**Planning and Design**

**General ethos**

This website’s aim is to create a simple yet colorful experience to attract children and make them more interested in puzzles. The main idea behind the website is to make kids more attracted to puzzles by simply offering them a friendly website that offers what they need when they need it.

**Site Map**



Figure 1. Website Sitemap

The structure proposed for the website in Figure 1 above is favorable as it accommodates with the website as it grows on further maintaining its order and allowing for various developers to work at the same time in their respective folder.

**Accessibility**

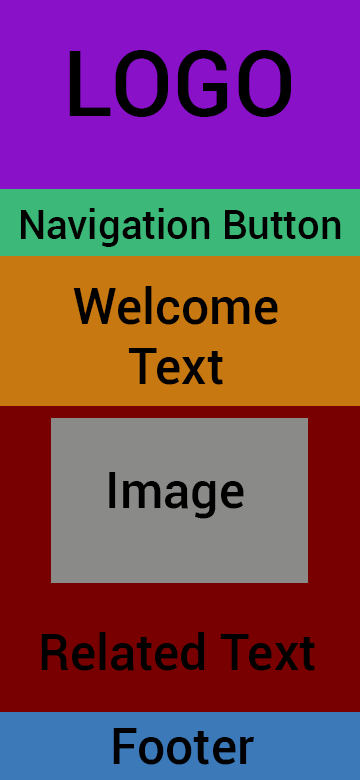
The website is to address accessibility issues by doing the following:

- Adding alternative tags for all important non-decoration images

- Adding support for access keys to facilitate navigation between pages

- Using colours with high contrast

- Not depending on specific colours that would not be visible or distinguishable for colour blind users

**Design Mock-ups**

*Figure 2 Mobile Design*

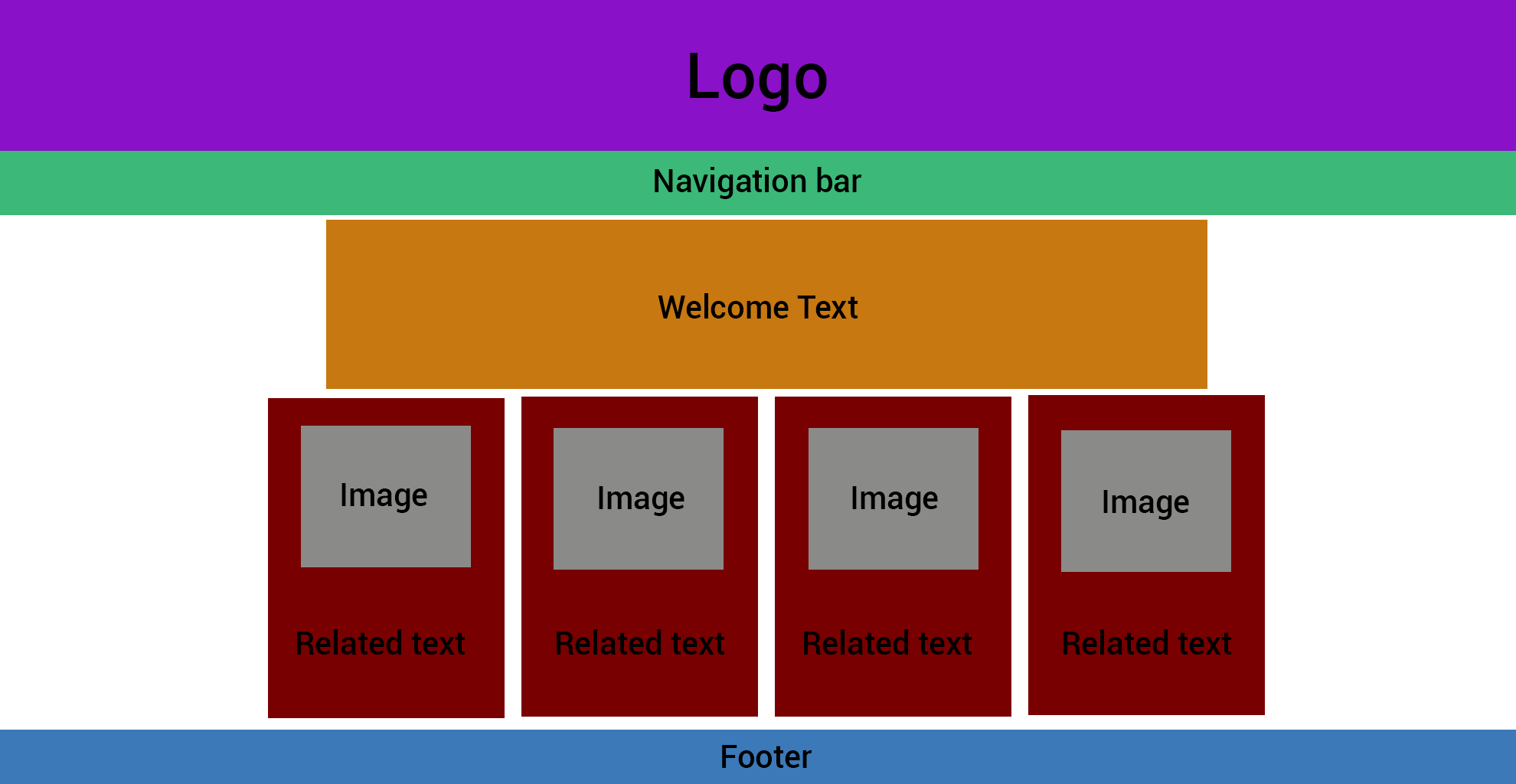


Figure 3 Desktop Design

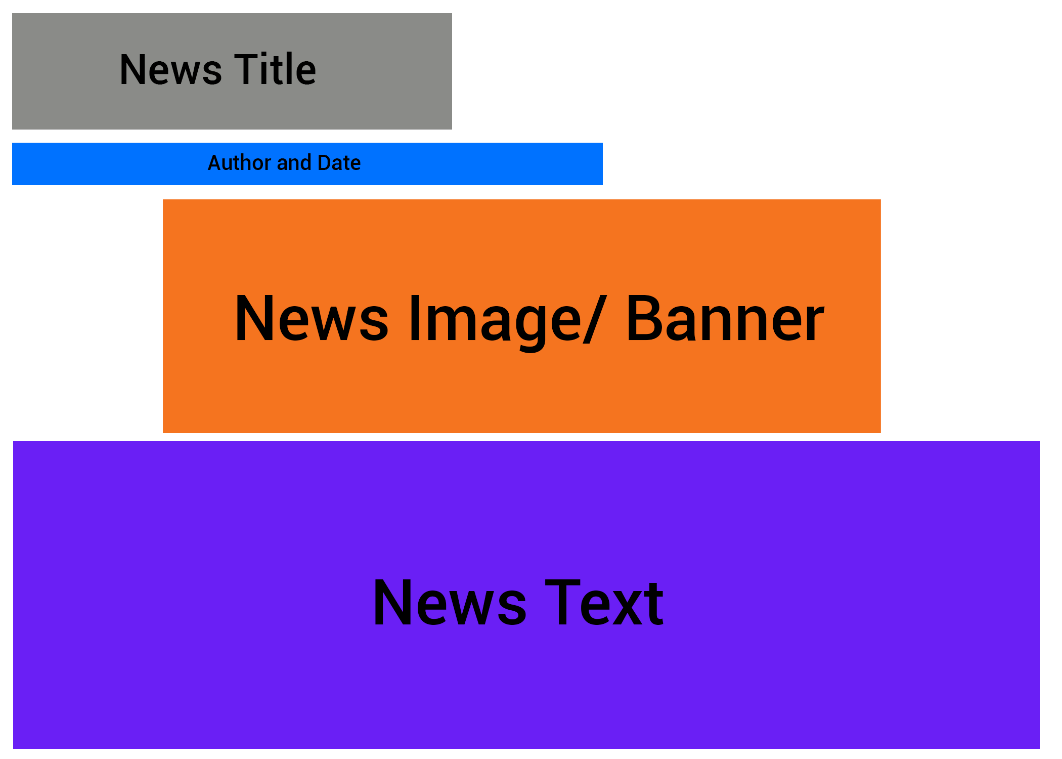


Figure 4 News Article Design



Figure 5 Website Logo

Shown above are 5 figures representing the intended design philosophy for the website. The header and footer both remain the same in both the mobile and desktop designs. However, the navigation bar is to collapse to a button-operated navigation menu on mobiles and expand to a full navigation bar on desktops.

As for the content, on mobiles they’ll be displayed in columns after each other while on the desktop they are to be represented along the same row.

Design breakpoints:

There will intentionally be one major breakpoint at which the website turns from its mobile version to the desktop version. This point is intended to be at 1000 pixels wide which is an appropriate size for a desktop/laptop screen. The website should not go smaller than 320 pixels wide since almost no devices use that size anymore and stop increasing in size after it reaches 2000 pixels wide which is appropriate for majority of devices in the current market.

**Menu System:**

The menu system that I believe is most appropriate for my site is “The Toggle” menu system. This is basically a relatively stylish and elegant approach which is why I decided to pursue it. It has many advantages like being elegant and it scales properly for mobiles and tablets and doesn’t eat up a big chunk of the display when the user doesn’t need or want to navigate to a different page on the website.

**Puzzle Game Design:**

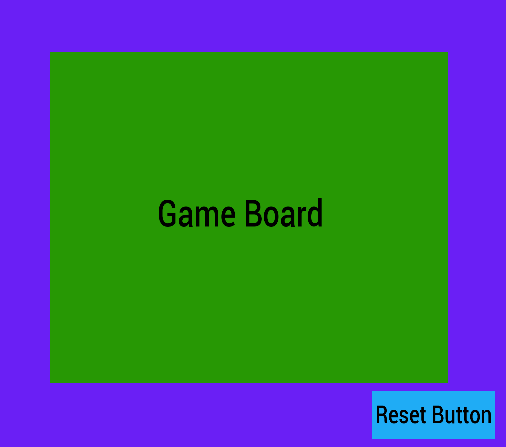


Figure 6 Puzzle Game Deign

The game chosen to be implemented Is the sliding puzzle game.

The game is to be designed in a very simple design. The idea behind that is to both adjust for children and for disabled users making the game as easy as possible to play with.

The users are to first encounter a very clear splash screen where they click anywhere on the canvas to start the game. On starting, the game randomizes the new image and shows it in the middle of the screen and each block is to have its own border to make it more clear where the cells start and end.

To make the game accessible:

- Colours with high contrast are to be used

- Fonts and text formatting to be used is clear and simple