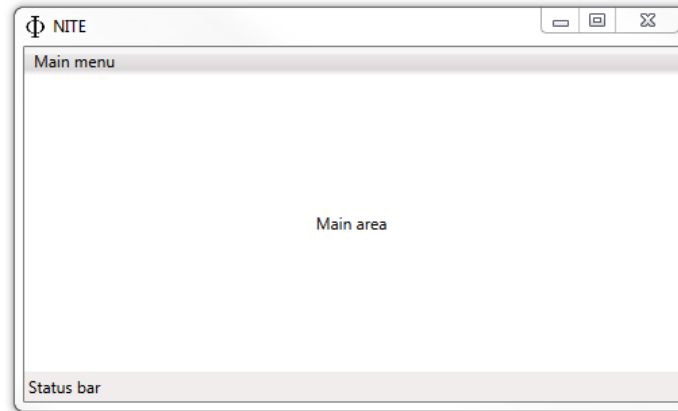# 1   GUI mockup

Figure 1: schema of the graphical user interface

1.1   Main menu

Main menu contains all general options that are required to be implemented, but are not connected with a specific step of calculation. Contents of the menu must not change during application operation, but its certain entries may be temporarily disabled during some phases of computation.

Main menu will contain, ex. exit option, example selection option.

1.2   Main area

Main area will contain frequently changing content, as it may have any of the following: a text field for entering a regular expression, button to proceed to the next step of computation, button to abort computation, button to display final result, a table with intermediate results, a final result, etc. Content of main area depends on context, i.e. previous actions of the user and current status of application.

1.3   Status bar

Status bar must contain one of three phrases at all times, unless there are equivalent indicators implemented (mentioned in each point):

- "busy" - if program computes the final or intermediate result.

  Equivalent of this is locking all elements of the GUI while the program is busy.

- "awaiting user interaction" - if program is not busy, but intends to be right after user gives some information that may help with further computation. The phrase may be changed to other with the same meaning. This status is intended only for computation phase, and only for those parts of computation phase that require user input.

  Equivalent of this status is displaying a new window. All information and input fields needed by the user to help the program must be in this new window. When it is closed, program resumes computation.

  Since the user feedback mechanism is optional (provided that it is of course substituted with working implementation), in certain implementation scenarios this status will never occur (or window will never be shown). If development team is able to prove that this feature would really never be used, this status indication does not have to be implemented.

- "ready" - in all other situations, for example: after start-up, after completing the computation.

  Equivalent of this status is a situation in which both previous mechanisms are implemented using second variant. If it is so, this status can be omitted.

Status bar may also temporarily contain some optional content that may help the user in completing the user interaction phase, provided that the main area is not a proper place for this content.