Seminar

on

Online Compiler Using Cloud Computing

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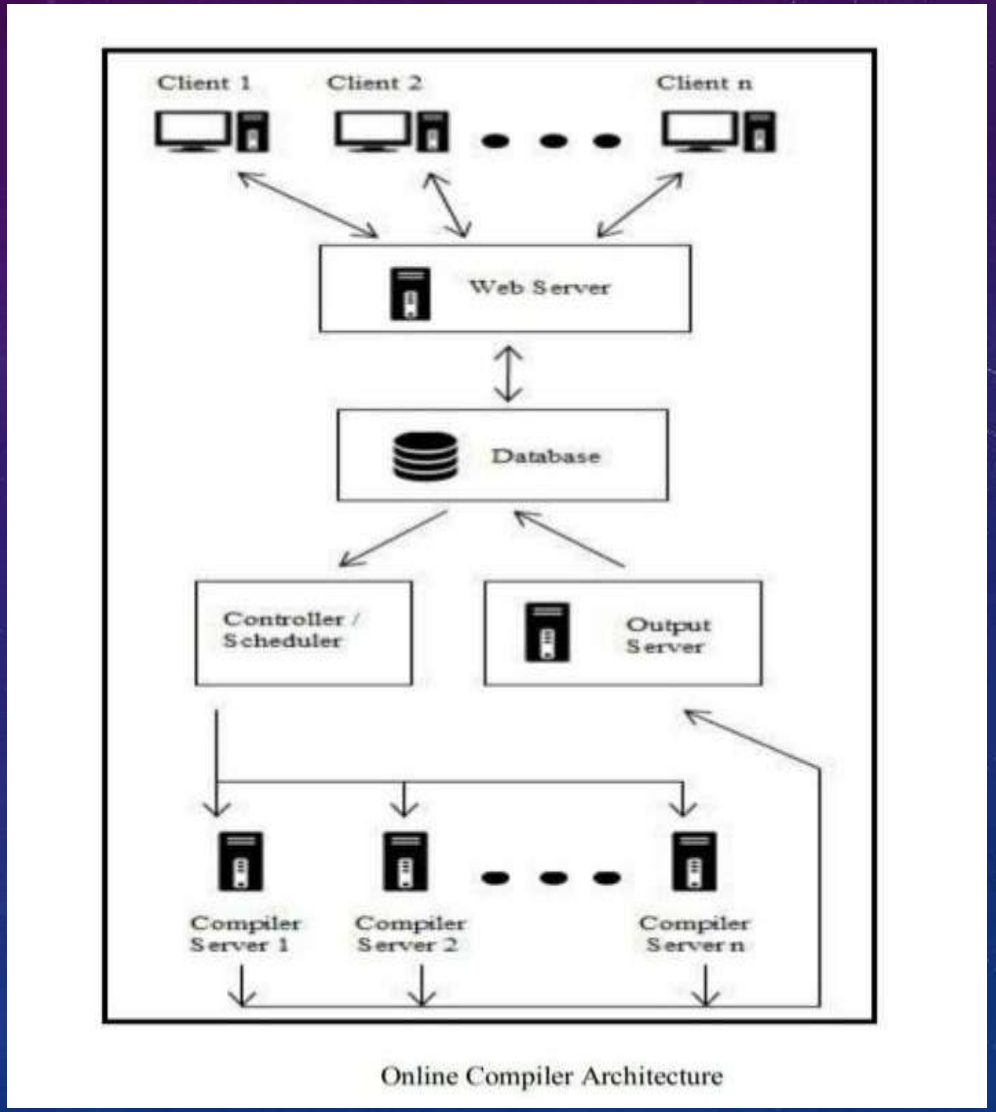
CONTENTS:

INTRODUCTION:

- Cloud computing
- Online Compiler



Online Compiler Architecture

OBJECTIVES:

- To provide web-based application which compile, store and execute program into a single editor which is common for all languages.
- To provide online tool which is independent of os for smartphones as well as computers accessible from any location.
- To reduce the problem of portability of storage and space.

FEATURES: 1. Cloud computing

Types of Cloud

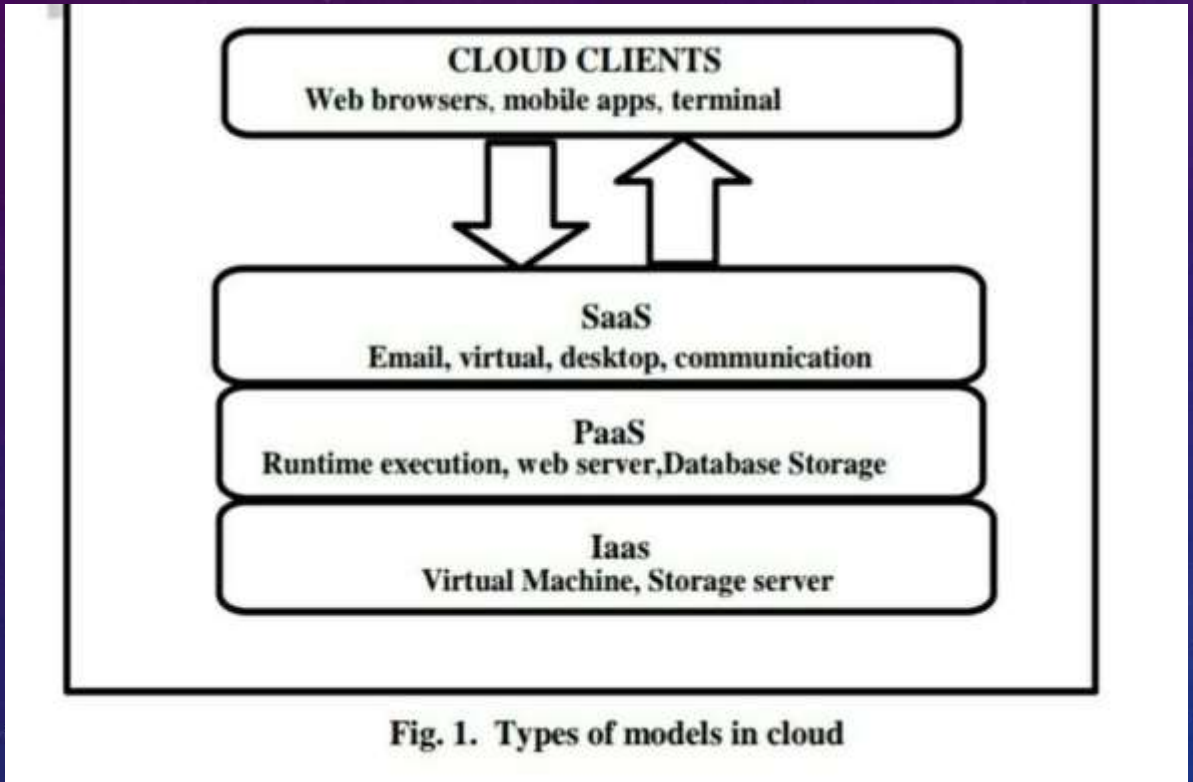


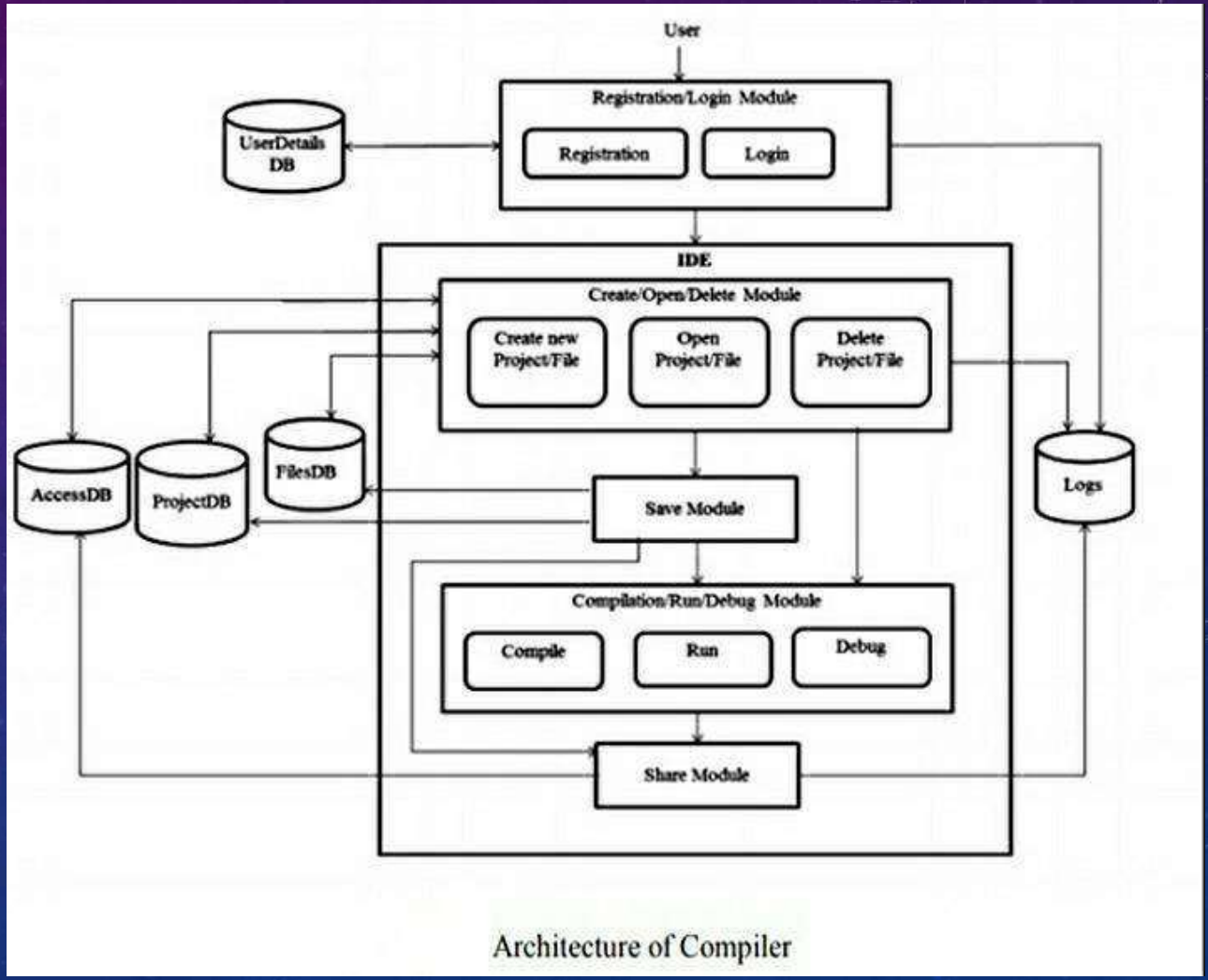
Fig. 1. Types of models in cloud

Cloud Service

FEATURES:

2. Features Of Online Compiler

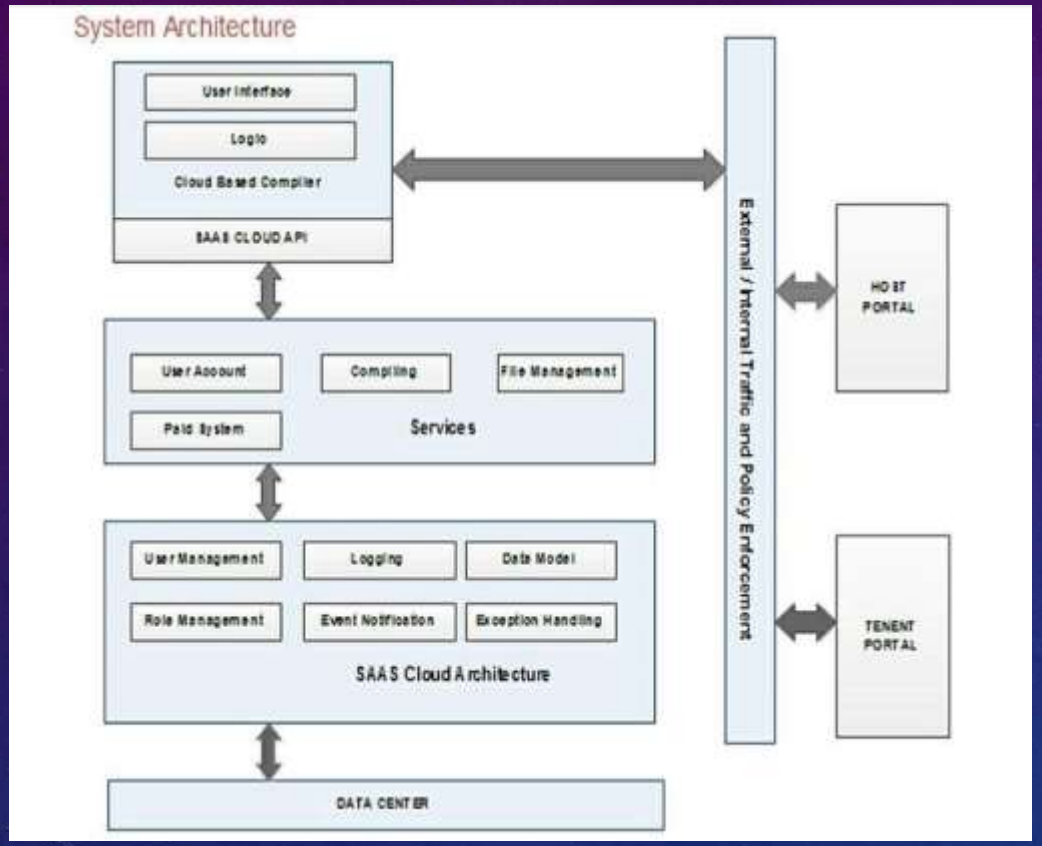
- Compile on go
- File Management
- Forum
- Security



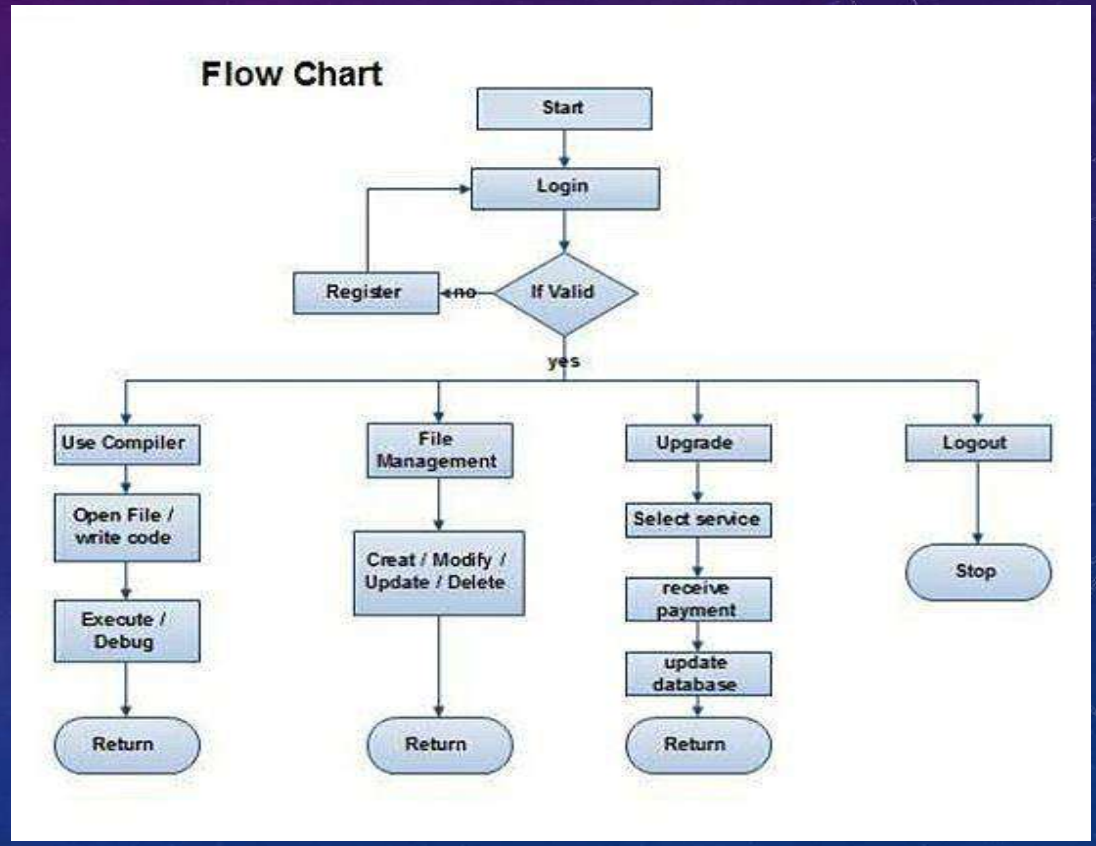
Architecture of Compiler

IMPLEMENTATION:

- Client side:



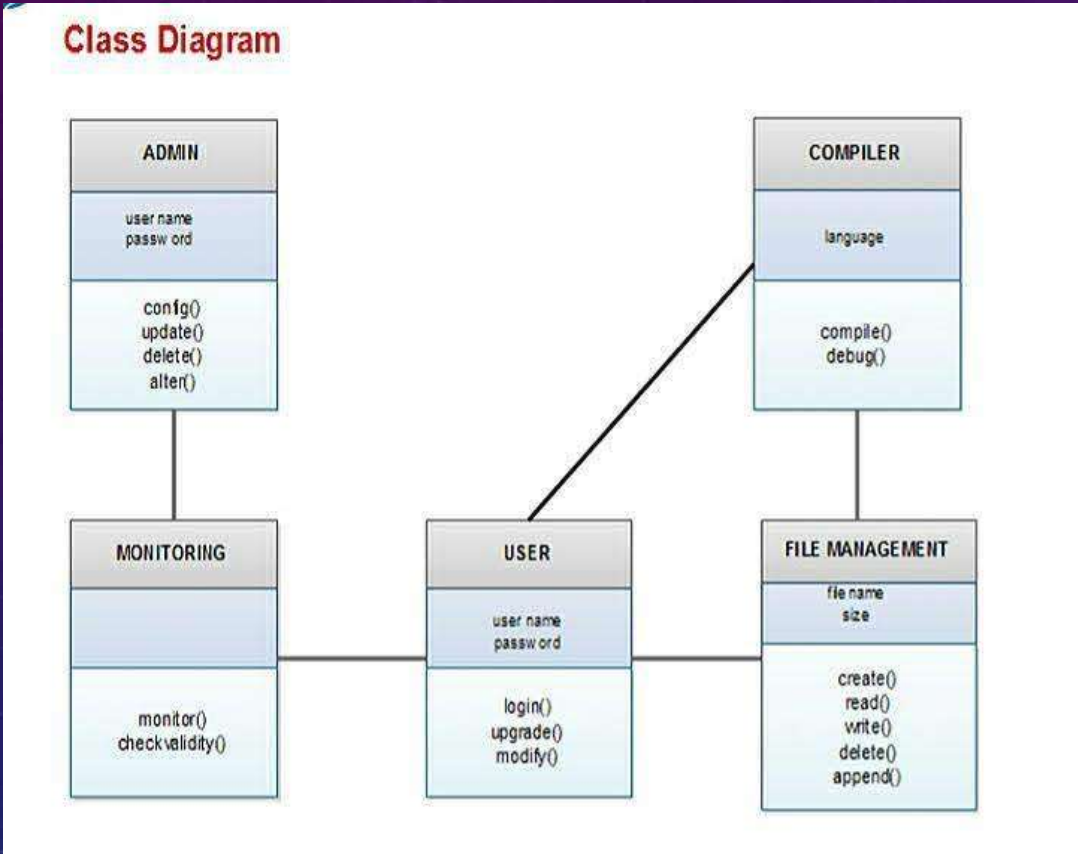
System Architecture



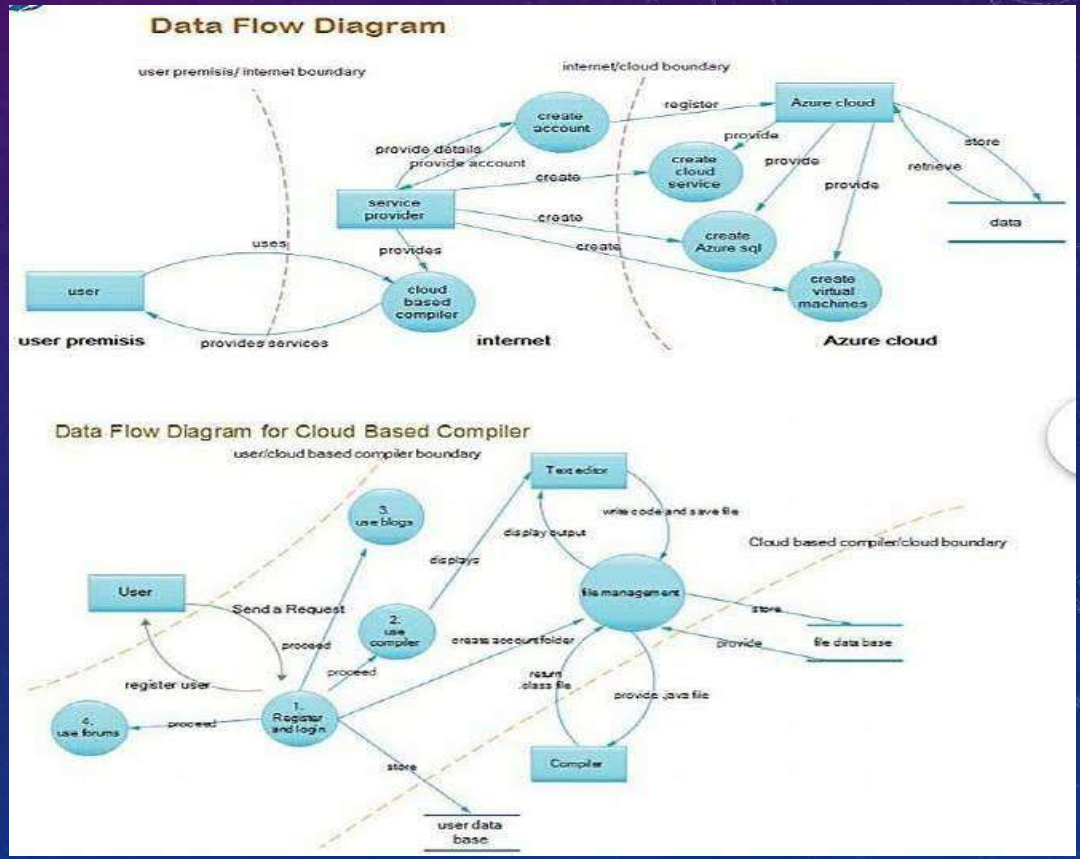
Flow Chart

IMPLEMENTATION:

- Client side:



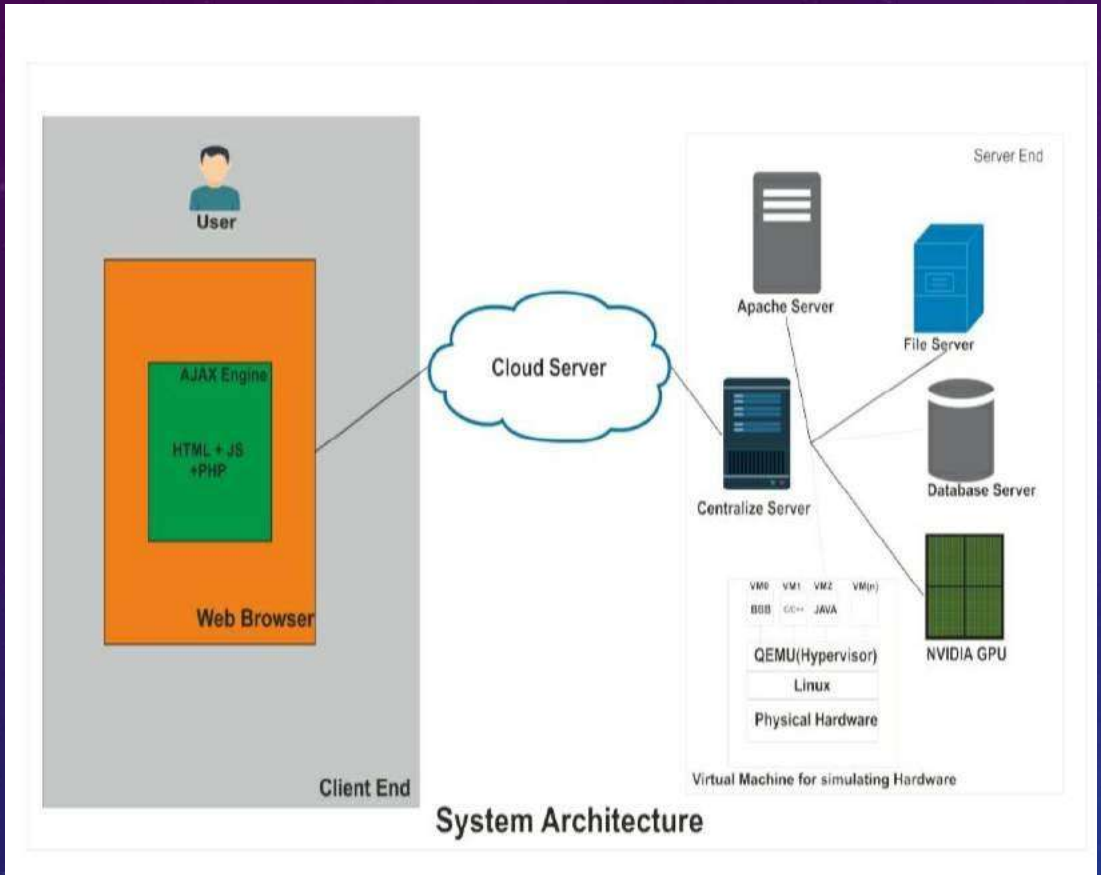
Class Diagram



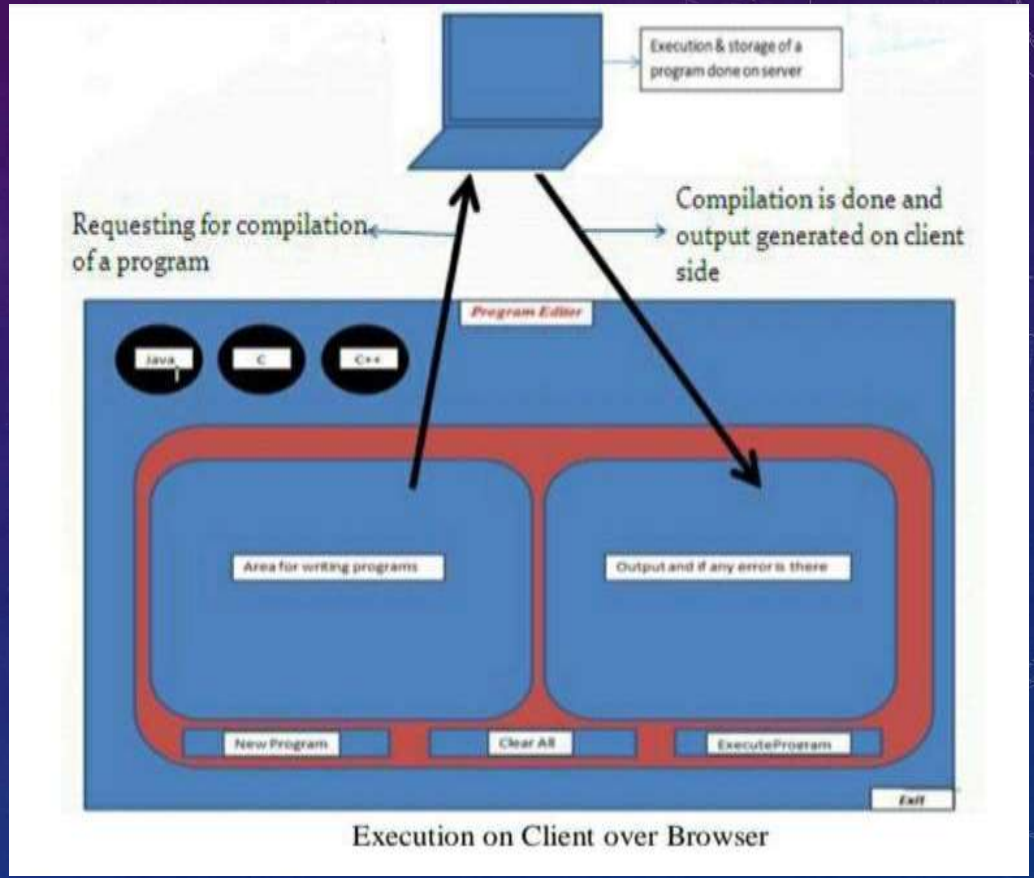
Data Flow Diagram

IMPLEMENTATION:

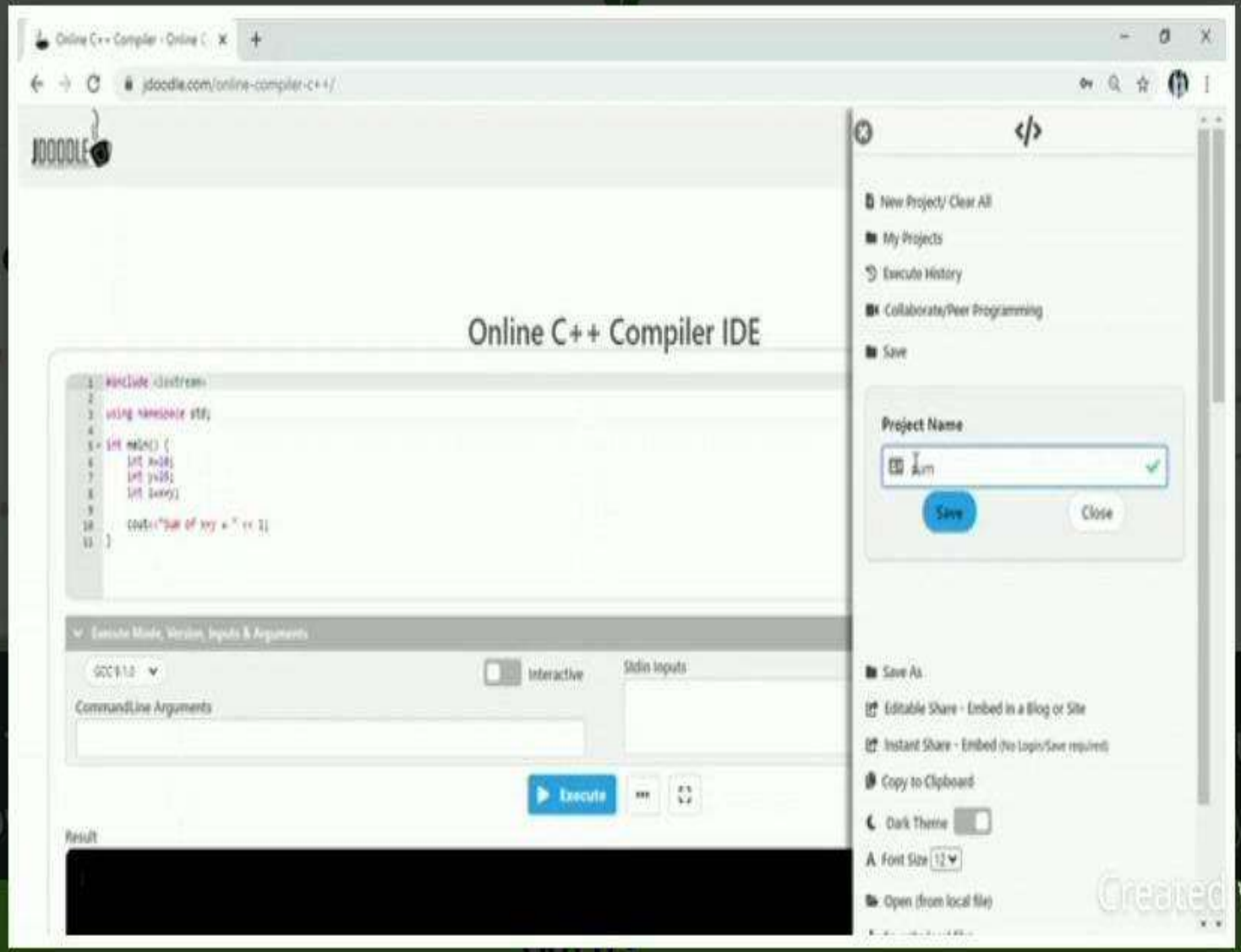
- Server side



System Architecture



Execution on client over browser


Online C++ Compiler IDE
jdoodle.com/online-compiler-c++/
New Project/ Clear All
My Projects
Execute History
Collaborate/Peer Programming
Save
Project Name
Save
Close
Save As
Editable Share - Embed in a Blog or Site
Instant Share - Embed
Copy to Clipboard
Dark Theme
Font Size
Open (from local file)
Interactive
Stdin Inputs
CommandLine Arguments
Execute
Result

APPLICATION:

- Creating Online Compiler

The below code will create a division and embed the compiler into a website page.

```
<div data-pym-src="paste copied URL here."></div>
```

The below code will include the JavaScript code from the JDoodle.

Include the below code at the bottom of the website page.

```
<script src=”https://www.jdoodle.com/assets/jdoodle-pym.min.js” type=”text/javascript”></script>
```

ADVANTAGES:

- Elegant and simple to use GUI for better coding.
- No need to download the SDK of any compiler.
- Independent of the OS for smartphones as well as computers.
- Accessible from any location through internet
- Useful for online examination
- Less cost

DISADVANTAGES:

- Sometimes it is not support for some medium level language
- In low networks connection & without internet it is not accessible.
- A large number of client's use the system sometimes may leads to a crash the system.

CONCLUSION:

- By using the services of cloud and characteristics of cloud computing and compiler, we develop a system which compile the different language source .
- Compared to the current situation where each machine need to install compilers separately this tool would eliminate the need to install compilers separately on each machine.
- The compiler package is to be upgraded it can be done easily without again installing it on each and every machine.

FUTURE SCOPE:

- Implement a security mechanism.
- Provide efficiency meters and code optimizer add ons
- Create Web API’s
- Callaborative editing

REFERENCES:

- [NIC 13] Nico Krebs, Lothar Schmitz, “Science of Computer Programming”, Volume 79, 1 January 2014.
- [SAJ 13] Sajid Abdulla, Srinivasan Iyer,Sanjay Kutty,“Cloud based Compiler”,International journal of student research in Technology Management, vol1(3),May 2013.
- [ANA 13] Anari Mohd Arshad, Khan Arshiys, Shaikh Sana,Mirza Zainab, “Complier On Cloud”, International Journal of Engineering Reasearch and technology(IJERT), ISSN:2278-0181, Vol-2, Issue 9,September 2019

THANK YOU