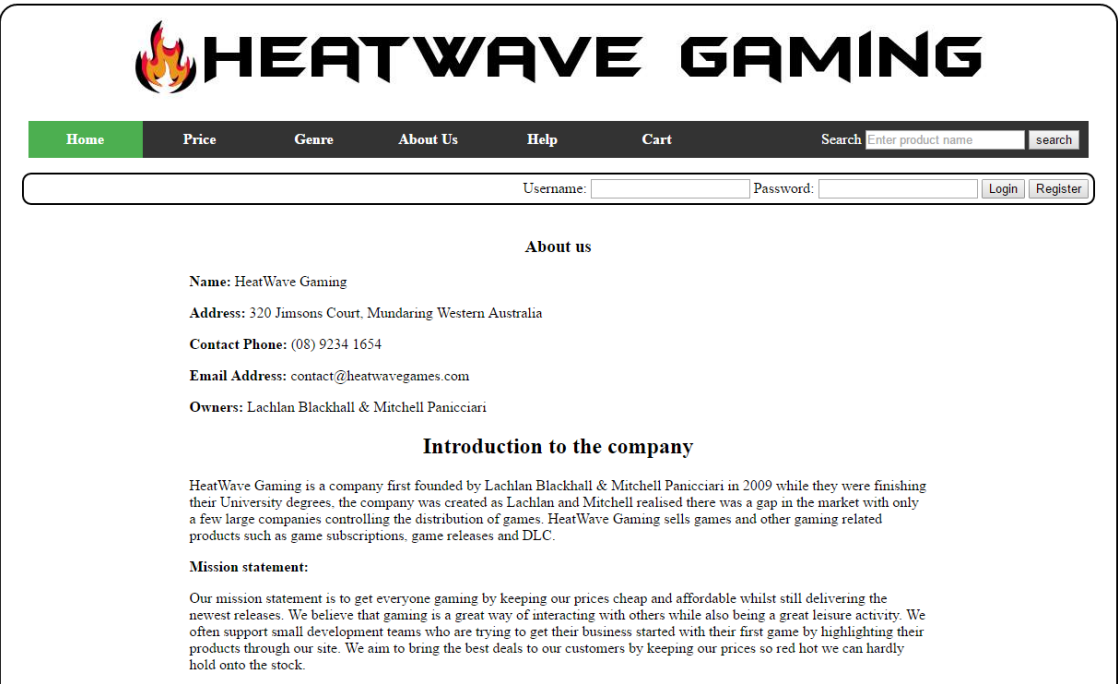
Our navigation system is consistent throughout the whole solution because we only have one page and use Ajax to load in different html elements as the user uses the website.

Our website provides the user with a help button which will open a new tab with a PDF document explaining how to use our website.

Our website offers a sitemap which shows the structure of our site.

Our site implements some of the html5 semantic elements such as header, footer, nav and section to define the overall structure of our web page. We have also used CSS externally to define our styles and visual layout of the solution.

Our website has been primarily tested on the latest version of Google Chrome but it also has full functionality on both the latest versions of Mozilla Firefox and Internet Explorer. Our web page is served through CETO and is therefore using ApacheHTTP and PHP is enabled.

Test documentation for your web application		
Test	Outcome	Evidence(Screenshot)
About Us button displays information about the website	About us button changes content of the container to show information about the company	

Navigation system stays the same throughout

Content is served dynamically through AJAX. In this example price <20 is selected in the first picture and genre racing is selected in the second picture

Home	Price	Genre	About Us	Help	Cart	Search <input type="text" value="Enter product name"/>	search
------	-------	-------	----------	------	------	--	--------

Username:

Password:

Login Register

CounterStrike: Global Offensive
\$15.00
Competitive FPS with an E-Sports following

World of Warcraft 30 Day Sub
\$15.00
The number one fantasy MMORPG created by Blizzard

Runescape 30 day membership
\$15.00
A fantasy MMO, very popular with several versions of the game to play

Minecraft
\$15.00
Block base sandbox game

Home	Price	Genre	About Us	Help	Cart	Search <input type="text" value="Enter product name"/>	search
------	-------	-------	----------	------	------	--	--------

Username:

Password:

Login Register

Forza Horizon 3
\$80.00
Open world roaming racing game, based in Australia

Forza Motorsport 6
\$70.00
Classic track racing game, a lot of cars to upgrade and race

Help button shows page for how to use the site

Help button opens a PDF document in a separate window with information about how our site works

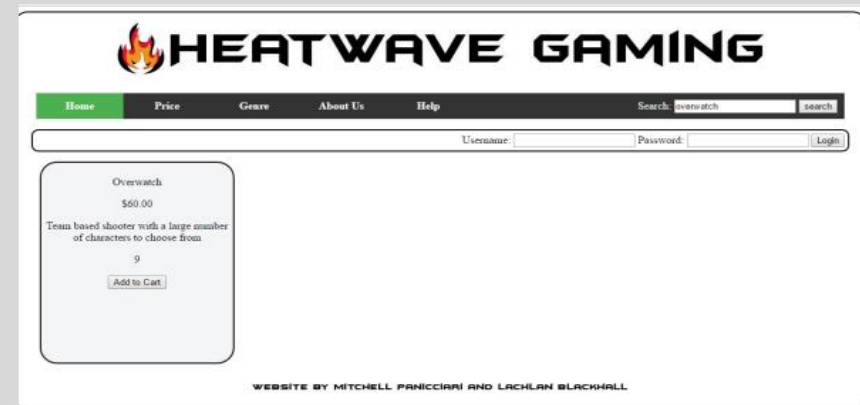
How to use HeatWave Gaming webstore

Searching for products

There is two main ways of searching for products on our website, the first way is via the search bar located on the main navigation bar at the top right of the screen.



In the search bar you can search for anything related to the product you are after, the search will return products which are related to what you searched. For example typing in "Overwatch" will search all the products and find any that match the description or name of "Overwatch". You do not need to complete the word you can also use tags which may be associated with the product such as "Ow".



Site map shows structure of the website	Site map shows how the site is structured	
Page loads on Google Chrome	Page loads on Google Chrome	

Page loads on IE

Page loads on IE

The screenshot shows the HeatWave Gaming website in an Internet Explorer browser window. The address bar displays the URL `http://ceto.murdoch.edu.au/~32667253/assignment2/index.html`. The browser's title bar indicates the page is titled "HeatWave Gaming". The website's header features a logo with a flame icon and the text "HEATWAVE GAM". Below the header is a navigation menu with links: Home, Price, Genre, About Us, Help, and Cart. A login section is present with fields for "Username:" and "Password:". The main content area displays three product listings, each with a title, price, description, a quantity of 9, and an "Add to Cart" button.

Product Name	Price	Description	Quantity	Action
CounterStrike: Global Offensive	\$15.00	Competitive FPS with an E-Sports following	9	Add to Cart
CounterStrike: Source	\$20.00	Precursore to CS:GO, an FPS that still has a cult following	9	Add to Cart
World of Warcraft 30 Day Sub	\$15.00	The number one fantasy MMORPG created by Blizzard	9	Add to Cart

Page loads on Mozilla


Page loads on Mozilla

HeatWave Gaming

HeatWave Gaming

ceto.murdoch.edu.au/~32667253/assignment2/index.html

Search



HEATWAVE GAMING

Home

Price

Genre

About Us

Help

Cart

Username:

Password:

CounterStrike: Global Offensive

\$15.00

Competitive FPS with an E-Sports following

9

Add to Cart

CounterStrike: Source

\$20.00

Precursore to CS:GO, an FPS that still has a cult following

9

Add to Cart

World of Warcraft 30 Day Sub

\$15.00

The number one fantasy MMORPG created by Blizzard

9

Add to Cart

User searches valid search

Products are displayed depending on search criteria

Home	Price	Genre	About Us	Help	Cart	Search <input type="text" value="overwatch"/>	search
------	-------	-------	----------	------	------	---	--------

Username:

Password:

LoginRegister

Overwatch

\$60.00

Team based shooter with a large number of characters to choose from

9

Add to Cart

Home	Price	Genre	About Us	Help	Cart	Search <input type="text" value="minecraft"/>	search
------	-------	-------	----------	------	------	---	--------

Username:

Password:

LoginRegister

Minecraft

\$15.00

Block base sandbox game

10

Add to Cart

		<div> <div> Home Price Genre About Us Help Cart </div> <div> Search ow search </div> </div> <div> Username: Password: Login Register </div> <div> <div> <div>CounterStrike: Global Offensive</div> <div>\$15.00</div> <div>Competitive FPS with an E-Sports following</div> <div>9</div> <div>Add to Cart</div> </div> <div> <div>CounterStrike: Source</div> <div>\$20.00</div> <div>Precursore to CS:GO, an FPS that still has a cult following</div> <div>9</div> <div>Add to Cart</div> </div> <div> <div>World of Warcraft 30 Day Sub</div> <div>\$15.00</div> <div>The number one fantasy MMORPG created by Blizzard</div> <div>9</div> <div>Add to Cart</div> </div> <div> <div>Overwatch</div> <div>\$60.00</div> <div>Team based shooter with a large number of characters to choose from</div> <div>9</div> <div>Add to Cart</div> </div> </div> <div> <div> <div>Dark Souls III</div> <div>\$50.00</div> <div>Action game based in medieval fantasy known for its difficulty and punishing fights.</div> <div>8</div> <div>Add to Cart</div> </div> <div> <div>Rocket League</div> <div>\$15.00</div> <div>Soccer meets driving once again in the long-awaited, physics-based multiplayer-focused sequel to Supersonic Acrobatic Rocket-Powered Battle-Cars!</div> <div>8</div> <div>Add to Cart</div> </div> <div> <div>Just Cause 3</div> <div>\$40.00</div> <div>The Mediterranean republic of Medici is suffering under the brutal control of General Di Ravello, a dictator with an insatiable appetite for power. Enter Rico Rodriguez, a man on a mission to destroy the General's hold on power by any means necessary.</div> <div>8</div> <div>Add to Cart</div> </div> <div> <div>Bloodbourne</div> <div>\$25.00</div> <div>Bloodborne follows the player character, the Hunter, through the fictional decrepit Gothic, Victorian era inspired city of Yhamam, whose inhabitants have been afflicted with an abnormal blood-borne disease.</div> <div>8</div> <div>Add to Cart</div> </div> </div>
User tries to search with empty field	No action is performed and the page does not change	

Users last search entry is saved

Users last search value is saved and kept even if they go to another option

Home	Price	Genre	About Us	Help	Cart	Search destiny	search
------	-------	-------	----------	------	------	----------------	--------

Username:

Password:

Login

Register

CounterStrike: Global Offensive

\$15.00

Competitive FPS with an E-Sports following

9

CounterStrike: Source

\$20.00

Precursore to CS:GO, an FPS that still has a cult following

9

World of Warcraft 30 Day Sub

\$15.00

The number one fantasy MMORPG created by Blizzard

9

Overwatch

\$60.00

Team based shooter with a large number of characters to choose from

9

Home	Price	Genre	About Us	Help	Cart	Search destiny	search
------	-------	-------	----------	------	------	----------------	--------

Username:

Password:

Login

Register

Destiny

\$50.00

Sci Fi shooter in shared world with various classes and weapons to play with.

8

Add to Cart

User uses price button on the menu to show products

Different products are displayed depending on the button pressed, <20 pressed and >50 pressed

Home	Price	Genre	About Us	Help	Cart	Search <input type="text" value="dw"/>	search
------	-------	-------	----------	------	------	--	--------

Username:

Password:

LoginRegister

CounterStrike: Global Offensive

\$15.00

Competitive FPS with an E-Sports following

9

Add to Cart

World of Warcraft 30 Day Sub

\$15.00

The number one fantasy MMORPG created by Blizzard

9

Add to Cart

Runescape 30 day membership

\$15.00

A fantasy MMO, very popular with several versions of the game to play

9

Add to Cart

Minecraft

\$15.00

Block base sandbox game

10

Add to Cart

Bioshock

\$15.00

You are the only survivor in a North Atlantic plane crash, floating in the icy water as the fuselage sinks beneath you. Your only hope is a lighthouse in the distance, inside of which sits a submersible capsule.

8

Add to Cart

Rocket League

\$15.00

Soccer meets driving once again in the long-awaited, physics-based multiplayer-focused sequel to Supersonic Acrobatic Rocket-Powered Battle-Cars!

8

Add to Cart

Username: Password:

<p>Overwatch</p> <p>\$60.00</p> <p>Team based shooter with a large number of characters to choose from</p> <p>9</p> <p>Add to Cart</p>	<p>Call of Duty: Infinite Warfare</p> <p>\$55.00</p> <p>A futuristic take on the classic franchise</p> <p>8</p> <p>Add to Cart</p>	<p>Forza Horizon 3</p> <p>\$80.00</p> <p>Open world roaming racing game, based in Australia</p> <p>9</p> <p>Add to Cart</p>	<p>No Mans Sky</p> <p>\$50.00</p> <p>Space based exploration game</p> <p>6</p> <p>Add to Cart</p>
<p>Forza Motorsport 6</p> <p>\$70.00</p> <p>Classic track racing game, a lot of cars to upgrade and race</p> <p>9</p> <p>Add to Cart</p>	<p>Battlefield 1</p> <p>\$60.00</p> <p>Large scale shooter based on WW1</p> <p>9</p> <p>Add to Cart</p>	<p>Fifa 17</p> <p>\$60.00</p> <p>One of the worlds most popular sports series based around soccer and its various championships.</p> <p>Add to Cart</p>	<p>Destiny</p> <p>\$50.00</p> <p>Sci Fi shooter in shared world with various classes and weapons to play with.</p> <p>8</p> <p>Add to Cart</p>

User uses genre button on the menu to show products

Different products are displayed depending on the button pressed, FPS pressed and Fighter pressed

HomePriceGenreAbout UsHelpCart

Search

Username: Password:

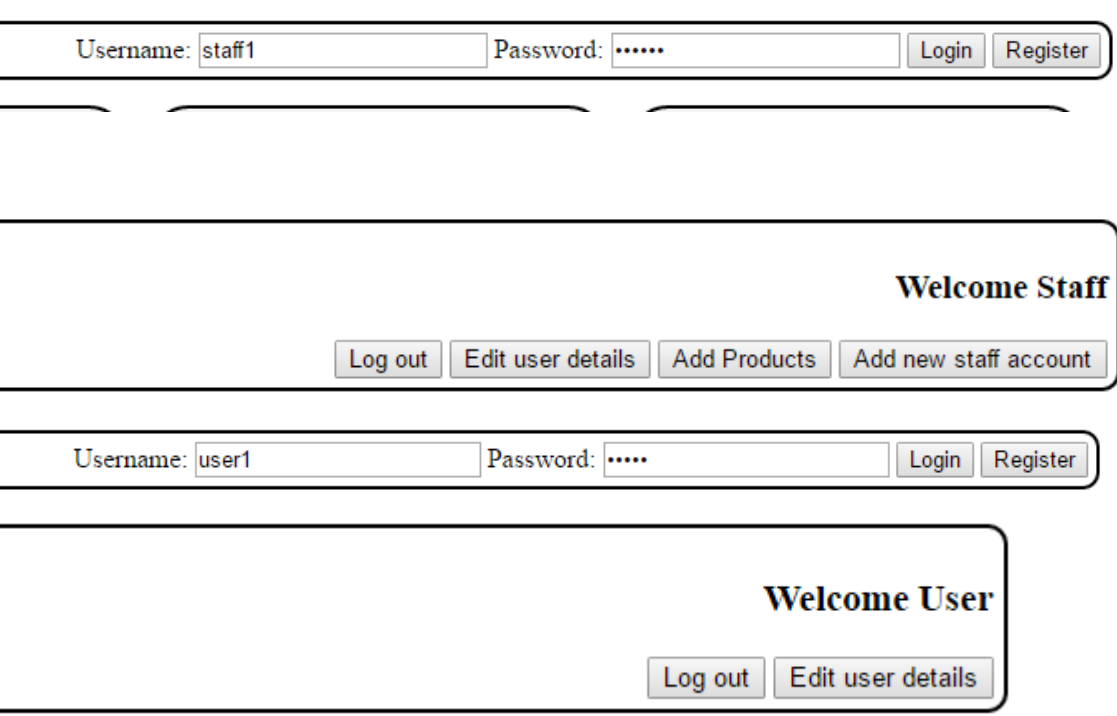
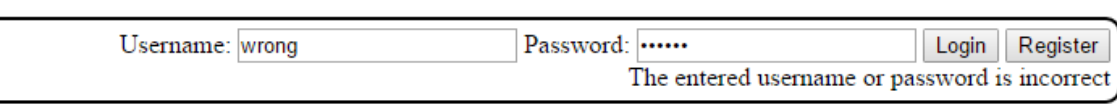

Street Fighter V

\$40.00

A 2D fighting game with a wide range of characters to choose from.

8

		<div><div>HomePriceGenreAbout UsHelpCart</div><div>Search<input type="text" value="ow"/>search</div><div>Username: <input type="text"/> Password: <input type="text"/> <input type="button" value="Login"/> <input type="button" value="Register"/></div><div><div><div>CounterStrike: Global Offensive \$15.00 Competitive FPS with an E-Sports following 9 <input type="button" value="Add to Cart"/></div><div>CounterStrike: Source \$20.00 Precursore to CS:GO, an FPS that still has a cult following 9 <input type="button" value="Add to Cart"/></div><div>Overwatch \$60.00 Team based shooter with a large number of characters to choose from 9 <input type="button" value="Add to Cart"/></div><div>Call of Duty: Infinite Warfare \$55.00 A futuristic take on the classic franchise 8 <input type="button" value="Add to Cart"/></div><div>Battlefield 1 \$60.00 Large scale shooter based on WW1 9 <input type="button" value="Add to Cart"/></div><div>Destiny \$50.00 Sci Fi shooter in shared world with various classes and weapons to play with. 8 <input type="button" value="Add to Cart"/></div><div>Star Wars: Battlefront \$50.00 Battlefront is an action shooter game based on the star wars series with large scale ground battles taking place across various movie locations. 8 <input type="button" value="Add to Cart"/></div><div>halo 5 \$50.00 Follows two fire teams of human super soliders 7 <input type="button" value="Add to Cart"/></div></div></div></div>
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User enters correct login information	User is able to login to the website and access other features	
User enters incorrect login information	User is unable to login to the website and is alerted that they have entered it incorrectly	
User presses log out button	User is logged out and the login screen is shown	


User presses edit user details button	USer is displayed with a form to edit their information	<hr/> <p>Username: <input type="text"/></p> <p>Old password: <input type="text"/></p> <p>New password: <input type="text"/></p> <p>Name: <input type="text"/></p> <p>Contact Number: <input type="text"/></p> <p>Address: <input type="text"/></p> <p>Email: <input type="text"/></p> <p><input type="button" value="Submit details"/></p>
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Staff presses add products button	Add products form is shown	<div> <div>Name: <input type="text"/></div> <div>Price: <input type="text"/></div> <div>Description: <input type="text"/></div> <div>Genre: <input type="text"/></div> <div>Quantity: <input type="text"/></div> <div>Rating: <input type="text"/></div> <div>Image: <input type="text"/></div> <div>Tags: <input type="text"/></div> <div>Submit details</div> </div>
User edits their details and submits	Their details are changed in the database	
Staff enters product information and submits	The new product is placed into the database and shown when searching for products	

Registered user adds product to their cart	The added product will show up in their cart	<div><div>Cart</div><div>Clear cart</div><div>CounterStrike: Source \$20.00</div></div>	
--	--	---	--

User presses the home button

User is taken back to the home page which displays all of the products

 **HEATWAVE GAMING**

HomePriceGenreAbout UsHelpCart

Search

CounterStrike: Global Offensive

\$15.00

Competitive FPS with an E-Sports following

9

Add to Cart

CounterStrike: Source

\$20.00

Precursore to CS:GO, an FPS that still has a cult following

9

Add to Cart

World of Warcraft 30 Day Sub

\$15.00

The number one fantasy MMORPG created by Blizzard

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Add to Cart

Overwatch

\$60.00

Team based shooter with a large number of characters to choose from

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Add to Cart

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\$55.00

A futuristic take on the classic franchise

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Add to Cart

Runescape 30 day membership

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A fantasy MMO, very popular with several versions of the game to play

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\$80.00

Open world roaming racing game, based in Australia

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No Mans Sky

\$50.00

Space based exploration game

6

Add to Cart

Forza Motorsport 6

\$70.00

Minecraft

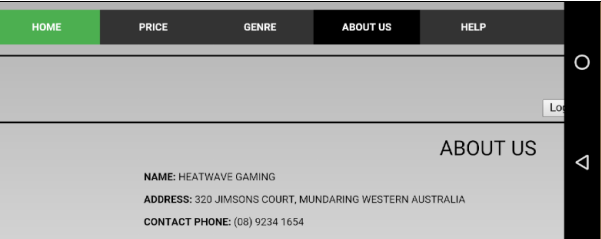
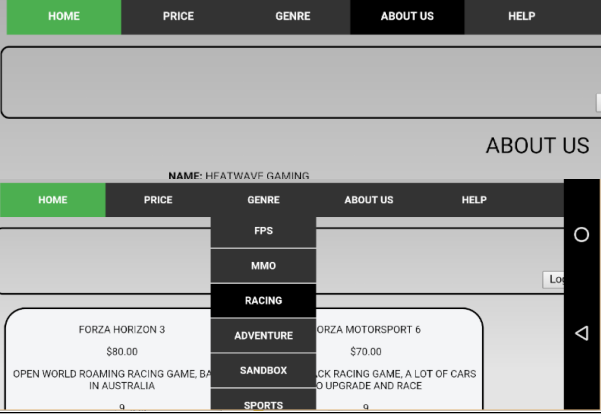
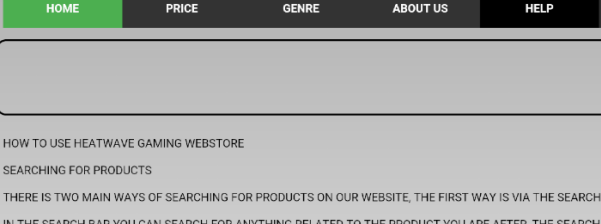
\$15.00

Battlefield 1

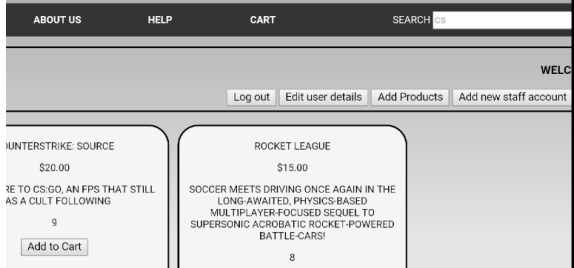
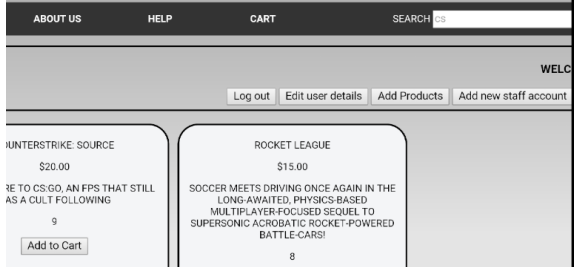


\$60.00

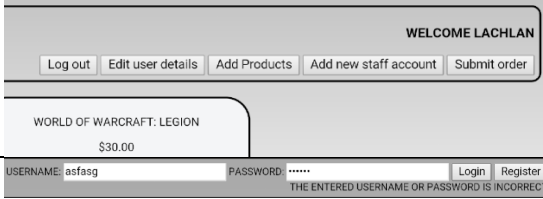

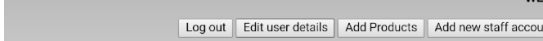

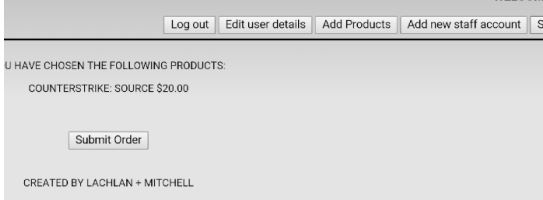
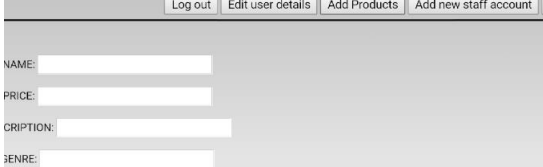
Fifa 17

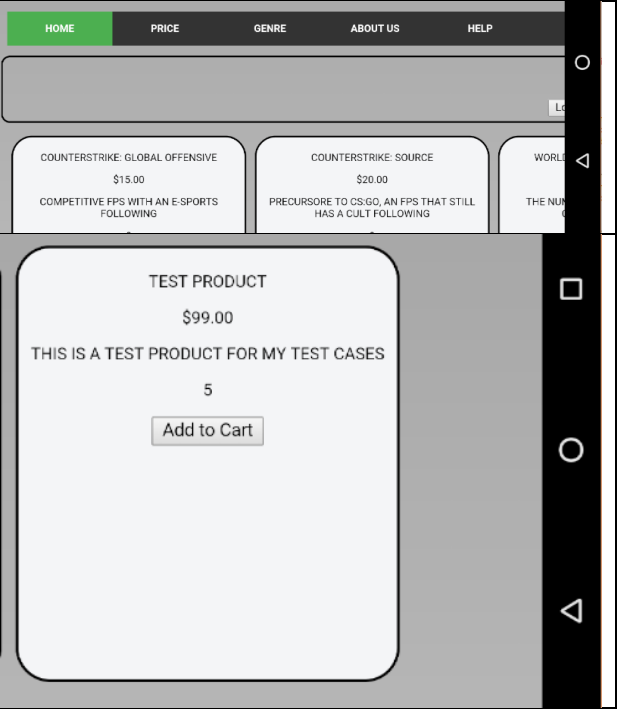
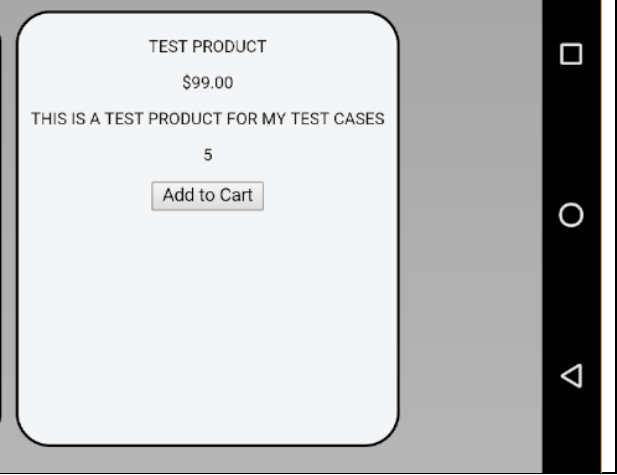
\$60.00


Test documentation for your mobile application:		
Purpose of the test	Outcome	Evidence(Screenshot)
About Us button displays information about the website	Button displays about us page	
Navigation system stays the same throughout	As the content is served on a single page through Ajax the nav system is not affected	
Help button shows page for how to use the site	The help content is loaded in place of the search data	

Site map shows structure of the website	The site map is loaded, the user can return to the app by tapping their back button	<p>This XML file does not appear to have any style information associated with it. The document tree is shown below.</p> <pre> <?xml version="1.0" encoding="UTF-8" standalone="yes" ?> <urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.sitemaps.org/schemas/sitemap/0.9 http://www.sitemaps.org/schemas/sitemap/0.9/sitemap.xsd"> <url> <loc> http://ceto.murdoch.edu.au/~32667253/assignment2/index.html </loc> <lastmod>2016-11-06T16:04:04+00:00</lastmod> </url> <url> <loc> http://ceto.murdoch.edu.au/~32667253/assignment2/help.pdf </loc> <lastmod>2016-11-06T15:59:15+00:00</lastmod> </url> </urlset> </pre>
Page loads on Android	The app loads on a Nexus 6 emulator running android, the normal page can also be viewed via a web browser.	<p>Android Emulator - Nexus6.5584</p>
User searches valid search	The search function displays results for what the user searches	

User tries to search with empty field	If the user tries to search with a blank field nothing shows and the results of the last search are kept	
Users last search entry is saved	As can be seen in the same picture as before the last search is shown in a faded grey when the search bar is blank	
User uses price button on the menu to show products	When the user clicks a price button only results matching that condition are returned	
User uses genre button on the menu to show products	When the user clicks on a genre button only products related to that genre is shown	

User enters correct login information	When the user enters the correct login information they are logged in and given the appropriate functions	
User enters incorrect login information	The app displays a message informing the user incorrect information was entered	
User presses log out button	The app refreshes and displays the login fields	
User presses edit user details button	The product display section is filled with the fields to edit user details	
User presses go to cart button	If the user has products in their cart it takes them to the confirmation screen, if not it prompts them to add products	
User presses add products button	The app loads the menu to add product details	

User edits their details and submits	The details are saved and the user is returned to the home screen	
User enters product information and submits	The product information is saved and the app refreshes to show the home screen with the new product	

Registered user adds product to their cart	Product is viewable in the cart menu option	
User presses the home button	App refreshes to display basic product view page	