

## 1 Input file format

The first line contains the name of the person, whose CV is to be created, Next, the text is to be interpreted as the text for the side, where if the line begins with an exclamation mark `!` it is to be treated as the title of a section. All following lines are to be interpreted as bullet points. An empty line containing only an exclamation mark `!` is used as a section mark, which shows that the following text belongs to the main body. The same structure for formatting is to be used as for the block above. If the text is to be written without a bulletpoint, then the beginning of the line should begin with `@`. If these symbols are to be used as literals, they must be escaped by using a backslash `\`.

For the stylization of the text the use of square brackets are used. In the text the contents inside the square brackets declare the stylization options that are used. The formatting is to be applied for the whole line, as such, the style declaration is to be put at the beginning of the line, following `!`, `@` if they were used. For example: `[Bold]`, `![Italic, Size=10pt, Color=red]`

## 2 Program workflow

The program works by reading the input file, passed by a commandline argument, line by line and interpreting each of the lines and converting the read String, removing the special characters, and parsing the String to be used as the text in the HTML file. It also splits the data and creates the needed information, to create the Cascadeing Sheets document. After all the lines have been processed, it writes the contents to the output files.

## 3 Headers

### 3.1 Formatter

This header houses the structure `Element` which contains a string, for the text that is to be displayed along with a char array that contains it's properties. A function returning a string is defined `parse(char*)`, which gets the read line as an argument and the function goes through it and determines what is this line declaring(`Title`, `bulletpoint`, `raw text`) and what properties does it have(`font`, `typefont`, `size`, `color`, etc.). The char array is formatted so that the first bit of the first element of the array indicates wheather or not the text is of the `Bold` typefont, the second bit, if it is italicized, the third if it is underlined, the fourth and fifth show whether the text is a title, and whether a bulletpoint should be added. The other bits are used incase of functionality expansion. the next char is understood as an unsigned number, that shows the size of the text, the next three chars are understood as the HEX values for the textcolor. The next chars are understood as a C-style string that declares the font used. After that the last char is understood as an ID number, for use in creating the css file. It is expected that the structure element is to be put in a list or other ordered data structure and stored for future parsing.

## **3.2 HTMLParser**

This header contains the HTML structure, which houses the name for the html file, the string, containing it's head information(Title), and an ordered Element array, which houses the Elements which are to be added in sequence.