Design discussion

We are proud to say that all elements of the website were created from scratch. Although we, obviously, checked how things are done, we didn’t put any ready elements.

**Layout**

When we were discussing the design of our website, we decided that it should have simple 3 column layout. Left column for navigation, right column for ads/other optional stuff, and center column for main content. We also wanted to make the website look good on different size screens.

Eventually, we stopped on one of implementations of multiple column layout. In this implementation left and right columns are fixed size while center column is responsive. This is achieved by putting left and right columns into padding of the main container using negative margins, and center column is taking 100% of main container. In this way desired outcome is achieved with only few additional markup, and many potential problems are avoided.

The website also has “sticky footer” which occupies bottom of a page independently of page height. So, for example, if there wasn’t any content, the footer would be still at the bottom. This is done by making minimal content height equal to 100% (of viewport) and putting negative bottom margin equal to footer height. To prevent footer overlapping content, we push down content by the width of the footer as well.

**Responsiveness**

In order to improve responsiveness of the website, we remove right column when browser window is smaller than 1070 pixels. This determined nature of the right column – its content is not vital for users: events panel serves as an advertisement for upcoming events, which can be found on events page. Offers panel advertises latest offers in a similar fashion. Sign in and sign up buttons disappear as well, but “Log in” button appears in navigation panel.

We don’t continue resizing infinitely. When window size reaches 820 pixels, the website starts maintaining its width. It would be troublesome to maintain layout and readability of some pages otherwise. Also, maximal width of the main container is 1000 pixels (after that margins start taking extra space), so that elements don’t grow forever. Finally, there are some special arrangements, related to paddings, font-size and other in “troublesome places”, namely, footer and gallery.

It is worth to mention that our gallery is responsive as well, and it maintains its width to height ratio equal to 4:3. Also it is possible to add pictures of any dimensions to the gallery.

**Accessibility**

We wanted the website to be accessible as well. Every picture has alternative text and important clickable elements have explicitly set tab indices. Tabbing order is as follows: navigation buttons – search bar – sign buttons – content elements – right column elements – footer. We believe, this is the most convenient way to tab through the website, as less important and less commonly used elements (like footer links) go last.

Events page and catalogue page have disappearing parts. This is achieved with checkboxes and radio buttons (when selected, certain elements become invisible). While doing the catalogue page, we encountered the following issue. Radio buttons were not displayed, and they were selected by clicking over labels, which had custom design. Labels, however, cannot be focused and tabbed through, so, a person navigating with keyboard wouldn’t be able to go through letters. In order to retain it accessible, we kept radio buttons displayed, but with negative z-index (still invisible). When radio button gets focus, a following label is styled in such a way that it looks like the focus was gained by the label. It is still not possible to tab through radio buttons, as they are represented as a single element. Instead, one should use arrow keys. Since our labels don’t look like radio buttons, we add a line, explicitly stating how to navigate through catalogue letters with keyboard. The same is done for events page.

**Design decisions**

When making design decisions, we first of all thought about the nature of our website and the functionality that it should provide. The website is done in green-light yellow-brown colours, which are natural. We tried to avoid using bright colours, as, first, they would be disturbing and second, making a website paler would underline beauty of flowers being part of content.

We also spent considerable time choosing picture to use in a background. Eventually, we settled with small, simple, yet beautiful clove flower. This added cleanliness and fit well with the chosen background.

Primary aim of our website is serving as a platform for swapping plants. We have several pages devoted to that. “Make an offer” button was initially red to highlight the importance of that activity (this was removed later to make navigation, as navigation was becoming too colourful). Also moving navigation buttons were replaced with static ones as the moves were annoying when browsing the website.

Throughout the website we use Century Gothic as the 1st font and Calibri as the 2nd font (in case users don’t have Century Gothic). The main reason for this is that, to our minds, Century Gothic and Calibri both improve readability. This is especially important since big fraction of our potential users is likely to be elderly people. We didn’t make font size especially large since users can zoom in and out without breaking the layout.

We have quite a few scrollbars on our website. Unfortunately, w3c doesn’t support scrollbar styling. Since scrollbars don’t fit our design, we partly hide them in parent’s padding (for right column’s panels).

**Initial design**

Our initial design is shown in appendix XXX. The picture you see was assembled in paint. The primary version of html and css was done based on it. Although it may look quite different from the final result, actually it is not. The general layout, the layout of pages, html structure and html content was kept.