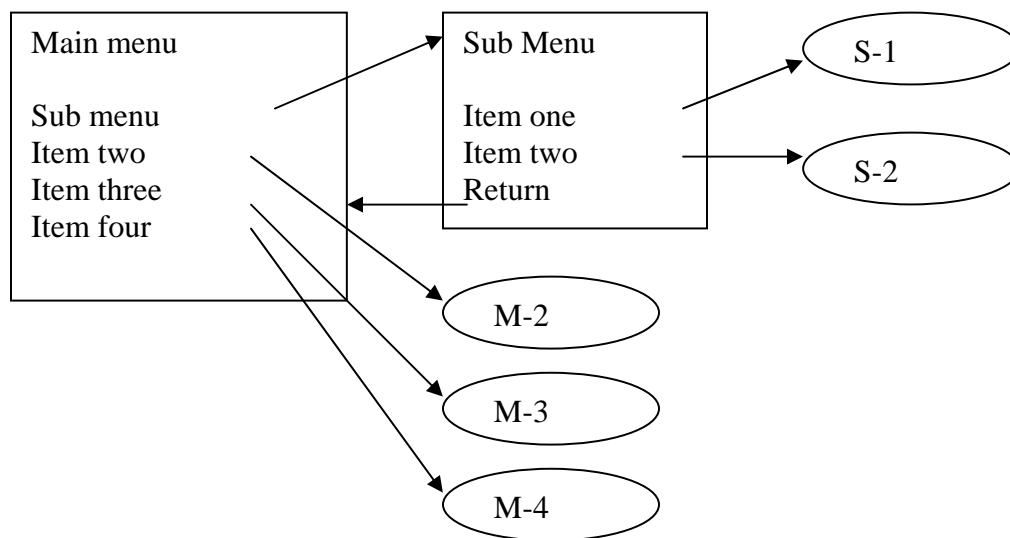


This project is to create menu systems from definitions that are instantiated at compile time and produces a very small and efficient menu system for embedded systems. The code from this project can be used in future projects.

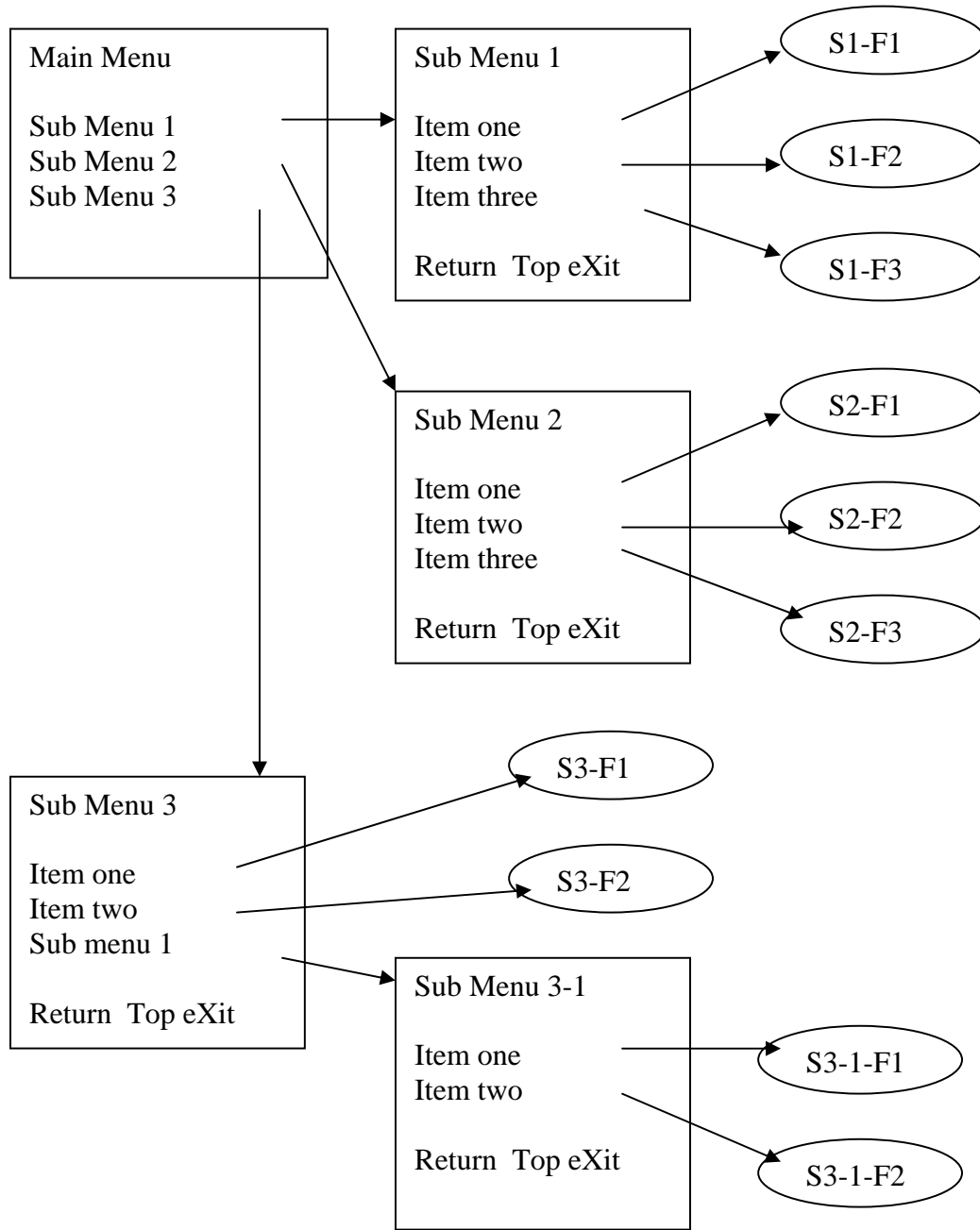
Support for the Windows and Linux platforms has been included in the clear screen (cls.c) module.

1. Review the supplied code (menu.zip) and become familiar with the structures used to create the following menu. See screen captures supplied at end of this documents.



2. Complete the function `menu_process()` to achieve the required results. (See screen captures at end of this document).
  - a. After the execution of a menu item request Enter key to be hit before continuing.
  - b. Display menu heading at top of menu.
  - c. Recursion is not allowed since it requires too many resources.
  - d. Provide code for return to Top (T) option.
  - e. Provide code for return to previous (R) menu.
  - f. Provide code for exit (X).

3. Modify the menu system to produce the following capabilities.



Example flow of supplied menu system.

```
Main Menu v0.1
1. Sub menu
2. Item two
3. Item three
4. Item four

R. Return      T. Top      X. Exit
>1
```

```
Sub Menu 1
1. Item one
2. Item two

R. Return      T. Top      X. Exit
>2_
```

```
Sub Menu 1 - Item two <2>
    Item one-two <1.2>
Press enter to continue.
```

```
Sub Menu 1
1. Item one
2. Item two

R. Return      T. Top      X. Exit
>r
```

```
Main Menu v0.1
1. Sub menu
2. Item two
3. Item three
4. Item four

R. Return      T. Top      X. Exit
>3_
```

```
Main Menu v0.1 - Item three <3>
    Item three <3>
Press enter to continue._
```

```
Main Menu v0.1
1. Sub menu
2. Item two
3. Item three
4. Item four

R. Return      T. Top      X. Exit

>x
```

It is Due 11:59pm of September 30, 2010. Email your source code and test files to [ece433report@gmail.com](mailto:ece433report@gmail.com). Have all your source files in one compress file. Your compress file should have a readme file about your code, which compiler and development tool you used, and about your implementation. You may need to change the compress file extension from *zip* to *piz*, in order to get through the file filter. Name your compress file using this naming convention – `firstname_lastname_embedded_menu.piz`. When you send email, use subject – “Embedded Menu Assignment.” Please send zip format only!