Assignment 1

- The chosen system

The chosen system for this assignment is a website, more specifically a web shop, which is the digital counterpart of a real-world shop in London, called Orcs Nest (https://orcsnest.com/). This "specialist games shop", as the site reads, was established in 1987 by Peter Wooding, who is also the owner of the website. The shop deals with board games, roleplaying games, collectible card games, magazines, novels, collectible miniature games, standalone miniatures and all kinds of accessories for the aforementioned products, like twelve-sided dices, sprays, paints and various tools for assembling and painting miniatures, and so on. There is also a submenu dedicated to shoutouts to DIY roleplaying clubs. Wayback Machine (Internet Archive, 2020) [i]indicates that the site seems to have been created in 1999, and it has been mostly unchanged in its design since as early as 2003, even though the sold products are recent and up to date, indicating that the website is not abandoned. The reason this system has been chosen for this assignment, is because there is plenty of room for improvement and because it serves as an excellent example for many common design flaws, such as a vertical menu, a lack of change in colour or some other kind of feedback when one clicks a submenu, and overall confusing structure. The site does not have a separate mobile version; when you visit it from a smartphone, it just gets scaled down in its entirety, in order to fit the phone's screen. This makes it impossible to conveniently navigate through it on a phone, given the already small menu buttons become extremely tiny, but this should not be all that surprising, since the standards regarding mobile sites were different back in 2003. The mobile version, however, is merely a question of detail, since the usability testing is going to take place on desktop PCs and a laptop, running either Mozilla Firefox, or Google Chrome.

- The Usability Test Plan

The objectives of this test are:

- To measure the length of time it takes to perform certain tasks
- To verify the user-friendliness of the website
- To check how satisfied users are with the site
- To hear feedback and suggestions for the improvement of the site

The equipment used:

- Laptop or desktop PC (1 laptop for #4 and #5, and separate desktop PCs for #1, #2 and #3)
- Either Google Chrome or Mozilla Firefox for opening the website
- OBS Studio to record the screen, as well as the speech of the testers
- Figma for creating the redesign mockups
- Google Forms for recording task ratings.

The participants:

Participant	Gender	Age	Occupation	Skill level
#1	Male	25	Full Stack Developer	expert
#2	Male	24	Customer Service Representative	expert
#3	Male	27	Concierge	casual
#4	Male	21	Student	inexperienced
#5	Male	36	Fitness Instructor	casual

The procedure:

Each participant was given a shopping list with the following three items:

- Star Wars Outer Rim (Board Game)
- Henry V Mounted and Command (Miniature)
- 12-Sided Dice

The items are all present on the site, although not necessarily available. Their task was to find out if an item was in stock, and if it was, they had to add them to their basket. The maximum time limit for each item was 170 seconds. If they did not manage to finish the task by then, it would be considered a failure. The last task was to proceed to checkout, choose from delivery options and proceed up until the page where they would have to fill in their private details. The maximum time limit for this was 90 seconds. This makes the maximum time limit of the total test exactly 10 minutes.

There were slight changes in the names of the items compared to how they appear on the site, in order to prevent the participants from finding the items by mindlessly copying and pasting them in the search bar. This was done to test the search algorithm of the site, as well as to encourage them to try the menus.

Metrics

- Task completion rates
- Time spent on each task
- Task ratings

- <u>Usability Test Results</u>

User ID	Task Number	Task Description	Elapsed Time (s)	Notes
#1	1	Star Wars Outer Rim	59	Slight difficulty using search
#1	2	Henry V Mounted and Command	24	Unsure if the item got added to the basket
#1	3	12-Sided Dice	125	Difficulty using Search, unsure if he found the right item due to the lack of image
#1	4	Checkout	69	Confused why the UK delivery cost is still displayed after choosing another country for the delivery destination
#2	1	Star Wars Outer Rim	33	Slight difficulty using search
#2	2	Henry V Mounted and Command	35	Slight difficulty using search, unsure if he found the right item due to the lack of image, unsure if the item got added to the basket
#2	3	12-Sided Dice	170+	No success through search or menus
#2	4	Checkout	85	Unsure of delivery cost
#3	1	Star Wars Outer Rim	170+	No success through search or menus

#3	2	Henry V Mounted and Command	125	
#3	3	12-Sided Dice	170+	No success through search or menus
#3	4	Checkout	90+	Ran out of time
#4	1	Star Wars Outer Rim	152	Slight difficulty using search
#4	2	Henry V Mounted and Command	25	
#4	3	12-Sided Dice	170+	No success through search or menus
#4	4	Checkout	64	
#5	1	Star Wars Outer Rim	170+	No success through search or menus
#5	2	Henry V Mounted and Command	22	
#5	3	12-Sided Dice	170+	No success through search or menus
#5	4	Checkout	64	

- Basic Statistical Analysis

The following three tables are going to include calculations carried out using formulas for effectiveness and time-based efficiency, as well as a Likert scale for the participants' ratings (Mifsud, 2020).

Task Completion Rates

Participant	Task 1	Task 2	Task 3	Task 4	Total Success by Participant	Completion Rates by Participant
#1	Success	Success	Success	Success	4	100%
#2	Success	Success	Failure	Success	3	75%
#3	Failure	Success	Failure	Failure	1	25%
#4	Success	Success	Failure	Success	3	75%
#5	Failure	Success	Failure	Success	2	50%
Total Success by Task	3	5	1	4		
Completion Rates by Task	60%	100%	20%	80%		

Time on Tasks

Time on Task (s)	Task 1	Task 2	Task 3	Task 4	Total time for each participant	Avg. time for each participant
#1	59	24	125	69	277	69.25
#2	33	35	170+	85	323	80.75
#3	170+	125	170+	90+	555	138.75
#4	152	25	170+	64	411	102.75
#5	170+	22	170+	64	426	106.5
Total time for each task	584	231	805	372		
Avg. time for each task	116.8	46.2	161	74.4		

Task Ratings Table

The participants have been asked to rate each of the tasks by completing a Google form.

Usability Testing for Orcs Nest

Please rate your satisfaction with each of the tasks in this test.

Task 1 (Star Wars Outer Rim)

1	2	3	4	5
○	○	○	○	○

Task 2 (Henry V Mounted and Command)

1	2	3	4	5
○	○	○	○	○

Task 3 (12-Sided Dice)

1	2	3	4	5
○	○	○	○	○

Task 4 (Checkout)

1	2	3	4	5
○	○	○	○	○

Submit

5 answers

Receiving Answers

Task 1 (Star Wars Outer Rim)

5 replies

Value	Count
1	2 (40%)
2	1 (20%)
3	0 (0%)
4	2 (40%)
5	0 (0%)
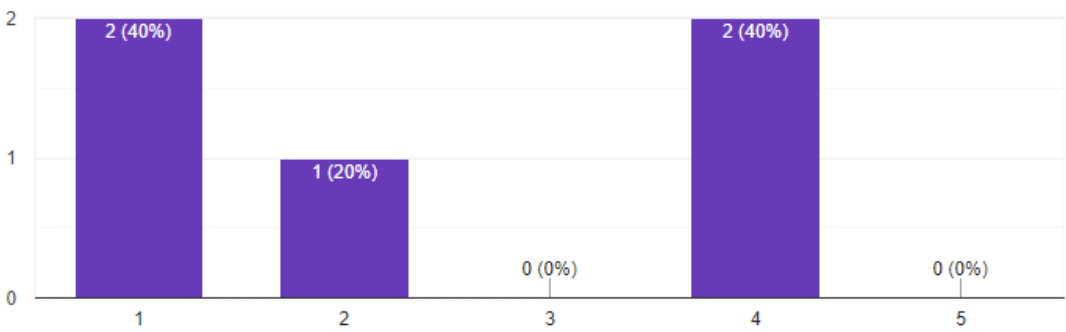
Task 2 (Henry V Mounted and Command)

5 replies

Value	Count
1	0 (0%)
2	1 (20%)
3	3 (60%)
4	1 (20%)
5	0 (0%)
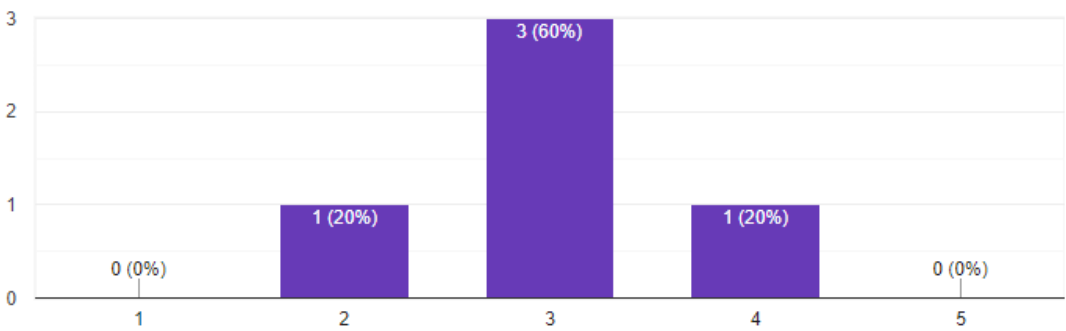
Task 3 (12-Sided Dice)

5 replies

Rating	Count
1	4 (80%)
2	1 (20%)
3	0 (0%)
4	0 (0%)
5	0 (0%)
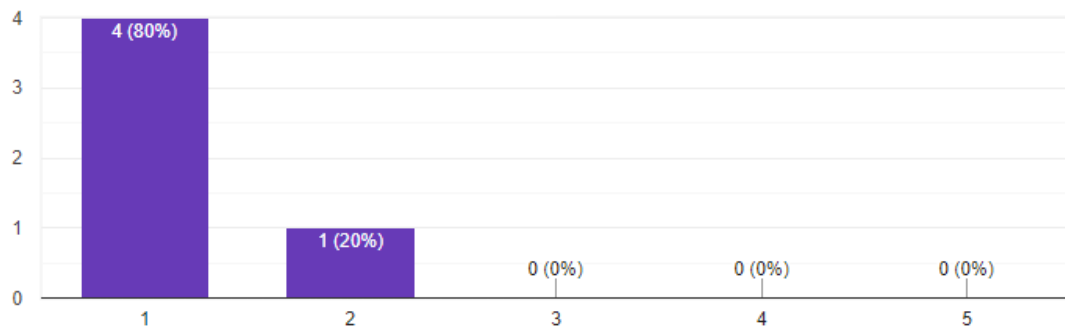
Task 4 (Checkout)

5 replies

Rating	Count
1	0 (0%)
2	1 (20%)
3	4 (80%)
4	0 (0%)
5	0 (0%)
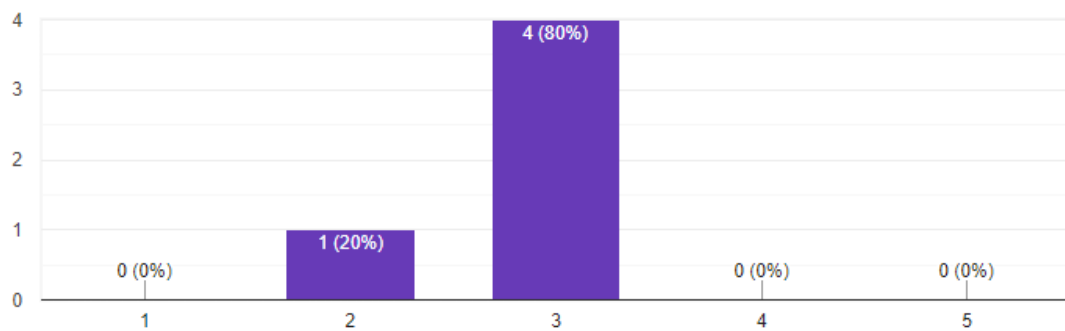
	Mean Ratings	Percentage Agree
Task 1	2.4	40%
Task 2	3.0	20%
Task 3	1.2	0%
Task 4	2.8	0%
Overall Satisfaction	2.35	

- Task 2 has the highest completion rate with 100%
- Task 3 has the lowest completion rate with 20%
- Task 2 has the lowest average time by task
- Task 3 has the highest average time by task
- Task 2 has the highest mean rating
- Task 3 has the lowest mean rating
- Task 1 has the highest percentage agree
- Task 3 and 4 have the lowest percentage agree

From these metrics, we can conclude that Task 2 was clearly the easiest and most popular task among all of them, while Task 3 was the hardest and least popular by far.

• Findings and Recommendation

Issue	Recommendation	Severity Ranking	Ease of Fix Ranking
Unsure if the item got added to the basket	A basket icon with a counter should always be visible	2	2
Difficulty using search	Write a better search algorithm	3	1
Difficulty using menus	Complete redesign	4	3
Unsure if they found the right item due to the lack of image	Every product should have an image	3	1
Unsure of delivery cost	Once the delivery destination is selected, only display the one cost which applies	2	0

The severity ranking and ease of fix ranking was decided using Rubin (2008) as a reference.

We can see in the table above that the site suffers from serious design issues, like a menu system which is hard to follow, not properly categorized and encouraging users to use the search option instead, which is, however, very strict and only considering item titles but not their description, and those titles are sometimes rather cryptic, like D12 for a twelve-sided dice. The results also do not have a picture next to them, instead, you have to individually click on them to be able to find a picture, and even then, they might not have it. This makes it impossible for a more inexperienced user to find a specific item, and makes it frustrating even for a more experienced user, to have to do all these workarounds for a task that should be simple and convenient. It is also worth noting, that accessing the Miniatures menu results in a message saying the site currently does not sell miniatures online, even though if you know the exact product you are looking for, you can still find it through the search bar, and order it. This applies to Henry V, the miniature in Task 2 as well. Assuming the seller has good reason for not wanting to sell miniatures online, this would likely cause disappointment in a customer who finds one through search, and thus assumes he would receive it. There are also some minor issues in comparison, like no indication which submenu you are on, cryptic menu titles, inability to sort lists of items by certain criteria, unprofessional and dated look and a lack of proper, clear feedback when performing actions such as adding items to the basket or setting a delivery destination.
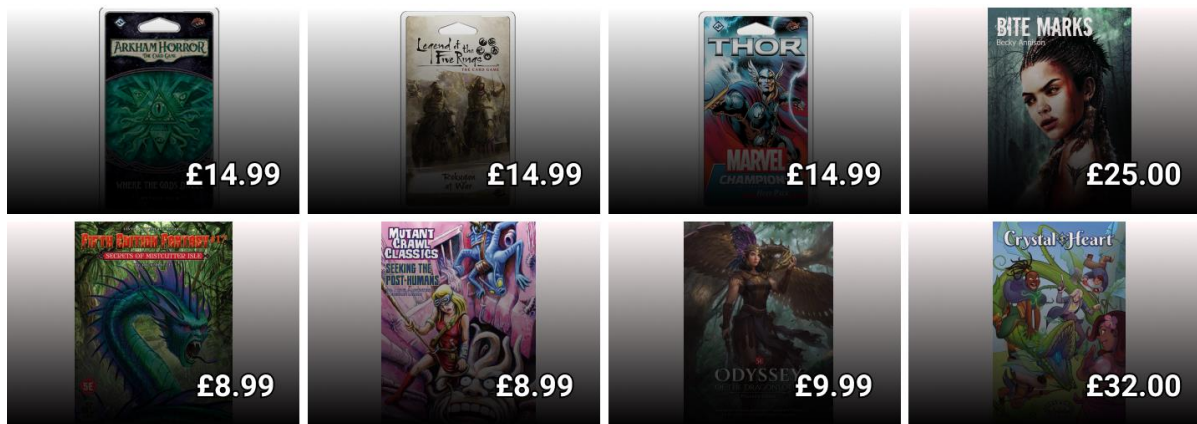
• Redesign of the User Experience for the chosen system

The following redesigns were made with Figma.

LATEST RELEASES

£14.99	£14.99	£14.99	£25.00
£8.99	£8.99	£9.99	£32.00

All artworks were taken from orcsnest.com and are the belongings of their respective owners, they only serve illustrative purposes here.

This is the redesign of the main page. The menu has been changed from vertical to horizontal. The buttons have become larger, and the menu titles are now more expressive. The needlessly large number of menus have been reorganised with some of them put under a common menu as submenus. There is a shopping cart icon in the top right corner which is always going to be there whichever page we are on, along with the number of items in it. The latest releases are now displayed with pictures and clearly visible prices and there are initially eight of them which fit in the screen but more if you scroll further down. If you click on one of them, it takes you to the details of that item.

Where the Gods Dwell: Arkham Horror LCG
The Fifth Mythos Pack in The Dream-Eaters Cycle for Arkham Horror LCG

£14.99

Release date:
06 March 2020

Publisher:
Fantasy Flight Games

Description:

Come face to face with madness in Where the Gods Dwell, the fifth Mythos Pack in The Dream- Eaters cycle for Arkham Horror: The Card Game! After your seemingly endless journey across the Dreamlands, you have made your way to the land of Leng, an icy wasteland where you believe the peak of unknown Kadath resides. All the while, a presence taunts you, gnawing at your insides— a wordless voice you cannot hear, but feel within the confines of your mind. A presence that is waiting for you.

Where the Gods Dwell is Scenario 4–A of The Dream-Quest campaign. This scenario can be played on its own in Standalone Mode or combined with the other expansions in The Dream- Eaters cycle to form a larger four-part or eight-part campaign. After the events of Dark Side of the Moon, you have finally made your way to lost Kadath, where Nyarlathotep is waiting for a battle that will force you to face deceit, lies, and shifting reality. If you can somehow draw him out, expose him, you may stand a chance, but how do you fight an enemy you cannot understand?

This is not a standalone product. A copy of the Arkham Horror: The Card Game Core Set and The Dream-Eaters deluxe expansion are required to play.

ORDER

All artworks were taken from orcsnest.com and are the belongings of their respective owners, they only serve illustrative purposes here.

From top to bottom there is the title of the product, the system it belongs to, its description and an order button highlighted with a friendly green colour. On the left there is the picture of the product, the release date and the name of the publisher.

	ALL ITEMS	BOARD GAMES	MAGAZINES & NOVELS	MINIATURES	CARD GAMES	ACCESSORIES	INFO	COMMUNITY

	Title ⇅	Publisher ⇅	Price ⇅	Availability ⇅	Release date ⇅
	Star Wars: The Card Game (T.O.S.)	Fantasy Flight Games	£36.99	Not in stock	18 December 2012
	Netrunner LCG 2017 Runner World Championship Deck (T.O.S.)	Fantasy Flight Games	£14.99	Not in stock	25 September 2018
	Netrunner LCG 2017 Corp World Championship Deck (T.O.S.)	Fantasy Flight Games	£14.99	Not in stock	25 September 2018
	Marvel Champions: The Green Goblin Scenario Pack	Fantasy Flight Games	£19.99	In stock	23 December 2019

All artworks were taken from orcsnest.com and are the belongings of their respective owners, they only serve illustrative purposes here.

Going to one of the Card Games categories brings us to this page. The Card Games menu button is highlighted with an orange colour. There are a handful of items displayed and more if you scroll down. The double arrows next to the properties of the items signify that you can sort them by whatever property you like. Clicking the arrows sorts them in ascending order, clicking it again switches to descending. The availability is clearly stated as well, to avoid confusion.

References

Internet Archive, 2020. *Wayback Machine.* [Online]
Available at: https://web.archive.org/web/2019*/orcsnest.com
[Accessed 06 03 2020].

Mifsud, J., 2020. *Usability Geek.* [Online]
Available at: https://usabilitygeek.com/usability-metrics-a-guide-to-quantify-system-usability/
[Accessed 10 03 2020].

Rubin, J. and Chisnell, D., 2008. Handbook of usability testing: how to plan, design and conduct effective tests. John Wiley & Sons.