Overview:

For the prototype phase in our project, we had two different prototypes. First, we made a database management tool to keep inventory of the donated books for the fair. This database includes a way to organize the books on a shelf so that they can be easily found. This will give the staff a more streamlined design to digitally see what books they have in stock. Next, we have a website to publicize, reserve and purchase books in the office or at the book fair.
Evolution of Prototype Designs

Database Prototype:

For our database prototype we create a database using Microsoft Access. In this database, there are different “fields” that describe a book. This database will help volunteers while organizing books that are donated. Not only will this database help volunteers, but it will help those that want to buy books from the Red Cross. By creating a database, this allows buyers to search for a certain type or book or a specific book. By creating an organizational system, more books can be sold and organized to generate more sales. Not only will an organizational system make finding and organizing books easier, but it will influence buyers to come back.

For some of the fields in our database we don’t just have someone enter information about a book but we have drop-down menus. For the “status” field of our database, those who are entering information about the book will have three options to choose from. These are hold, available or purchased. This allows buyers to know whether or not the book is available and also helps those who work at the Red Cross because they can answer questions about the status of a particular book.
Another field that has a drop down menu is genres. This drop-down menu has a wide selection of genres to choose from, when entering information about a book. We choose to have many genre choices because we believe that this is one of the most important fields in our database. There are many more genres than what we have listed, but these are the most popular and recognizable genres that we would organize books by. Having a genre field will also make an excellent way for buyers to scope out a wide variety of books, by just searching by genre.

Another field that we specialized was the barcode ID. This is how the books will be organized in the library. The code starts with a ‘R’ and then has two blank spaces. The ‘R’ represents row and the two blank spaces are where one can insert what row the book will be placed on. The ‘S’ represents shelf number and the ‘B’ represents what number the book is on the shelf. The barcode ID will make it easier for buyers to find a book and help those putting away books and organizing them.
Website Prototype:

Primary Design

The image below is our first initial design. This picture shows what was the intended home page for our website that we created for the American Red Cross’ Book Fair. This was a rough draft that we used to see what information was needed and how to place each element of the home page. Upon showing this rough draft to a potential user, we gained feedback that was used to mold the second prototype. Notable information that was gained through this process included layout flaws, relevant information that was not present, and tools that would help the user gain more information if they were interested in learning more.
Secondary Design

Our team’s second design of the web page featured many key improvements. The goal was to use feedback from the first testing stage to create a more user friendly interface that would allow any and all users have a pleasing experience with the Book Fair website. Included in the next prototype was an interactive process that allowed users to visually see what each page would entail. By using several pieces of paper, users were able to see what each link would reveal. In the photos below, the home page is seen first, followed by the about link. After this, users were able to see the home page for the books section, and a sub category of this section that includes books by specific authors. This is an example of how books would be organized electronically to better the inventory system for the American Red Cross Book Fair.

After testing users again, there were still some drawbacks to the page, but compared to the previous prototype, the improvements were exponential. The ease of use was increased greatly and users understood how to handle maneuvering between pages much more easily. The lacking information was added and our most recent prototype is one that has many less flaws. The end result is a webpage prototype that delivers a good image and experience of how the final webpage will appear.