Exploring Darknet Marketplaces

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Assignment Purpose

- Understand the difference between the surface web, the deep web, and the dark web
- Explore alternative ways of accessing the Internet and finding content
- Investigate the functioning of darknet marketplaces and the types of goods and services exchanged.

Materials Needed

- A machine connected to the Internet (preferably a laptop or desktop)
- The Brave browser with Tor enabled

Assignment

Your assignment is in two parts. For Part I, read the document "Surface Web vs. Deep Web vs. Dark Web" and answer the questions. In Part II, use the "Brave and Tor Installation Instructions" to prepare and then answer the questions. You can answer the questions directly on this page if you wish. Please follow the same standard in presenting your answers, including screenshots. Be neat. Make sure the screenshots are large enough f

or me to evaluate.

Part I

1. What is the difference between the surface web, the deep web, and the dark web? **15 pts.**
   The surface web is comprised of billions of statically linked HTML web pages, which are normally stored as files in searchable databases over the HTTP protocol. The web browser applications that can be accessed through the surface web, are google, chrome, safari, and internet explorer. These search engines scan the surface web and utilize the links on the static websites to go through it to build a composite index, which allows

these webpages to be located. User on the surface web are normally people, who abide by the law and are making daily searches on the internet, such as YouTube.

The deep web however cannot be accessed through traditional search engines, the reason why, is that the deep web is excluded from formal search engines, due to their readability, dynamic nature and the explicated content that is shown. The reason that these issues occurred on the deep web, is that the readability aspect has to do with the different file types. While the dynamic nature has to do with the consistent content updates. Furthermore, the deep web does not have static URL links, and can be only accessed through queries of logging into a account with a username and password to view data.

The Dark web is however much more different then both the surface web and the deep web. The reason behind this, is that the dark web is made from a collection of networks and technologies that operate within a protocol layer that is displayed onto the conventional internet. Furthermore, the technology that is used on the dark web, ensure that the IP address of the user can stay disguised and there identity remains anonymous, by using a series of computers to route users.

2. What are some differences between the *users* of the surface web, deep web, and dark web? **15 pts.**

The users on the surface web, are your law-abiding citizens, who are making searches about topics they are interested about, or going to apps such as YouTube to watch something. Users on

the deep web are more of your teleological people, who are knowledgeable about common research techniques, experimenting with different combinations, and the use of usernames and passwords to access the website. Dark web individuals are those who search the dark web for illegal activity and are normally your criminal individuals. However not all dark web individuals fall under this category, some users wish to hide their identities and locations due to fear of violence or political relations.

3. What space in the digital environment likely has more content - the surface web or the deep web? **5 pts.**
The deep web has more content, the reason behind this claim is that the deep web contains email information, online banking information, and Netflix credentials, that can only be accessed by individuals, with the proper login credentials. Individuals use the deep web every single day without knowing, such on apps of social media, for example Facebook, twitter, Instagram, and snapchat which all include login credentials to access.

4. What are some challenges the authors discuss concerning the deep web? **15 pts.**
The challenges that are faced with the deep web, is the searchability of its contents. The reason this occurs, is that vast amounts of documents are invisible to standard search engines, which makes users miss out on very important content, that is legal. Other issues that occur in the deep web, is that there are search engines that have been developed, but are only occupied by academic and business use, which gives other individuals a disadvantage. I feel like this is completely wrong, because everyone should have access to material that is free of use to everyone no matter who they are and be able to get there easily. I feel that there should be a deep web search engine for everyone on the internet, no matter if they are not in a business or an academic institution.
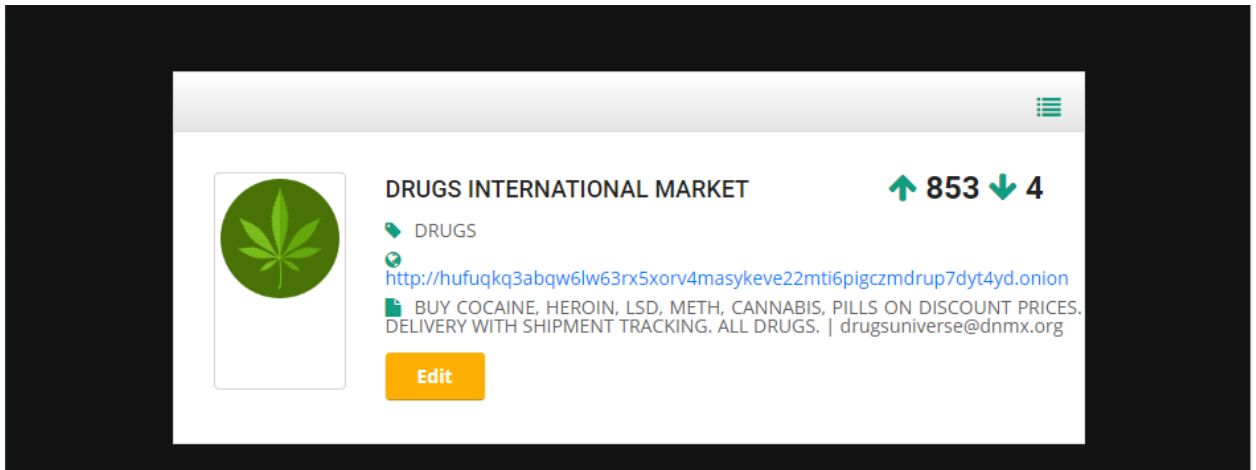
Part II

5. Take a screenshot of two different darknet markets. Include the URL (see the example from what I believe is likely a fake site). **5 pts.**
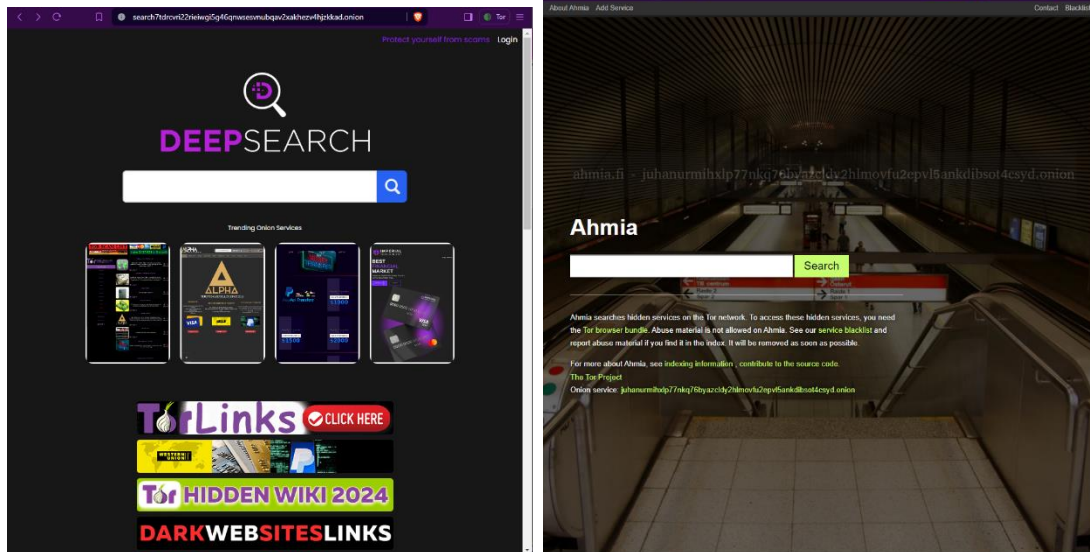
6. What are the primary goods and services typically exchanged on darknet markets? **5 pts.**

The goods, that are normally exchanged on the darknet market, are illegal drugs, counterfeit currencies, stolen personal data, and weapons and firearms. The services that are sold on the darknet markets are, contract killings, hackers for hiring, sex trafficking, and phishing campaigns.

7. Darknet markets are usually organized (but not always) into subcategories of goods. Go into one of the goods categories and take a screenshot (see example here) **5 pts.**

DRUGS INTERNATIONAL MARKET ↑ 853 ↓ 4

🏷 DRUGS

🌐 http://hufuqkq3abqw6lw63rx5xorv4masykeve22mti6pigczmdrup7dyt4yd.onion

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8. Describe in a few sentences how buyers and sellers can communicate on darknet markets. You can discover this by attempting to communicate with a seller. **10 pts.**

The way that buyers and sellers can communicate on the darknet market, is that they communicate through encrypted messaging systems and channels that are anonymous. The reason behind this method, is that both parties can maintain confidentiality and anonymity without being tracked by a third party and data being intercepted or decrypted. Furthermore, most darknet markets, will have their own secure communication platforms that they will provide, to be able to have buyers and sellers trust one another throughout the purchasing process of good or services.

9. Describe in a few sentences how darknet markets operate regarding transactions and payments. You can discover this by attempting to complete a transaction. **10 pts.**

The way that darknet markets operate, regarding transactions and payments, is through forms of crypto currencies. These crypto currencies can include coins, such as bitcoin, Monero or Ethereum for payments. These currencies are then transported to a escrow account, that is controlled by the certain darknet market site to ensure that the buyer and the seller don't run into issues and both sides of the transaction are satisfied, the buyer receives the product and the seller receives the currency.

Describe four differences between searching the darknet and the surface web. **15 pts.**

The first difference, between searching the darknet and the surface web, is that the surface web can be accessed by any individual using search engines such as google, chrome, Firefox, and safari, while the darknet can be only accessed by individuals with peer-to-peer file sharing programs, Napster, and LimeWire which are normally forced to cease operations. This makes it difficult for average individuals with no common knowledge on how the darknet market works to reach it.

The second difference between searching the darknet and the surface web, is that the surface web, will never display the good and the services that are provided on the dark web for purchase, due to them being illegal and morally wrong. These purchases can include drugs, cp, hitmen, and illegal guns which cannot be found on the surface web at all, due to the individual being tracked down on the surface web.

The third difference between searching the darknet and the surface web, is that individuals on the darknet are completely anonymous and the web pages are completely encrypted, due to the contents that are presented on the web pages, being of an illegal nature. While the individuals that are on the surface web are completely tracked on what they search, and their identity being known from the sites they end up visiting.

The fourth difference between the darknet and the surface web, is that their illegal content that is shown on the darknet websites, and only good and services that a criminal would want to intervene in. While the surface web concludes of all types of good and services that are personally legal and are reviewed by other customers upon purchasing and are found mostly everywhere.