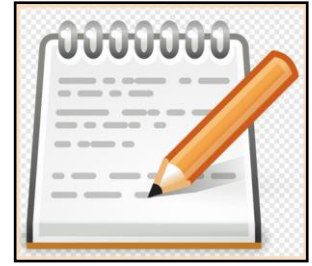**Code / Project** : CME1252 / 3
Year / Semester : 2020-2021 Spring Semester
Duration : 5 weeks

Project: CENG Editor

The goal of the project is to develop a simplified console editor.

General Information

This project consists of an editor that provides various word processing capabilities in an active work space of 20*60 characters.

Features

The editor has the capability of loading and saving the text files. It supports 26 letters of English alphabet (a-z, A-Z), digits (0-9), space and punctuation marks (. , : ; ! ? - * +). Other characters cannot be used and they are ignored.

The words should not be split between two lines. Paragraphs (ending with return) can be more than one line.

The editor supports cursor movement in four directions, character insertion or deletion at a desired location. It has also two writing modes: insert and overwrite (default mode: insert).

Special Keys

The editor supports the following special keys:
- Cursor keys
- Delete/backspace
- Return
- Home/End
- PageUp/PageDown
- Insert (to change the writing mode; insert/overwrite)
- Function keys for various purposes

Sample Screen

```
+----+----+----+----+----+----+----+----+----+----+----+----++ F1:Selection start
|Project: CENG Editor                                        | F2:Selection end
|                                                            | F3:Cut
|The goal  of the project is to develop  a simplified console| F4:Copy
|editor.                                                     | F5:Paste
+                                                            + F6:Find
|General Information                                         | F7:Replace
|                  |                                         | F8:Next
|This project con sists of  an editor  that provides  various| F9:Align left
|word  processing  capabilities  in an  active work  space of| F10:Justify
+20*60 characters.                                           + F11:Load
|                                                            | F12:Save
|Features                                                    |
|                                                            | Mode:Insert
|                                                            |
+                                                            + Alignment:Justified
|                                                            |
|                                                            |
|                                                            |
|                                                            |
+                                                            +
+----+----+----+----+----+----+----+----+----+----+----+----++
```

Selection and Cut/Copy/Paste

The editor provides cut/copy/paste capabilities by using the following keys:
- F1: Marks the start of the selection
- F2: Marks the end of the selection
- F3: Cut
- F4: Copy
- F5: Paste

When a selection occurs, it should be highlighted.

Alignment

The editor supports different text alignment options through the following keys:
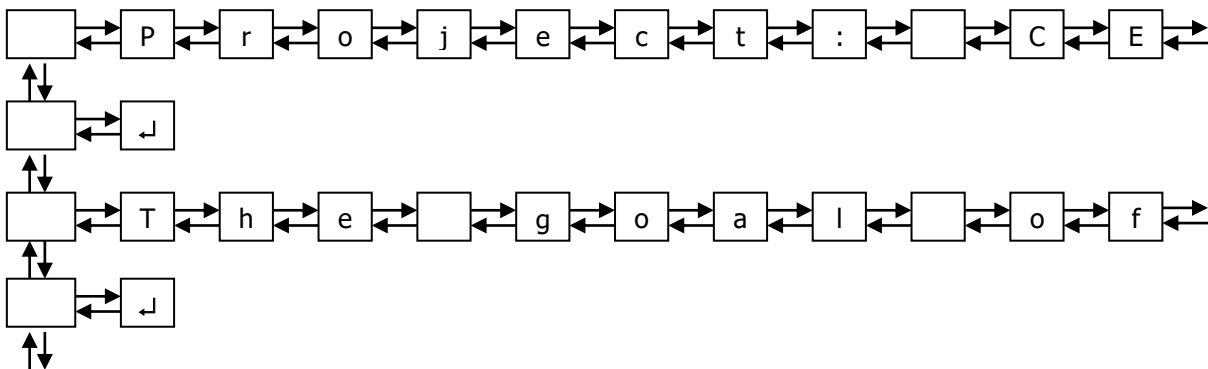- F9: Aligned to the left (default mode)
- F10: Justified

If an alignment key is used, current paragraph is aligned. If there is a selection, alignment is applied to the paragraphs of the selection.

At the right of the editor active area, there are various items:
- Function key explanations/reminders
- Writing mode indicator: Insert/overwrite
- Paragraph alignment: When the user moves the cursor to another paragraph, the alignment of the paragraph must be shown at the right of the working area

Structure

Multi-linked list structure will be used for the editor.

Suggested Weekly Program

1. Discussing and designing solution alternatives. Creating the necessary variables, structures. Screen.
2. Load/save. Cursor movement. Entering and deleting characters/words.
3. Insert/overwrite modes. Special keys.
4. Selection. Cut/copy/paste. Find, replace.
5. Alignment. Remaining parts of the program, testing/debugging.

First Evaluation: 11.6.2021 **Report:** 11.6.2021	**Final Evaluation:** 25.6.2021 (powerpoint + poster) **Report:** 25.6.2021