

Software Engineering Assignment

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Cse-1

A List of CMM-5 Certified Companies in India

- Cognizant Technology Solutions
- Infosys Technologies Limited
- Larsen & Turbo Infotech Limited
- Mastek Limited
- Patni Computer Systems Limited
- Satyam Computer Services Limited.
- Sonata Software Limited
- Syntel
- Siemens Information Systems Limited
- Tata Consultancy Services
- Tata Elxsi Limited
- Tata Interactive Systems
- Wipro Technologies
- Software Paradigms International (SPI)
- IBM Global Services Bangalore
- NIIT, Software Solutions Bangalore
- Phoenix Global Solutions (I) Pvt. Ltd. Bangalore

Tools for Software Development

Compiler/Interpreter

A **compiler/interpreter** is a computer program (or a set of programs) that transforms source code written in a programming language (the source language) into another computer language (the target language), with the latter often having a binary form known as object code. The most common reason for converting source code is to create an executable program.

Integrated Development Environment (IDE)

An **integrated development environment (IDE)** is a software application that provides comprehensive facilities to computer programmers for software development. An IDE normally consists of a source code editor, build automation tools and a debugger. Most modern IDEs have intelligent code completion. E.g. **Netbeans**, Eclipse, **CodeBlocks** etc.

Debugger

A **debugger** or **debugging tool** is a computer program that is used to test and debug other programs (the "target" program). E.g. GDB: **The GNU Project Debugger**

GUI designer

A **graphical user interface builder** (or GUI builder), also known as **GUI designer**, is a software development tool that simplifies the creation of GUIs by allowing the designer to arrange graphical control elements (often called widgets) using a drag-and-drop editor. Without a GUI builder, a GUI must be built by manually specifying each widget's parameters in source-code, with no visual feedback until the program is run. E.g. **Netbeans**.

Build Automation

Build automation is the process of automating the creation of a software build and the associated processes including: compiling computer source code into binary code, packaging binary code, and running automated tests. E.g. **FinalBuilder**, **Gradle** etc.

Release Automation

Application release automation (ARA) refers to the process of packaging and deploying an application or update of an application from development, across various environments, and ultimately to production. ARA solutions must combine the capabilities of deployment automation, environment management and modeling, and release coordination. E.g. **UrbanCode Deploy & UrbanCode Release** by IBM, **Visual Studio Release Management** etc.

Version Control System

A component of software configuration management, **version control**, also known as **revision control** or **source control**,^[1] is the management of changes to documents, computer programs, large web sites, and other collections of information. Changes are usually identified by a number or letter code, termed the "revision number", "revision level", or simply "revision". For example, an initial set of files is "revision 1". When the first change is made, the resulting set is "revision 2", and so on. Each revision is associated with a timestamp and the person making the change. Revisions can be compared, restored, and with some types of files, merged. E.g. **Gitub** etc.