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**CS 270: Final Project Write-up**

The mission of my website was to provide various tools and resources about the mobile game Brave Frontier. Through this, the site’s target audience, experienced Brave Frontier players, can make the most out of the game. To take the target audience into account, I included several features into the site. On the homepage, the visitors can see recent news to the left. The news section will contain news about the game as it is updated. By reading the news, the players can stay on top of recent features that were incorporated into the game. Also, the news is dynamically updated by reading text files from the “articles” folder. This will allow more articles to be displayed on the home page without making it harder to edit the home page’s code.

To the side of the homepage, there are several external links and two links to other pages on the site. The first internal link brings the user to tier lists for each “element” in the game. The way the tier lists take the target audience into account is that it helps them know which “units” are considered to be the best in the game. For instance, the fire tier list states that Claire is one of the best units. Because of that, the visitor knows that in comparison to other units, Claire takes priority due to her power in the game. Also, each unit name has a link to their page on the Brave Frontier Wiki if the visitor wants to know more about that unit.

The second link to the side of the homepage brings the user to a damage calculator. The calculator has three text boxes, several check boxes, and a wide variety of radio buttons. The text boxes take in numbers and the check boxes and radio buttons allow the users specify which battle conditions to simulate. This takes the target audience into account by allowing them to see how much damage they can have a “unit” deal under certain conditions. The visitors can select which conditions to simulate, and once they press the “see damage” button, the damage is calculated using PHP and displayed to the current user. Along with this, other numbers are displayed that give the current user a feel as to what the conditions were like for calculating damage. For instance, if the unit’s hit “sparked” and the unit had an eighty percent spark buff, then the player can see on the calculated damage page that the unit had a spark modifier of 2.3.

I selected the colors of the site to make it easily readable. Since the text would not have been easily readable against the background picture, I chose to use a white-against-black color scheme for each page section to make sure that the text was easily readable. I also chose light blue and red for the links so they would be easily readable. On the tier lists, I chose black-against-white text since it was easy to read as well. While almost every “element” color on the tier list page was readable against white text, the color for the thunder tier list had to be a darker shade of yellow because the normal version of yellow was hard to read against the white background.

I provided continuity between the pages by making the index page the “hub” for all the other pages and having the other pages of the website stem out from the index page. On the non-index pages, the user can return to the index page by clicking on the banner. On the tier list page, the user starts out on the list for the fire element and can click any of the links in the center of the page to view the list for a different element. On the damage calculator page, I split each section of the calculator into the different kinds of modifiers it changed. For instance, if the visitor wants to change the sphere to boost spark damage, they can find it under the “Spark Modifiers” section. Also, once the user calculates the damage, they can use the back button provided on the page to go back to the calculator if they want to see another unit’s maximum damage potential.

I provided consistency in the look of the site by using the same background image in all pages of the site and the serif font family in almost every section of the website. Also, the background image of the banner is the same throughout the website, yet to provide the user with a feel as to which page they’re on, the position of the logo and the game character(s) shown on the banner will change with the page. In addition, with the exception of the tables on the tier list pages, the white-against-black theme for text areas is kept consistent through the website.

The first difficulty I encountered was that sometimes, elements of the site would overlap with each other. I solved this by discovering the *clear* CSS property. The *clear* property will make sure that there are no other elements positioned to a certain direction in relation the element the property is being applied to. For instance, if *clear* is set to right, then no elements will be to the right of the element the *clear* property is being applied to.

Another difficulty I encountered was that I thought the *fgets* method read an entire file. However, after further investigation, I discovered that the *fgets* method reads a file line-by-line. I accommodated this by setting up a system with article files where the first line holds the title of the article, the second line holds the date of the article, and the third line holds the content of the article.

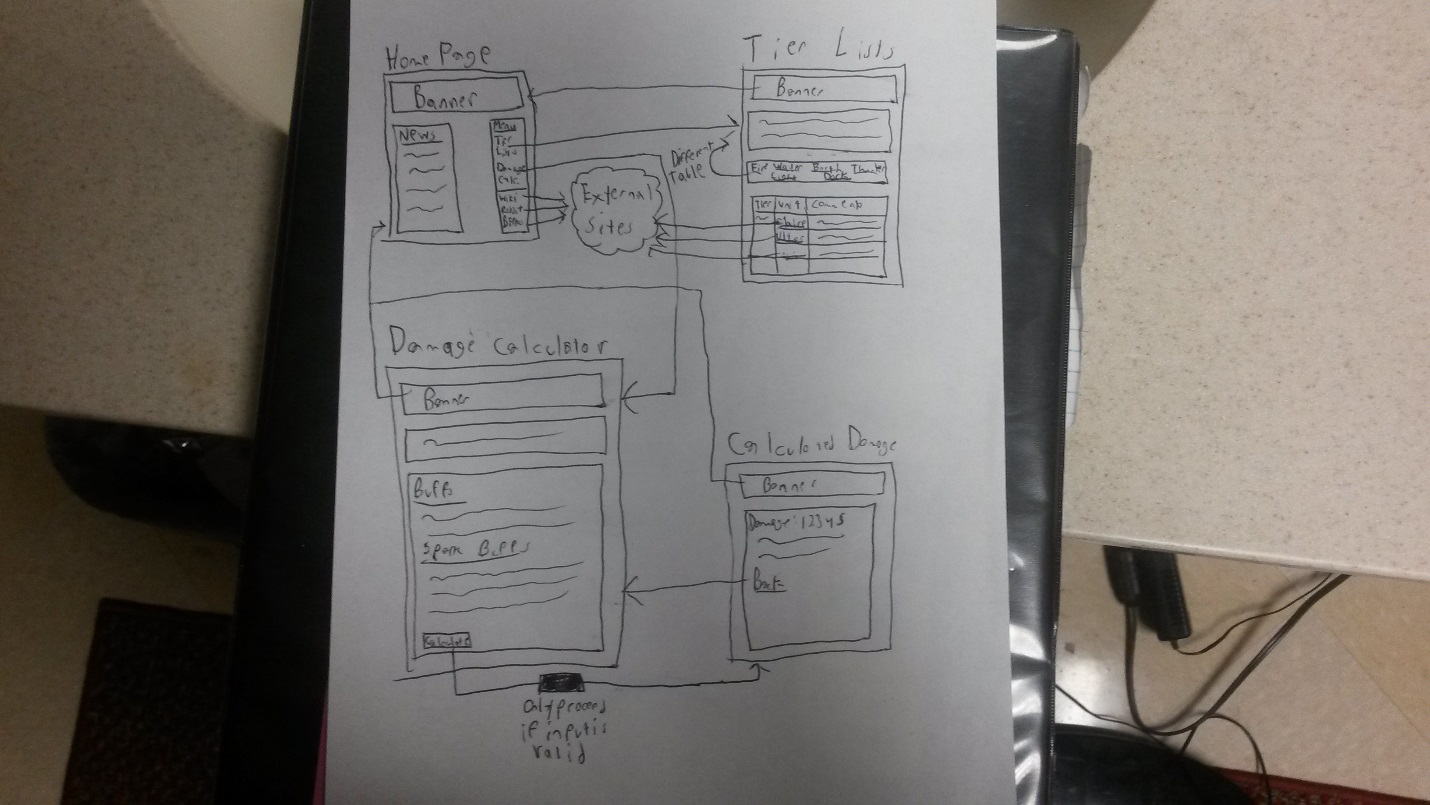
If I could do the site again, I would make several changes to it. First off, I would create the site with jQuery mobile. While the current site works decently with mobile platforms, I could have used jQuery mobile to maximize mobile accessibility. Second, I would have added a limit to the number of news articles displayed at once. With the current code, every article ever written for the site is displayed on the same page, and as more articles are added, the home page can easily become long. If I added a limit, the site could only display the first few articles and store the rest of the articles in an archive. This would have made the site easier to access as more articles are added.

After testing the site, I found that it worked well across multiple platforms. However, some differences could still be noted. On Internet Explorer, some pages created a border around the banner that was not part of the banner originally. Also, the tier list tables were aligned to the left instead of in the center. On Android, the table text was smaller than the text in the info box, yet the text was still readable. The full platform findings can be found in the “Platform Findings” spreadsheet.

After I completed the site, I sent out a survey to see what other thought of my site. Seven people responded, and their responses can be seen in the “Site Feedback Log” spreadsheet. With the exception of one respondent, the site received generally positive feedback. One respondent commented that the link to the Brave Frontier Official Website was broken. It may have appeared broken since the Official Website takes a long time to load on most connections. To accommodate this, I replaced it with a link to the official wiki, a site that loads faster. In addition to this, I made some small edits to the news articles and changed the color of the links in response to other comments made in the survey.

Overall, my site was built to accommodate experienced Brave Frontier players. The site included features that took the target audience into account. Also, the site appeared well on other platforms. In addition, when the site was tested by other people, the site received generally positive feedback and appropriate changes to the site were made based on the comments given by the testers.

**Site Flowchart (A larger version of the image can be found in the project folder):**

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