Online Java Compiler

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Abstract— *As it could be a competitive world and extremely quick world, everything within the universes is to be web. During this web world all the items area unit on-line. Thus we tend to created software system referred to as "On-line java compiler with security editor". The most aim of this project we are able to simply to write down a java program and compile it and rectify in online. The user doesn't having java development kit .The user solely connected to the server. The server having java compiler .so server executes the java code and manufacture the error message to the acceptable user. During this project is additionally making a security editor. This editor performs code and decrypts the file. Secret writing and decoding method perform mistreatment RSA Algorithms. There's ton of security algorithms area unit there, however RSA algorithmic rule is incredibly economical to code and decode the file. This project is employed to look at all style of java API .It is terribly helpful for writing the java program simply, as an example if any error within the format of API suggests that ready to} able to read API throw this modules.*

Key-Words: Text mining, classification, software system repositories, compiler, software system comes, triaging, feature extraction**.**

1 . INTRODUCTION

Data mining is that the method of extracting helpful data through information analysis. It's additionally called information discovery. Helpful information obtained as a results of data processing will be use to chop prices, increase revenues or each. Target information for mining purpose is categorical and numerical having information sorts like number, decimal, float, char, VarChar etc.

The main aim of this project is we will simply write a java program compile it and right in on-line. The user doesn't have java development kit .The user is barely connected to the server having java compiler ,so server executes the java code produces the error message to the suitable user. In this project is additionally creates a security editor. This editor performs cryptography and cryptography of the file. These processes square measure performed mistreatment LSB Algorithms. There's ton of security algorithms, however LSB formula is most effective to code and decode the file.

In this project it's accustomed read all sort of java API .It is terribly helpful for writing the java program simply, as an example if any error within the format of API there's a chance to read API throw through this module.[1]

1.1 Purpose of the project

The purpose of the project is to compile the java program on-line that provides java API in addition by providing security mechanisms through LSB algorithmic rule while not having any java development kit on client machine.

1) 1.2 Vision

This project is developed for collecting the java programs on-line. The

ONLINE-COMPILER FOR JAVA WITH SECURITY

EDITOR may be an internet based mostly application which will be accessed throughout the globe.

2) 1.3 Scope

This system may be used for collecting java programs online, additionally save that file on the online, we are able to access the java API categories and that we also can perform coding and decipherment operations.

1.4 Overview

Here user check in into the appliance, once he's registered then he will directly log into the appliance with correct user id and Arcanum.

1.5. Drawback Formulation

ONLINE-COMPILER FOR JAVA WITH SECURITY EDITOR may be an internet based mostly application which will be accessed throughout the globe.

3) 2. LITERATURE SURVEY

Existing System

The existing system is that the manual system. The manual system is liable to error. It's time overwhelming. It's terribly tough for an individual to provide the report. There square measure probabilities for dynamical the theme report and do malpractice. This technique involves lots of manual entries with the applications to perform the specified task.[2]

Limitations in Existing System

- Info retrieval may be a terribly massive method.
- Lack of organization of the files might rise to info loss because of accidental deletion of files.
- No security as a result of the files square measure visible to the users.
- Report generation are going to be a giant task.

3. PROPOSED SYSTEM

The planned system is meant to eliminate the issues within the existing system. The most aim of this project we are able to simply to jot down a java program and compile it and right in on-line. The Client machine doesn't having java development kit .The Client machine solely connected to the server. The server having java compiler .so server executes the java code and manufacture the error message to the suitable Client machine.[3]

3.1. SYSTEM ARCHITECTURE

Below design diagram represents primarily flow of requests from users to info through servers. During this state of affairs overall system is meant in 3 tires on an individual basis mistreatment 3 layers referred to as presentation layer, business logic layer and link layer. This project was developed mistreatment 3-tire design.

URL pattern represents however the requests square measure flowing through one layer to a different layer and the way the responses have gotten by alternative layers to presentation layer through server in design diagram.[4]

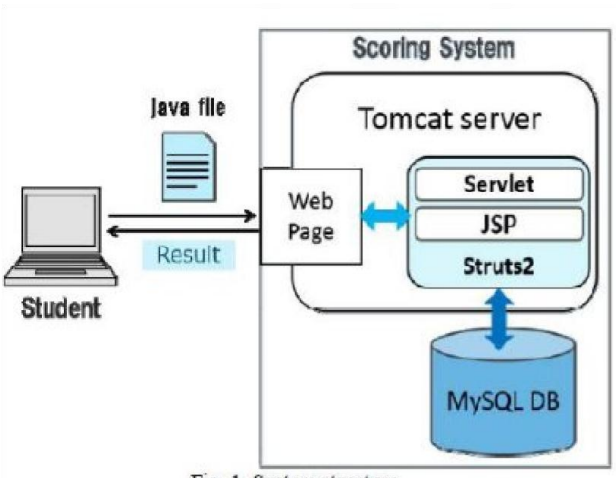


Fig. 1. System structure

4. MATHEMATICAL MODEL

4.1. Set Theory

Let us consider S as a system for CONCEPT BASED USER.

S= {……

INPUT:

- Identify the inputs

F= {f_1, f_2, f_3 ....., f_n| 'F' as set of functions to execute commands.}

I= {i_1, i_2, i_3...|'I' sets of inputs to the function set}

O= {o_1, o_2, o_3....|'O' Set of outputs from the function sets}

S= {I, F, O}

I = {Query submitted by the user...}

O = {Output of desired query,...}

F = {Functions implemented to get the output,

LSB algorithm,

RSA algorithm,

Clustering algorithm}

2.Above mathematical model is NP-Complete

4.2. LSB Algorrithm:

It is used to encrypt user's code at server side

1. Code is converted in binary formated
   Lets example 01010001100011001100000011111
2. Make set 6 bit or 4 bit
   010100 011000 110011 000001
3. Replace last bit to first bit , doing that our code is encrypted format
   001010 001100 111001 100000
4. For decryptetion just reverse process.

4.3. Clustering Algorithm (Mapping Code) :

A step clustering algorithm is applied to the Mapping Code, to obtain compile of similar queries and similar concepts.

Similarity function:

$$sim(x, y) = \frac{N_x \cdot N_y}{\|N_x\| \ \|N_y\|}$$

4.4 RSA Algorithm :

Step 1 – Choose two prime numbers, Prime1 and Prime2 to get the ProductOfPrime1Prime2 variable

n = pq, where p and q are distinct primes.

Step 2 – Find the Totient of ProductOfPrime1Prime2

phi, φ = (p-1)(q-1)

Step 3 – Get a list of possible integers that result in 1 mod Totient

e < n such that gcd(e, phi)=1

Step 4 – Choose a 1 mod Totient value with exactly two prime factors: Encrypt Prime and Decrypt Prime

$d = e^{-1} \bmod phi$

Step 5 – Encrypt

$c = m^e \bmod n, 1<m<n.$

Step 6 – Decrypt

$m = c^d \bmod n.$

[5]

5. WORKING

Modules :

5.1. Java File Creation:

During this module we are able to produce a java file and reserve it in our native file system. Any Client will produce a java file mistreatment this website. The Client will produce as several java files and save it. The online page additionally used as associate editor for the purchasers to form java files. Mistreatment this Client will simply produce a java file. It's additionally user friendly for the purchasers.[6]

5.2. Java File Compilation:

In this module, {we can|we will|we square measure able to} compile any java application that we have a tendency to are making. The Client machine isn't needed to own the JDK put in on their machines. The Client will use this internet application and he will compile the java file. The Client machines java application is compiled with the assistance of the JDK put in within the server machine. The JDK put in within the server machine will the compilation for all the java programs on the market within the server machines.[7]

5.3. Java API info

In this module, we are able to apprehend the data of all the API (Application programming Interface) on the market in java. Mistreatment this module {we can/we will/we square measure able to} apprehend all the strategies that are on the market {in a/during a/in associate exceedingly/in a very} category or an interface. The appliance programming interface may be an assortment of categories and interfaces on the market in an exceedingly package. It is unimaginable for a software engineer/coder/software engineer/engineer/applied scientist/technologist/computer user} to recollect all the strategies on the market {in a/during a/in associate exceedingly/in a very} category or an interface on the market in an exceedingly package thus At that point the programmer will build use of these JAVA API.[8][9]

5.4. ENCRYPTION

In this module, we have a tendency to do coding mistreatment LSB algorithmic rule. We have a tendency to square measure encrypting the file with the assistance of LSB algorithmic rule. For encrypting a file, we'd like to urge binary range from the user. With the assistance of those binary numbers we have a tendency to square measure encrypting the file. Currently the particular text of the file is born-again to a cipher text. Thus it'll not be visible for the user. It'll not be within the known format.[10]

5.5. DECRYPTION

In this module, we have a tendency to do decipherment mistreatment LSB algorithmic rule. We have a tendency to square measure decrypting the file with the assistance of LSB algorithmic rule. For decrypting a file, we'd like to urge binary

range from the user. With the assistance of those binary numbers we have a tendency to square measure decrypting the file. Currently the particular text of the file is born-again to an original text. Thus it'll be visible for the user. It'll not be within the known format.[11]

6. ADVANTAGES OVER EXISTING SYSTEM

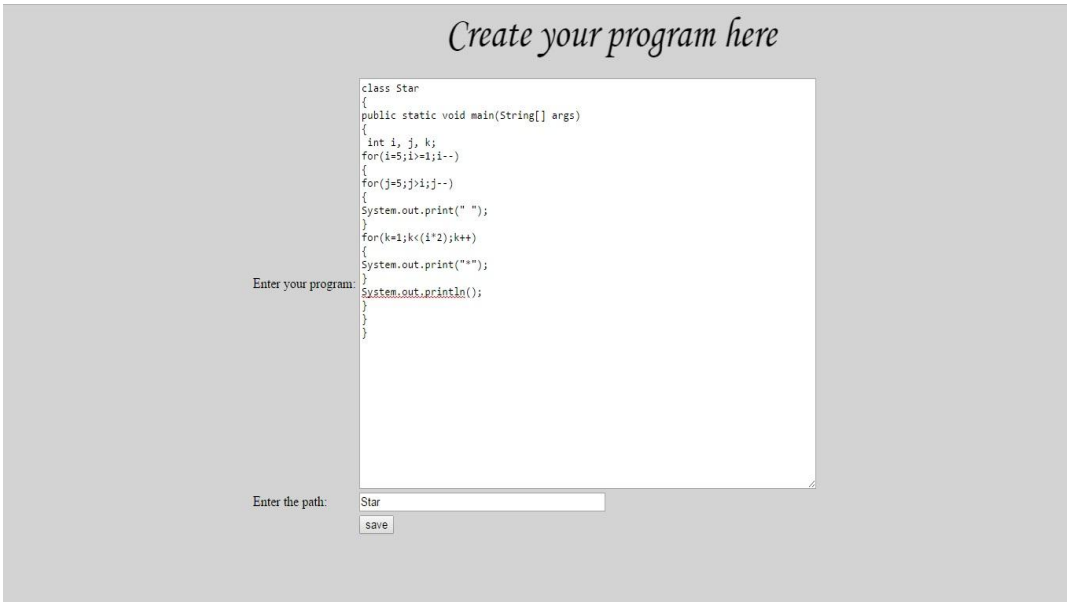
- We are able to compile and run our java program on-line.
- On-line access is provided for the saved files
- No need to install jdk in our own system.

7. ACTUAL PROJECT IMAGES

7.1. HOME PAGE :

In this project user can easily create, modify, compile, run the java programs. This homepage have various options like create java file, compile java file, run java file, and java API by using those options user can perform any operation on that entered java program.

7.2. CREATE JAVA CODE PAGE :

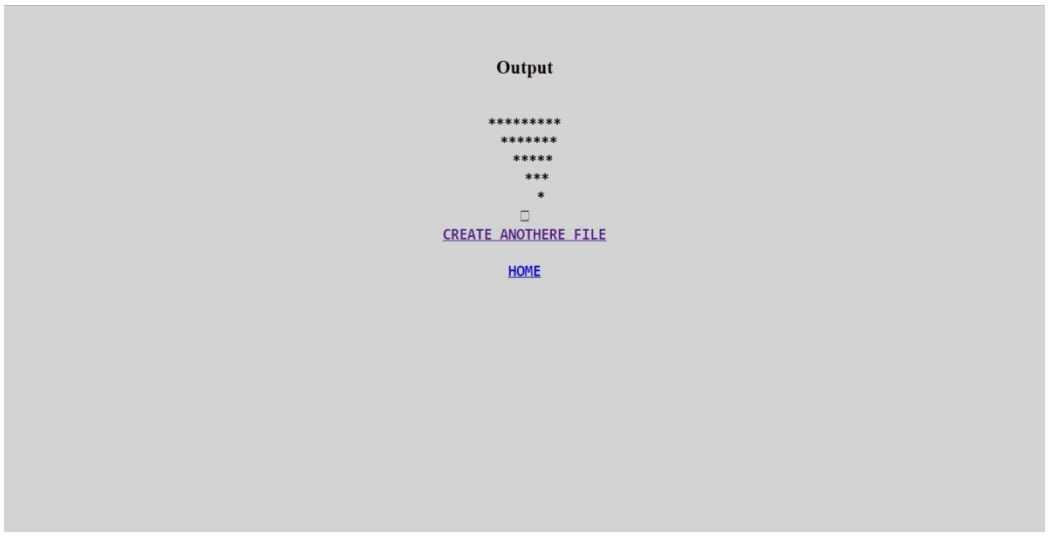


On this page user can write, copy any java program and then save it by any title. That saved program located at our local storage drive user can easily retrieve that saved program in future for use.

7.3. COMPILE :

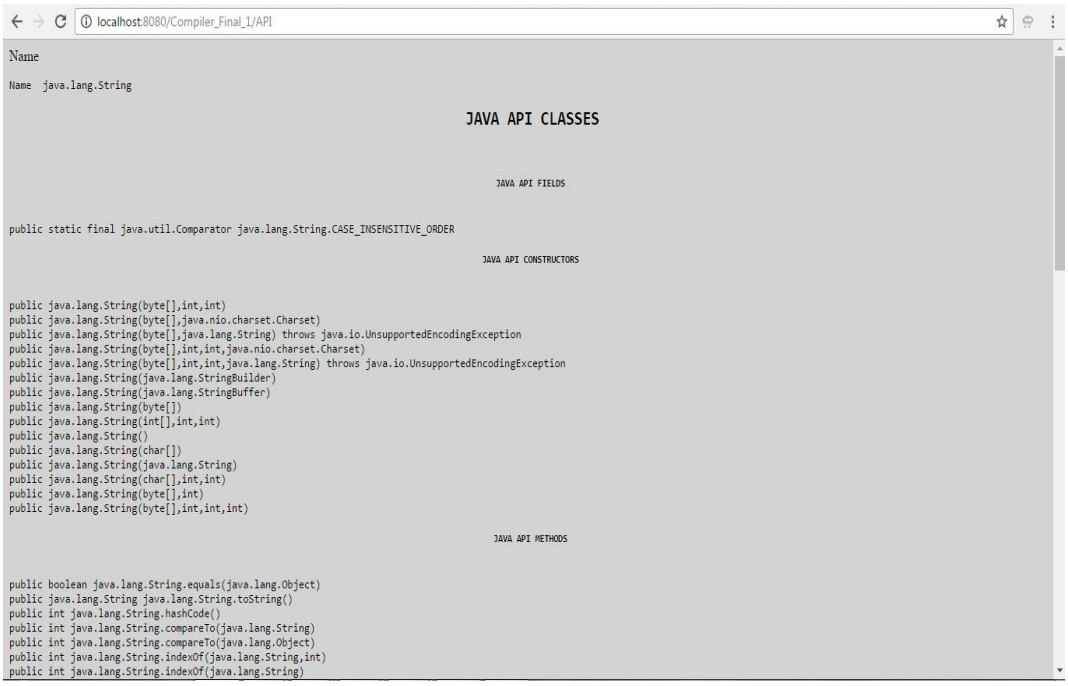
At this page it shows the compile report about that particular entered program , if that program contains any error then it shows the particular error report else it displays the no error in that particular entered program and also gives the link to run that program.

7.4. RUN :



In page it shows the program output of entered program. Here it also provides the links for cerate new program and to go back at home page.

7.5. JAVA API PAGE :



Sometimes user was not aware about some java API and their declaration method this feature will help the user about to get the information about any API declaration and use regarding.

8. APPLICATIONS

1) Online java compiler
2) Online java program debug.
3) Online java API checking machine.
4) Code checker.
5) Code editor.

9. FUTURE WORK

1) In future this application would be work for all programming languages like c, c++, python…….etc.
2) Develop the projects using this application.

10. CONCLUSION

In this project we will simply to jot down a java program and compile it and correct in on-line. The Client machine doesn't having java development kit .The Client machine solely connected to the server. The server having java compiler .so server executes the java code and manufacture the error message to the suitable Client machine.

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