

ONLINE COMPILER

A PROJECT REPORT

Submitted By: ~

AMIT KUMAR

Roll no: 20141001

DEBABRATA KR KARAN

Roll no: 20141008

ABHISHEK KR MISHRA

Roll no: 20141047

Under the guidance of

Mr. Sumit Kumar Gupta

Lecturer in

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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Project associates:

Amit Kumar (20141001)

Debabrata Kumar Karan
(20141008)

Abhishek Kumar Mishra
(20141047)

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ABSTRACT:

This is regarding the entire report of the project consisting of Abstracts and Keywords, Introduction, Main topic, related works, Proposed Model, Implementation, Screen shots & Results and its Future works.

Aim of this project is to use this compiler during the tech fest or some online competition organized by school, college or any reputed institute.

We have made web application named ONLINE COMPILER which allows you to compile source code and execute it online in many programming languages. This web application help programmer to run their code online and in this web application, there is an auto detect technology which automatically detect the programming language i.e. programmer don't have to mention their programming language explicitly.

This web application allow you to upload you source code and compile it, also you can write you code and save it to your respected device and use in future.

KEYWORDS:

Words that forms the base of our project are-

- Online compiler
- Programming language
- Secure access

INTRODUCTION:

This web application will help schools, colleges or any reputed institute to organize online coding competition for students. Students or any programmer can also use this web application for compiling and running their code online. And in this web application every user have to login to their respective account so the third party inference is not happens and ever program securely compile , run and save their code.

MAIN TOPIC:

1. **Online compiler:** Online compilers are the web application which allows you to write code and compile and run that online. Also you can upload your source code and compile your code and run. Or you can save your code.
2. **Programming language:** A vocabulary and set of grammatical rules for instructing a computer to perform specific tasks. The term **programming language** usually refers to high-level **languages**, such as JAVA, C, C++, PYTHON etc.
3. **Secure access:** In this web application we try to provide security to every user. In this web application every user have to login to their respective account so that he can write code, compile and run without any distraction from any third party.

ADVANTAGES:

1. This web application will help schools, colleges or any reputed institute to organize online coding competition for students.
2. Secure access
3. Automatically detect the programming language in which program write their respective code.

DISADVANTAGES:

Since this web application automatically detect the programming language in which program write their respective code, so it take little more time to detect the respective language in which programmer write their code.

RELATED WORK:

Related web applications	Description
Code chef	It is a global competitive programming platform which supports over 50 programming languages and has a large community of programmers that helps students and professionals test and improve their coding skills. Its objective is to provide a platform for practice, competition and improvement for both students and professional software developers. Apart from this, it aims to reach out to students while they are young and inculcate a culture of programming in India.
Hacker Rank	Hacker Rank is a technology company that focuses on competitive programming challenges for both consumers and businesses, where developers compete by trying to program according to provided specifications. Hacker Rank's programming challenges can be solved in a variety of programming languages (including JAVA, C++, PHP, PYTHON, SQL) and span multiple computer science domains.

SYSTEM DESIGN

DATA DESIGN

One of the tools of structured analysis is the diagram. A data flow diagram is a graphical representation of the system. The analyst can use dataflow diagram to explain this understanding about the system.



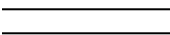

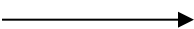
APPLICATION:-

- Data flows are an intuitive way of showing how data is processed by a system.
- At analysis level analyst should be used to model the way in which data is processed in the existing system.
- Data flow models are used to show how data flows through a sequence of processing steps.

DESCRIPTION:-

- A graphical tool used to describe and analyze the movement of data through a system manual or automated including the process store of data and delays in the system.
- The transformation of data from input to output through processes may be described logically and independently of the physical component associated with system.
- The data transformation at each step before moving on to the next stage. These processing steps or transformation are programs function when data flow diagrams are used to documents a software design.

The symbols that are used in the data flow diagram carry following meaning.

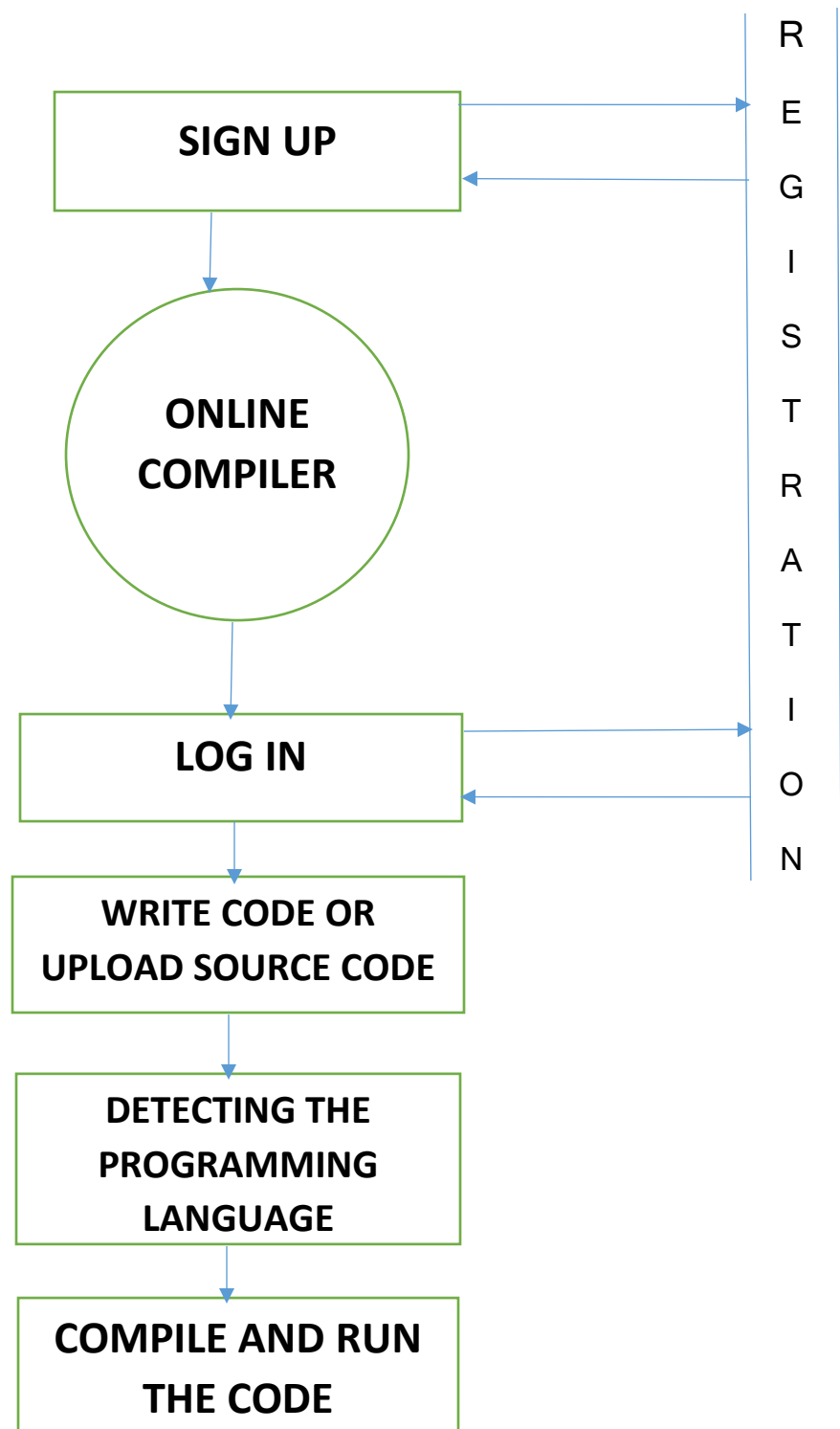
	Rectangle	it symbolizes the sources.
	Ellipse/Circle	it symbolizes the process.
	Open Rectangle	it symbolizes store data.
	Unmarked Line	it symbolizes connectivity Without a dataflow.
	Marked Line With a dataflow.	it symbolizes connectivity

DATA DIRECTORY

REGISTRATION TABLE

Field Name	Data Type(Size)
User Name	Varchar(25)
E-mail Id	Varchar(30)
Password	Varchar(18)

PROPOSED MODEL:



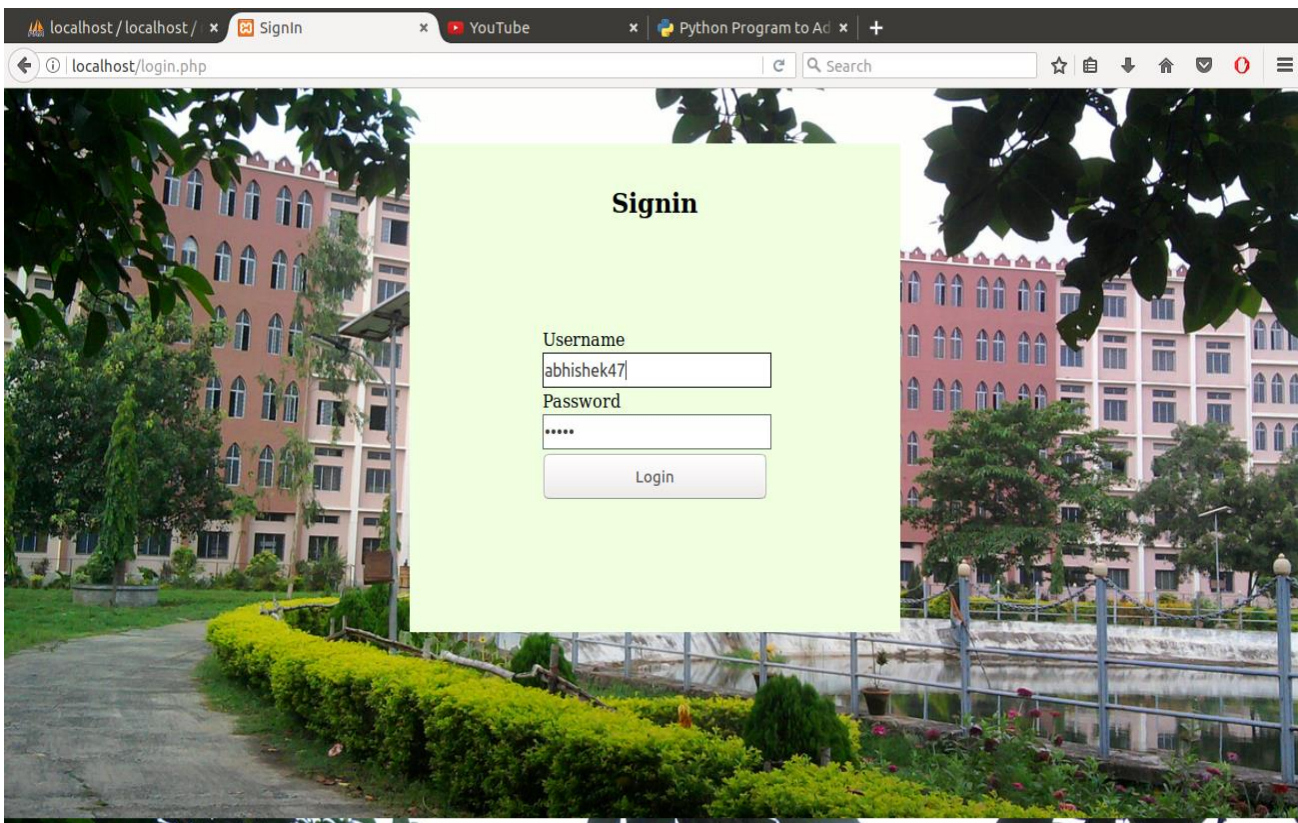
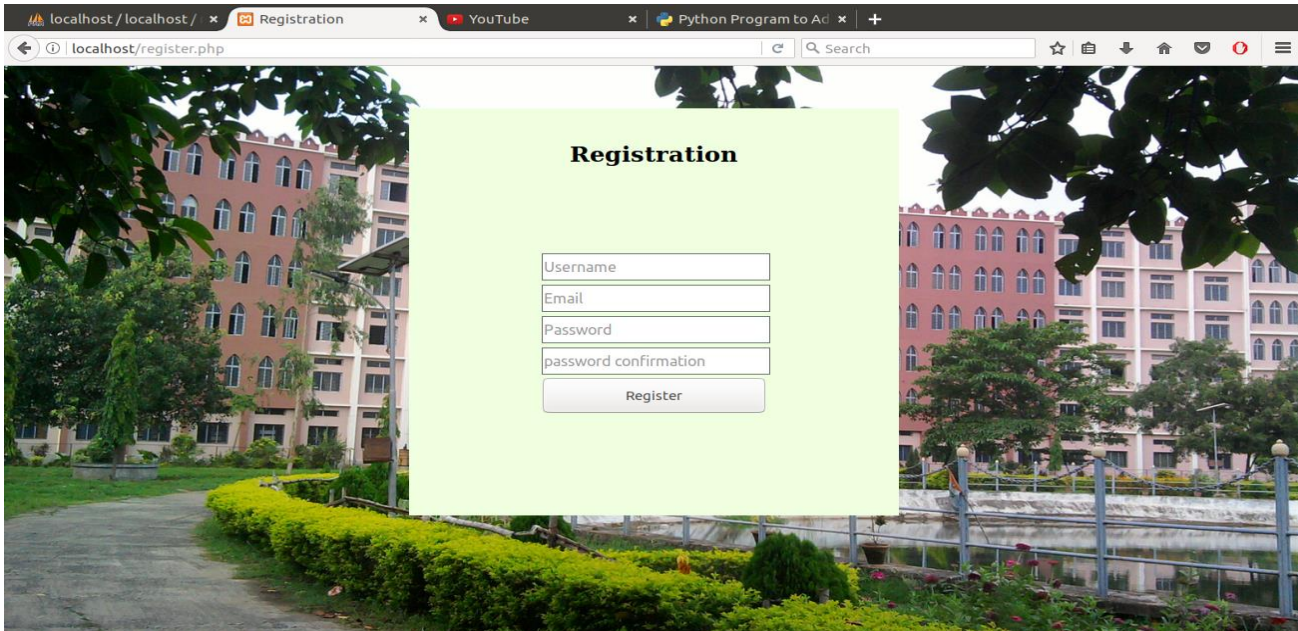
IMPLEMENTATION:

The aim of this web application is to organize online coding competition during tech fest or in any special occasion by schools or colleges or any reputed institute. This web application has design in such a way that the programmer can easily write their code or can upload their code and compile and run their code. And one great advantage of this web application is that it automatically detect the programming language in which programmer write their respective code.

For the time being we provide programmer to compile their respective code in 4 different language i.e. JAVA, C, C++, PYTHON.

And we try to provide some security to every user from third party access so they can write their code and compile and run without any distraction from others.

SCREENSHOTS AND RESULTS:



localhost / localhost / x Compiler x YouTube x Python Program to Ad x +

localhost/compiler.html

Home Supported languages Register Clear field Login abhishek021

```
# This program adds two numbers
num1 = 1.5
num2 = 6.3

# Add two numbers
sum = float(num1) + float(num2)

# Display the sum
print('The sum of {0} and {1} is {2}'.format(num1, num2, sum))
```

Compile and Run

Custom Input

Output

The sum of 1.5 and 6.3 is 7.8

localhost / localhost / x Compiler x YouTube x Python Program to Ad x C Program to Display F x +

localhost/compiler.html

Home Supported languages Register Clear field Login abhishek021

```
#include <stdio.h>
int main()
{
    int i, n, t1 = 0, t2 = 1, nextTerm = 0;

    n=10;

    printf("Fibonacci Series: ");

    for (i = 1; i <= n; ++i)
    {
        // Prints the first two terms.
        if(i == 1)
        {
            printf("%d, ", t1);
            continue;
        }
        if(i == 2)
        {
            printf("%d, ", t2);
            continue;
        }
    }
}
```

Compile and Run

Custom Input

Output

Fibonacci Series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34,

FUTURE WORK:

- 1.** Add more programming languages to this web application, so that a programmer can compile and run all types of program.
- 2.** For the time being it is hosted in a local server, in future we host it into a global server.
- 3.** Develop mobile app so everyone can use it on mobile also.
- 4.** Make it more secure.
- 5.** Make it faster.

CONCLUSION:

We conclude to build a sealable interface that extend to each common hand with following objectives

- Write, compile and run your code
- Use to organize any coding competition
- Secure access

REFERENCES:

1. Php.net/manual
2. Stack overflow