How to Make your own Hard Shell eReader

Recently I purchased an eReader and within a short time I cracked the glass while carrying it in my briefcase. I had a descent leather case. I purchased a second unit and low and behold I cracked that glass as well in the corner. I then setup on a mission to find a "**TOUGH**" case for my next reader. If you've tried to find one as well, I think you will agree it's nearly impossible. So I set out to make my own. Like many, I like the feel of a book too, so I used it as my base material.

Supplies:

Used hard cover book (size to fit reader plus)
Square balsa wood (enough to span 3 sides of book)
Elmer's carpenter glue (small tube)
Cloth material glue (small tube)
Cloth (color to suit enough for front and back book inside cover plus)
Razor knife
Scissors
Hand pressure clamps

Following are the basic steps:

1. Take your eReader to a used book store and find a "Hard Cover" book which is slightly thicker in pages than your reader. If you want to fancy it up you can choose a larger size to accommodate any accessories as well. For this description we will use two configurations, one plain and one to accommodate earplugs. Next find some cloth material to use as backing and spine reinforcement. Then go to your local hobby shop and purchase balsa wood of sufficient thickness to span all of the pages in the book you picked up. Make sure your book is big enough to accommodate the reader plus the square balsa wood and still leave a lip edge. This will keep the standard book look. You may have to shave some of the width to accommodate book size. If you have some carpentry tools and skills you can always rip the size of wood you need.

2. Next open the book and using the razor knife cut out all the pages. Be careful not to cut too deep, damage the cover spine.

3. Next cut your balsa wood to fit the outer edge of the book. If you cut the ends at a 45˚ the case will have a cleaner edge and maintain a closer real style book look. Once you have marked all of the wood pieces and cut them, apply carpenter's glue to the edge and place on book edge. Do not place the wood flush with the book edge. Leaving a small lip, this will keep the book feel.
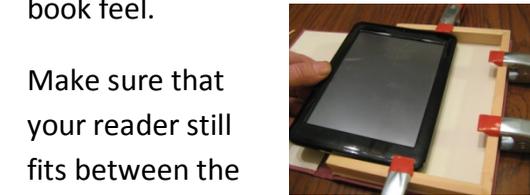
Make sure that your reader still fits between the wood pieces. If you have a rubber skin for your reader and you wish to keep it make sure that you size it correctly. I forgot in my first attempt. Let the glue set good

and strong. I left mine overnight just to make sure.

4. Next place your cloth between the wood pieces and cut the corners to allow

the edge to fold up on the inside of the wood without puckering. Cut the material to span the complete book on the cover side. I left mine with an extra edge and cut flush once the material glue was well set.
Remove all of the wrinkles in the material and make sure that the glue
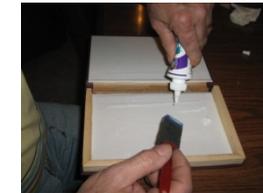
covers all of the surfaces. Again I let sit overnight just to make sure that the material is well secured before tugging at it.

5. If you're going to add a compartment to store your earphones it will

best to add a back section to the frame. Make sure that you have sufficient space between the spine and the wood pieces. The back section can be thinner and I think best if it is glued above the material so that as the book is closed the material will make the back hinge section stronger.

6. Next cut a small groove in the back and front wood section at the bottom where the divider will be placed to form a cavity for the earphones. Cut a piece of wood to span the distance. Make the edges sharp so as to fit into the groove.

7. Next apply some carpenter glue to the back piece of wood which will go against the spine. Fold the book against the back
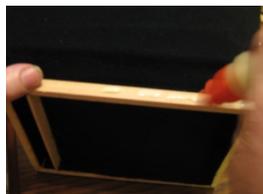
wood section and secure until the glue is set.

8. Once the back book section is secured to the wood and the glue has set Cut the excess material around the edges.
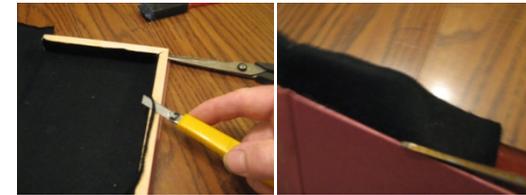

9. You can drill small holes on the top of the wood and glue in small magnets and an opposing steel washer on the cover to act as book latch. I did not have this done yet at time of writing as I needed to purchase small magnet at a local shop.

Your book case is now complete. It will look just like an ordinary book to any casual observer and as well as keeping your eReader safe from damage it just may avoid temptations from light fingered individuals. I mean who wants to steal an ordinary book. I hope you enjoyed the project

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