

|  |
| --- |
|  |
| Code Editor |
|  |
| A matter of style |

**Under the supervision of: Submitted By:**

**Shruti mittal parikshit agarwal**

**Faculty (Minor Project) V Sem. A-2**

***Roll: 45***

**B. Tech CS**

Code Editor

A matter of style

# Introduction

Code Editor is a source code editor and Notepad replacement that supports tabbed editing. It is written in Java and thus supports multiple platforms.

# Team

**Project Leader:** Parikshit Agarwal

**Team Members:** 1

**Cell No.:** 9001424449

**E-Mail:** parikshit.ag@gmail.com

# Requirements

* JRE 1.5 or higher
* 100 kb of space (approx) or higher
* 16 MB of RAM or higher

# Scope

#### As a replacement of Notepad

Editing multiple simple plain text files is much easier in code editor then in Notepad

#### As a Source Code Editor

Supports many features of source code editing

#### As a IDE

Has a features such as syntax highlighting and indentation, thus makes it idle for use as a Java IDE.

# Advantages

* As Code Editor is proposed in Java, thus makes it platform independent. It means that it is not restricted by the underlying operating system whether it is windows, mac, linux or and other.
* Code Editor is a light weight application, and does not require cpu intensive work, or any other sophisticated hardware.
* Portable: There is no need to install Code Editor prior of using it. Just copy the application on a JRE supported system and run it.

# Features

#### Tabbed Editing

It has the feature to open and edit multiple files in tabs simultaneously and hold their contents separately using tabbed panes.

#### File Rendering

Includes the features such as

* Creation of new files
* Opening Existing files
* Saving files
* Closing files (discarding changes)

#### Editing

Includes file editing features such as

* Undo
* Redo
* Cut
* Copy
* Paste
* Select All

#### Find and Replace

Supports smart find and replace feature for quick and easy editing and navigation. User has a choice of searching in normal mode and Regular Expression mode.

#### Go To

Jump directly to the desired line number.

#### Smart Indentation

Has the ability to auto Indent the code based on the braces.

#### Color Coding

Processes the file for a set of key words of the Java language that has been hard coded in the software, and color codes them according to their nature.

# Proposed Options

File New (Creates new blank file)

Open (Opens an existing file)

Save (saves the contents of current file)

Save As (saves the contents in a new file)

Close (closes the current file and tab)

Close All (closes all the files in the tabbed pane)

Close All But This (closes all the files except the current focused file or tab)

Edit Undo (Undo the last change)

Redo (redo the last change)

Cut (cuts the selected text)

Copy (copies the selected text)

Paste (pastes the text under the cursor from the clipboard)

Select All (selects all the text in a current file)

Search find (searches for the given string or pattern (regular expression) in a current file)

Replace (replaces the searched string that is highlighted with the given replacement string)

GoTo (moves the caret position to the given line number)

# Current Status of Development

1. Trail design and prototype development is completed.
2. Coding, testing of various modules using the prototype is going on.

# Technical Details

Code Editor is proposed in Java swing technology which makes it appealing at the user’s end.For searching the pattern within files, Code Editor makes use of Regular Expressions.

#### Swing

The Swing toolkit includes a rich set of components for building GUIs and adding interactivity to Java applications. Swing includes all the components from a modern toolkit: table controls, list controls, tree controls, buttons, and labels.

Swing is far from a simple component toolkit, however. It includes rich undo support, a highly customizable text package, integrated internationalization and accessibility support. To truly leverage the cross-platform capabilities of the Java platform, Swing supports numerous look and feels, including the ability to create your own look and feel. The ability to create a custom look and feel is made easier with Synth, a look and feel specifically designed to be customized. Swing wouldn't be a component toolkit without the basic user interface primitives such as drag and drop, event handling, customizable painting, and window management.

#### Regular Expressions

Regular expressions are a way to describe a set of strings based on common characteristics shared by each string in the set. They can be used to search, edit, or manipulate text and data. Knowledge of specific syntax to create regular expression is required — one that goes beyond the normal syntax of the Java programming language.