**A**

**PROJECT**

**ON**

**INTEGRATED DEVELOPMENT ENVIRONMENT**

**( IDE )**

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**Year 2008-2012**

**ACKNOWLEDGEMENT**

I wish to express my gratitude and sincere thanks to **Mr. Rajit Kumar**, Executive

Director–Information Technology Services (ITS) Department, of CMC Limited, Pitam Pura, New Delhi for providing me with the opportunity to work in such an esteemed organization.

I would like to extend my indebtedness to **Megha Chauhan** , our Training

Co-ordinator, CMC Limited who guided me a lot during the completion of this project. I am extremely thankful to CMC limited for providing me with the opportunity to

avail the excellent facilities and infrastructure in completing my vocational training.

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**iv**

**ABSTRACT**

Integrated development environment (IDE) (also known as integrated design environment, integrated debugging environment or interactive development environment) is a [software application](http://en.wikipedia.org/wiki/Software_application) that provides comprehensive facilities to [computer programmers](http://en.wikipedia.org/wiki/Computer_programmer) for [software development](http://en.wikipedia.org/wiki/Software_development). An IDE normally consists of:

* a [source code editor](http://en.wikipedia.org/wiki/Source_code_editor)
* a [compiler](http://en.wikipedia.org/wiki/Compiler) and/or an [interpreter](http://en.wikipedia.org/wiki/Interpreter_%28computing%29)
* [build automation](http://en.wikipedia.org/wiki/Build_automation) tools
* a [debugger](http://en.wikipedia.org/wiki/Debugger)

IDEs are designed to maximize programmer productivity by providing tightly-knit components with similar user interfaces. This should mean that the programmer has to do less mode switching versus using discrete development programs

Typically an IDE is dedicated to a specific programming language, allowing a feature set that most closely matches the programming paradigms of the language. However, there are some multiple-language IDEs, such as Eclipse, Oracle JDeveloper, recent versions of NetBeans, Microsoft Visual Studio, Genuitec MyEclipse, WinDev, and Xcode.

IDEs typically present a single program in which all development is done. This program typically provides many features for authoring, modifying, compiling, deploying and debugging software. The aim is to abstract the configuration necessary to piece together command line utilities in a cohesive unit, which theoretically reduces the time to learn a language, and increases developer productivity. It is also thought that the tight integration of development tasks can further increase productivity. For example, code can be parsed while being written, providing instant feedback on syntax errors.

v

**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **FIGURE** | **DESCRIPTION** | **PAGE NO** |
| 2.1 | Compiler | 6 |
| 2.2 | Interpreter | 7 |
| 2.3 | Implementation | 8 |
| 2.4 | Authentication | 12 |
| 2.5 | Main Interface | 13 |
| 2.6 | New project | 14 |
| 2.7 | Error | 15 |
| 2.8 | Writing code | 16 |
| 2.9 | Saving Project | 17 |
| 2.10 | Undo | 18 |
| 2.11 | Redo | 19 |
| 2.12 | Copy and Paste | 20 |
| 2.13 | Compilation | 21 |
| 2.14 | Error Removing | 22 |
| 2.15 | Byte Code generation | 23 |

**CONTENTS**

**Chapter Page**

Title Page

Certificate ii-iii

Acknowledgement iv Abstract v

1. Introduction 1
   1. About the IDE 2
   2. Software Description 3
   3. Modules of the IDE
2. System Design

2.1 Hardware Requirements 5

2.2 Software Requirements 5

2.3 System Design 6

2.3.1 Complier 6

2.3.2 Interpreter 7

3. Implementation 8

4. Summary and Conclusion

* 1. Features of the project 10

4.2 Future Aspects of the project 10

5. References 11

6. Appendix

* 1. Appendix A (Snap Shots) 12
  2. Appendix B (Source code) 24