**WHAT IS PROGRAMMING???**

A programming language provides **a way for a programmer to express a task so that it could be understood and executed by a Computer*.***

**Computer programming is a way of giving computers instructions about what they should do next. These instructions are known as code, and computer programmers write code to solve problems or perform a task.**

The end goal is to create something: that could mean anything from a web page, or a piece of software, or even just a pretty picture. That’s why computer programming is often described as a mix between art and science; it’s technical and analytical, yet creative at the same time.

**WHY PROGRAMMING???**

* **Programming is fun:** Using Programming, you can create your own games, your personal blog/profile page, a social networking site, a search engine or an e-commerce platform
* **The backbone of a Technology Company:** The backbones of today’s technology companies like Google, Facebook, Microsoft, Apple, Amazon, and many others, are giant computer programs written by a collaboration of thousands of skilled programmers.

**FORGET ALL DAILY LIFE LOAD**

**AND START TO CODE !**

**FEEDBACK FORM**

**shorturl.at/xzGL6**

**APPLICATIONS**

**Operating Systems**

Be it Microsoft Windows or Mac OSX or Linux - all of them are programmed in C++. C/C++ is the backbone of all the well-known operating systems as it is a strongly typed and a fast programming language.

**Browsers**

The rendering engines require faster execution to make sure that users don’t have to wait for the content to come up on the screen. As a result, such low-latency systems employ C++ as the programming language due to its speed.

**Libraries**

Many high-level libraries use C++ as the core programming language. For instance, several Machine Learning libraries use C++ in the backend because of its speed. [Tensorflow](https://www.tensorflow.org/), one of the most widely used Machine Learning libraries uses C++ as the backend programming language.

**Graphics**

All graphics applications require fast rendering and just like the case of web browsers, here also C++ helps in reducing the latency. Software that employ computer vision, digital image processing, high-end graphical processing, popular games - they all use C++ as the backend programming language.

**Banking Applications**

One of the most popularly used core-banking system - Infosys Finacle uses C++ as one of the backend programming languages.

**Databases**

[Postgres](https://hackr.io/tutorials/learn-postgres?ref=blog) and [MySQL](https://hackr.io/tutorials/learn-mysql?ref=blog) - two of the most widely used databases are written in C++ and C, the precursor to C++. These databases are used in almost all of the well-known applications that we all use in our day to day life - Quora, YouTube, etc.

**Telephone Switches**

C++ is widely used in programming telephone switches, routers, and space probes it is one of the fastest programming languages,

**Compilers**

The compilers of various programming languages use C and C++ as the backend programming language as both C and C++ are relatively lower level languages and are closer to the hardware.

**INTRODUCTION**

## FEATURES OF C++

* **Simple**
* **Portability**
* **Powerful**
* **Platform dependent**
* **Object oriented oriented**
* **Case sensitive**
* **Compiler based**
* **Syntax based language**

It is a simple as its code is written in English and is easy to understand. It is portable as C++ program on one Window OS runs easily on other Window OS. It is a powerful, case sensitive and a platform dependent language. It is an object-oriented programming language as it follows concepts like polymorphism, inheritance, encapsulation, abstraction. It is a compiler based and syntax based language as without compilation execution of C++ program cannot occur and it follows rules and regulations for proper syntax

**ADVANTAGES OF C++**

* **Speed**: C++ is faster than most other programming languages and it provides excellent concurrency support. So it is useful in those areas where performance is quite critical and the latency required is very low such as web servers, application servers, database servers, etc.
* **Closer to hardware**: C++ is closer to hardware than most other programming languages. This makes it useful in those areas where the software is closely coupled with hardware and low-level support is required at the software level.

**C++ PROJECT IDEAS**

At the end of the session, all of us have to submit one project created by us using C++.

So, following are links to some of the projects that all of you can go through and then develop your own idea :

**ALL THE BEST !**

# Banking Record System

* <https://www.codewithc.com/banking-record-system-project-c/>

# Bookshop Management System

* <https://www.codewithc.com/bookshop-management-system-project-in-c/>

# Bus Reservation System

* <https://www.codewithc.com/bus-reservation-system-project-in-c/>

# Hostel Management System

* <https://www.codewithc.com/hostel-management-system-project-vb-net/>

# Payroll Management System

* <https://www.codewithc.com/payroll-management-system-project-in-c/>

# Phonebook Management System

* <https://www.codewithc.com/phonebook-management-system-project-in-c/>

# Railway Reservation System

* <https://www.codewithc.com/railway-reservation-system-project-in-c/>

# Sales Management System

* <https://www.codewithc.com/sales-management-system-project-c/>

# Student Database Management System

* <https://www.codewithc.com/student-database-management-system-c-project/>

# Student Report Card System

* <https://www.codewithc.com/student-report-card-system-project-in-c/>

# Supermarket Billing System

* <https://www.codewithc.com/supermarket-billing-system-project-in-c/>

# Telephone Directory System

* <https://www.codewithc.com/telephone-directory-system-project-in-c/>

# Traffic Control Management System

* <https://www.codewithc.com/traffic-control-management-system-c-project/>

# University Management System

* <https://www.codewithc.com/university-management-system-project-c/>

# Tank Game

* <https://www.codewithc.com/tank-game-c-project/>

# Search Engine

* <https://www.codewithc.com/search-engine-project-in-c/>

# Canteen Management System

* <https://www.codewithc.com/c-program-canteen-management-system-c-mysql/>

# Music Store Management System

* <https://www.codewithc.com/music-store-management-system-c-program-with-mysql-database/>

# Travel Agency Management System

* <https://www.codewithc.com/travel-agency-management-system-in-c-with-mysql/>

**ABOUT US**

**MOTTO :**

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**AIM :**

**The purpose of this website is to ease the learning process of students and help them to learn C++ language in an attractive and interactive way.**

**This website aims to keep the content compact and to the point and also helps students to analyze their weak sections through quizzes, so that they can focus more on those concepts.**