X-Ray Builder GUI

http://www.mobileread.com/forums/showthread.php?t=245754

A .Net application that processes e-books to create X-Ray files for Amazon Kindles (Paperwhite, Voyage, Fire).
X-Rays are built complete with chapter locations and excerpts.

Original X-Ray Builder by Ephemerality <Nick Niemi - ephemeral.vilification@gmail.com>
Modified version by darrenmcg
Original X-Ray script by shinew
http://www.mobileread.com/forums/showthread.php?t=157770
http://www.xunwang.me/xray/

Requirements:
.Net Framework 4.0+
Any file that mobi_unpack can process should work (mobi, azw, azw3, etc.).

Books should be DRM-free.
Chapter detection on DRM books is not supported.

If you create an X-Ray file for a book, but still use the DRM copy on your Kindle, you will run into issues where the excerpts do not line up do where they are in the DRM-free version. In this case, you have 2 options. Either use the DRM-free version on your Kindle, or as an alternative you can determine the offset required to fix the excerpt locations and specify it with the 'offset' setting.

As an example:

Excerpt: "The quick brown fox jumps over the lazy dog."
On a DRM copy, X-Ray is showing: "x jumps over the lazy dog."
Open the rawML (using Notepad++, or similar), find that excerpt in the book and determine the difference between the original and the DRM version. In this case the DRM version is 18 characters ahead of the original, so specify an offset of 18 in Settings.
From all the books tested with this, the offset is always the same. If for some reason the offset is variable throughout the book, this will obviously fail.
Note that the offset will also be applied to chapter locations.

After downloading the terms from Goodreads, they will be exported to an "aliases" file in the "ext" folder, named after the book's ASIN. The alias file allows you to define aliases for characters and topics manually to maximize the number of excerpts found within the book.
Initially terms would automatically search by a character's first name as well (Catelyn Stark would also search for Catelyn) but issues arose for things like "General John Smith" so it is left as a manual feature for now.

Aliases follow the format:
Character Name|Alias1,Alias2,Etc

Similarly, chapters are automatically detected as well if the table of contents is labelled properly, then exported to a "chapters" file in the "ext" folder. This allows any random chapters you may not want included, like copyright pages, acknowledgements, etc. to be removed. This also allows you to setup parts in case the book is divided into parts that include multiple chapters.

Chapter format:
Name|start|end

You can export your Goodreads data to an XML file and modify it yourself (or build it from scratch).
Once dumped to file, you can choose to use the XML instead of downloading from information from Goodreads.

Example of a 2 terms dumped to XML:

```xml
<?xml version="1.0" encoding="utf-8"?>
<ArrayOfTerm xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Term>
    <type>character</type>
    <name>Arya Stark</name>
    <desc> Arya Stark is the third child and youngest daughter of Eddard Stark and Catelyn Tully. She is a
headstrong tomboy with no interest in the domestic duties expected of her gender and would rather be mastering
weaponry. She relates most to her half-brother Jon Snow and does not get along well with her elder sister,
Sansa, who is the epitome of a dignified lady and polar opposite of Arya. Arya has a long face, grey eyes and
brown hair, features which are typical of the Starks. She is generally considered rather plain looking and
dressed in boys clothing, she easily passes for male. In temperament, she is said to take after her aunt, Lyanna
Stark, who was hot-tempered and wilful.</desc>
    <src>Goodreads</src>
    <url> http://www.goodreads.com/characters/40658-arya-stark</url>
    <matchCase>true</matchCase>
  </Term>
  <Term>
    <type>character</type>
    <name> Daenerys Targaryen</name>
    <desc >She is stunningly beautiful, with silver hair and purple eyes. At the beginning of A Game of Thrones,
she is a maid of thirteen years and one of the last members of the ancient Targaryen Dynasty. She is the
daughter of King Aerys II and his wife Rhaella. When Dany was born, her father had already been killed and her
mother had to flee to Dragonstone. She was born as a fierce storm struck Dragonstone, and so was called
\"Stormborn\". Her mother died as a result of the labour and shortly thereafter Dragonstone fell to the rebel
forces. Daenerys and Viserys her brother were smuggled away to the Free City of Braavos.</desc>
    <src> Goodreads </src>
    <url> https://www.goodreads.com/characters/29542-daenerys-targaryen</url>
    <matchCase>true</matchCase>
  </Term>
</ArrayOfTerm>
```

Explanation of different elements:

type: Can be either character or topic. People should obviously character, anything else should be a topic. Your Kindle may not load the X-Ray if you put something other than those 2.

name: Self-explanatory.

desc: The description you want to show for the term. Notice that quotation marks should be escaped with a backslash or your X-Ray will probably fail to load.

src: Can be either wikipedia or Goodreads. If it is not one of the 2, your description will not show in the X-Ray for that character.

url: Usually the Wikipedia or Goodreads link that points to either the term itself or the generic URL to the book.

matchCase: Can be true or false. Indicates whether the search should be case-sensitive. Characters and proper names are usually case-sensitive, while items or other glossary terms are not.