

# Regular Expression Checker in Python

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## ABSTRACT

The creation of a Python regular expression checker. The program will allow users to enter regular expressions and then test them against sample text strings to ensure their accuracy and functioning. The window that pops up it allows the users to input regular expressions that are defined in the proposal and test them against various string patterns to check the reliability.

## Introduction

Regular expressions checker is a great thing to check out the provided type of string that they are same or not or is there any error in that. Regular expressions checker is used in various applications such as data validation, parsing, and text processing. This project aims to develop an automated checker for regular expressions using Python Language, providing an efficient way to validate and test the expressions.

## Functionality Overview

The regular expression checker includes some key features:

- Input Validation: Ensures that the input regular expression is correct or not.
- Pattern Matching: Allows users to test the regular expression against various string inputs.

## User Interface

This checker adopts a user-friendly interface that allows users to easily input regular expressions to check the strings.

## Discussion

The regular expression checker significantly simplifies the process of developing and testing regular expression patterns. By the validation process, it reduces the chances of errors and increases efficiency. This project is useful for software developers and testers who frequently work with regular expression.

## Methods||Language And Tools

The project was made through using Python Language, Using a Python-based GUI framework and libraries, creating out logics for the regular expression checker according to out types or cheking strings,utilizing the regular expression checker module to parse and check regular expression patterns.

## References

For creating our project we needed help so we took some help from other sources and from our teachers too:

<https://www.youtube.com/watch?v=rfRiualNVbQ>

<https://www.geeksforgeeks.org/regular-expression-python-examples/>

## Conclusion

The goal of creating a Python Regular Expression Checker is to give programmers, testers, and students an effective and user-friendly tool for validating and testing regular expressions. With the help of this tool, regular expressions will be easier to debug and validate, ensuring that they work as intended in a variety of applications. The Regular Expression Checker will streamline the testing process and make it user-friendly even for individuals with limited programming experience by utilizing Python's features and offering a straightforward graphical user interface.