Pseudo Code Designer Model

Main Page

When the webpage is opened, user will see some buttons and two small screens for the parameters and the constant variables at the left part of the page. At the center of the page there will be an area for the pseudo code main algorithm.

Pseudo Code Algorithm Area:

This blank area will be at the center of the page. User will be able to create new algorithm steps and fill them to write an algorithm. User will be able to trace these steps by clicking the "Start trace" button and choosing the steps. The color of the steps will be changed, presumably to green, while tracing the algorithm. Moreover, user can write some code segments for those steps by using the "blue star" image at the top right of that step.

Buttons

Parameter Button:

There will be a parameter button at the left top of the page. This button creates parameter from the algorithm. As an example there will be a variable in the algorithm which is called "number". When we choose the number and click the parameter button the "number" variable will be added to "Parameters" screen and all the other "number" variables will be bold inside the algorithm.

Constant Button:

This button will work as the same logic with the parameter button. Instead of parameter it will show the constant variables inside the algorithm.

Add to Main Step:

This button will create a main line to write the algorithm. As an example,

1. Ask for & get a number from user

2. Check the remainder of the given number when division by two

We had already these two steps and we want to add the third step to the algorithm,

3. if the reminder is equal to zero then

Then we can use this button to add a new main step to the algorithm.

Add to the Step:

This button will add a new line under the step which is already created. As an example,

       1. Ask for & get <u>number to check</u>

We have this step and we want to expand it instead of go on to the next step. Then we can use this button and add some new lines like 1.1 and 1.2 as it can be seen below,

      1.1 Prompt user to enter number to check
      1.2 Read <u>number to check</u> from keyboard

This button will have another small button next to it which is seen as "H". The "H" button will hide or reveal the expanded steps inside the pseudo code algorithm.

Delete Button:

This button will delete the chosen step form the algorithm.

Save Button:

This button will save the algorithm.

Load Button:

This button will load one of the chosen algorithms which is already saved by the user to the algorithm area.

Start New Algorithm:

This button will renew the algorithm area and user will be able to create a new pseudo code algorithm.

Start Trace:

This button will start the tracing process. When this button is clicked, buttons will be colorful for the tracing process. Otherwise, color of the buttons will be the same in order to avoiding some complications while writing the algorithm.

Create the template:

This button shows the template code of the pseudo algorithm in another page.

<u>**Screens**</u>

Parameter Screen:

This screen will be at the left-center part of the main page. This screen shows the parameters with their data types which are created with "parameter button".

Constant Screen:

This screen will be work with the same logic as parameter screen. The screen will show the constant variables instead of parameters.

Meaning of the Stars on the Rightmost Part of the Algorithm Steps

Blue Star:

When the blue star is clicked, a small text editor page will be revealed to the right of that step. User will be able to write the code of the step inside the text editor.

Yellow Star:

This star will represent the loops.