

Forum:[Hack Forums](#)

Thread: [Where to start in Programming | A Guide](#)

Revenge - December 4, 2013, 2:43 pm

Introduction

I've seen a lot of threads around this section asking "What's the best language to learn?", "Where can I learn", "I want to be able to code _____, what language should I learn?". I'm here to answer all of these questions and I'll make it very easy to find which language is for you. You'll be coding in no time!

Visual Basic .NET

Visual Basic is one of the easiest languages to learn and it's where a lot of people start. Visual Basic can be used to code a wide variety of programs and it's very versatile. It was first released in 1992 by Microsoft after [Alan Cooper](#) sold it to them. A lot of the time it is shortened to "VB.NET" and it includes a very easy to use drag and drop interface.

Common Uses:ASP.NET Web Applications

Microsoft Windows applications

Windows Phone apps

Simple Games

Pros and cons:Pros:Easy to learn. It has one of the easiest syntax's for a new programmer to learn.

Lots of resources for someone who is beginning to learn a programming language.

Cons:Memory Intensive. It is not useful over a language such as C for programs that require lots of processing time.

A hard language to debug code. It is a hard language to debug code in with bad error handling messages.

Resources:Books: [Start Here! Learn Microsoft Visual Basic 2012](#) by Michael Halvorson

[Visual Basic 2010 Made Easy](#) by Dr Liew Voon Kiong

[Murach's Beginning Visual Basic .NET](#) by Anne Prince

If you have any resources you would like to see added please PM me.

Videos: [Visual Basic .NET Tutorials](#) by TeachMeComputer

[Visual Basic](#) by thenewboston

[Visual Basic Tutorials](#) by learnerstv

If you have any resources you would like to see added please PM me.

Courses: [Visual Basic .NET Course](#) by homeandlearn

[Learn Visual Studio](#) by Learn Visual Studio

If you have any resources you would like to see added please PM me.

Hack Forums: [The Basics of VB.NET](#) by [SomeWhiteGuy](#)

[Getting Started with VB.NET | The Complete Basics](#) by [Odus](#)

If you have any resources you would like to see added please PM me.

C#

C# which is pronounced C Sharp is developed by Microsoft and it was created to use all of the .NET platform. It was first released in 2001 and the development team is lead by [Anders Hejlsberg](#) who also created the langue Delphi.

Common Uses:Web Applications

Simple Games

Windows Applications

Pros and cons:Pros:The syntax of C# is similar to a number of different languages such as Java, Objective C, PHP, and C++. This makes it so that other languages will be easier to learn.

One of the most in-demand languages for employers.

Has an advanced garbage collector which helps to prevent memory leaks.

Cons:Has a difficult syntax to learn for a beginner.

Largely dedicated to Microsoft Windows so misses out on the Linux and Mac operating systems.

Resources:Books: [Pro C#5.0 and the .NET 4.5 Framework](#) by Andrew Troelsen

[C# 5.0 in a Nutshell: The Definitive Reference](#) by Joseph Albahari and Ben Albahari

[C# in Depth, 3rd Edition](#) by Jon Skeet

If you have any resources you would like to see added please PM me.

Videos:[C# Tutorial For Beginners](#) by kudvenkat

[C#](#) by thenewboston

[C# Fundamentals Development for absolute beginners](#) by channel9.msdn

If you have any resources you would like to see added please PM me.

Courses:[C# Programming Training](#) by microsoftvirtualacademy

[C# Training](#) by learnvisualstudio

If you have any resources you would like to see added please PM me.

Hack Forums: [\[?\]143 - BIGGEST C# Tutorials!!! \(Console- & WinForms\)\(Basics,IO,Sockets,Sql etc.\)](#) by [bausshacker](#)

[143 \[?\] - C# Programming Tutorials!!! \(Console- & Windows Form Applications\) #2](#) by [bausshacker](#)

[Welcome to C# | A Comprehensive Guide](#) by [Odus](#)

If you have any resources you would like to see added please PM me.

C++:

C++ pronounced see plus plus was developed by [Bjarne Stroustrup](#) in the 1980's. It was made in an attempt to better the C programming language.

Common Uses:Computer Games

Anti-Virus Software

Medical Software

C++ Compilers

Design Software

Pros and cons:Pros:Wide variety of different programs can be made in C++

A lot of people program in C++

It's a low-level programming language

Cons:Difficult syntax for beginners to learn
Harder to free up memory than other languages
Can't be used on all operating systems

Resources:Books: [The C++ Programming Language: Special Edition \(3rd Edition\)](#) by Bjarne Stroustrup

[Effective C++:55 Specific Ways to Improve Your Programs and Designs \(3rd Edition\)](#)

[Thinking in C++, Second Edition](#) by Bruce Eckel

If you have any resources you would like to see added please PM me.

Videos: [C++](#) by thenewboston

[cplusplus](#) by cplusplus tutor

[C++ Video guide](#) by University of Reddit

If you have any resources you would like to see added please PM me.

Courses:[cplusplus4c](#) by coursera

[learncpp](#) by learncpp

If you have any resources you would like to see added please PM me.

Hack Forums: [The Complete C++ Guide](#) by [Crow](#)

[Ultimate C++ Beginner Guide](#) by ['Remix](#)

If you have any resources you would like to see added please PM me.

C

The language C was developed to do system programming for the OS UNIX. It was developed in the early 1970's by [Ken Thompson](#) and [Dennis Ritchie](#).

Common Uses:Writing Operating Systems

System Level Programming

Compilers

Embedded Systems

Pros and cons:Pros:Useful to know because many other languages are made on the foundations of C

Easy to make programs run on multiple machines, and thus is considered highly portable

Relatively easy to learn

Cons:It has no exception handling

There's no runtime checking

Doesn't support object oriented programming

Resources:Books: [C Programming Language \(2nd Edition\)](#) by Brian W. Kernighan and Dennis M. Ritchie

[C Programming: A Modern Approach](#) by K. N. King

[C Programming Absolute Beginner's Guide \(3rd Edition\)](#) by Greg Perry and Dean Miller

If you have any resources you would like to see added please PM me.

Videos: [C Programming Tutorials](#) by iTzAdam5X

[C Programming Tutorials](#) by CPlusPlus TutorDotcom

[C](#) by thenewboston

If you have any resources you would like to see added please PM me.

Courses: [Free MIT online C programming course](#)

If you have any resources you would like to see added please PM me.

Hack Forums:

If you have any resources you would like to see added please PM me.

Objective-C

Objective-C was developed in the 1980's by [Brad Cox](#) and Tom Love, but it didn't become popular until NeXT bought it. Later on NeXT was bought by Apple and it has become the main language for the Mac OS X, iPhone, iPod touch and iPad.

Common Uses: App development for Apple products
Apple Computer Programs

Pros and cons: Pros: Object oriented

Cons: Swift has replaced it in a lot of different areas

Resources: Books: [Programming in Objective-C \(5th Edition\) \(Developer's Library\)](#) by Stephen G. Kochan

[Objective-C Programming for Dummies](#) by Neal Goldstein

[Learn Objective-C on the Mac For OS X and iOS, 2nd Edition](#) by Scott Knaster, Waqar Malik and Mark Dalrymple

If you have any resources you would like to see added please PM me.

Videos: [Learn Objective-C Programming](#) by mybringback

[Objective-C Tutorials](#) by Apple Programming

[Objective-C](#) by thenewboston

If you have any resources you would like to see added please PM me here.

Courses: [Objective-C essential training](#) by lynda

[Learn Objective-C](#) by codeschool

If you have any resources you would like to see added please PM me.

Hack Forums:

If you have any resources you would like to see added please PM me.

Java

Java was first developed by [James Gosling](#) and it was first released in 1995. It's currently one of the most popular languages and has about 10 million users.

Common Uses: Making websites
Mobile Phone Software
Games
Android Applications

Pros and cons: Pros: Industry standard
Object oriented
Relatively easy to learn for a beginner
Platform independant

Cons: It can be slower than other languages

Resources:Books:[The Java Programming Language, 4th Edition](#) by Ken Arnold, James Gosling and David Holmes

[Java, A Beginner's Guide, 5th edition](#) by Herbert Schildt

If you have any resources you would like to see added please PM me.

Videos: [Java Language Tutorials](#) by John Gizdich

[Java \(Beginner\)](#) by thenewboston

[Java Video Tutorials](#) by Derek Banas

If you have any resources you would like to see added please PM me.

Courses: [learn java](#) by Codeacademy

[learn java online](#) by learnjavaonline

If you have any resources you would like to see added please PM me.

Hack Forums: [The Java Language.](#) by [redpois0n](#)

[Welcome to Java :: A complete, updated compilation of Tutorials and Source Codes](#) by [King of Hearts](#)

[Ultimate Java Tutorial | Huge and Detailed | Beginner Friendly](#) by [MeshCollider](#)

If you have any resources you would like to see added please PM me.

Revenge - December 4, 2013, 2:50 pm

JavaScript

JavaScript is a scripting language rather than a programming language, but I decided to include it also. JavaScript was developed by [Brendan Eich](#).

Common Uses:Building Websites

Games

Pros and cons:Pros:Very fast

It's a very simplistic language

It's a very versatile language

Cons:Security issues

Reliant on what the end user is doing

Resources:Books: [JavaScript : The Definitive Guide: Activate Your Web Pages \(Definitive Guides\)](#) by David Flanagan

[JavaScript and HTML5 Now](#) by Kyle Simpson

[Eloquent JavaScript](#) by Marijn Haverbeke

If you have any resources you would like to see added please PM me.

Videos: [JavaScript Video Tutorial](#) by Derek Banas

[JavaScript for Beginners](#) by Easy Learn Tutorial

[JavaScript](#) by thenewboston

If you have any resources you would like to see added please PM me.

Courses: [JavaScript](#) by CodeAcademy

[JavaScript](#) by w3school

[JavaScript](#) by codeschool

If you have any resources you would like to see added please PM me.

Hack Forums:

If you have any resources you would like to see added please PM me.

PHP

PHP(Hypertext Preprocessor) is another scripting language and tons of websites are now using it. It was first developed by [Rasmus Lerdorf](#) in 1995.

Common Uses:It's mostly used for building websites(I'll go through some of the things it can do).

Collect User Information

Can create graphics with GD library

It can preform calculations

Pros and cons:Pros:Easy to learn

It's a well supported language

Platform independant

Speed and efficiency

Cons:Security

Can struggle with larger projects

Resources:Books: [Programming PHP](#) by Kevin Tatroe, Peter MacIntyre and Rasmus Lerdorf

[PHP Reference: Beginner to Intermediate PHP5](#) by Mario Lurig

[PHP for the Web, 3rd Edition](#)

If you have any resources you would like to see added please PM me.

Videos: [PHP](#) by thenewboston

[PHP Video Tutorials](#) by phpvideotutorials

[PHP Training Tutorials](#) by lynda

If you have any resources you would like to see added please PM me.

Courses: [PHP](#) by codeacademy

[PHP 5 Tutorial](#) by w3school

[zend PHP training](#) by zend

If you have any resources you would like to see added please PM me.

Hack Forums: [\[Tut.\] The basics of PHP](#) by [idiot10](#)

If you have any resources you would like to see added please PM me.

Python

Python was created by [Guido van Rossum](#) in 1991 and it was named after a game show known as "Monty Python". Python is considered one of the best languages to start learning with out there today.

Common Uses:Network Programming

Games

Web Development

Scientific Programming

Pros and cons:Pros:Simplistic design

Internet of things programming is often done with Python

Cons: Can be slower than other languages
It has design restrictions

Resources: Books: [Learning Python, 5th Edition](#) by Mark Lutz
[Python In A Day: Learn The Basics, Learn It Quick, Start Coding Fast \(In A Day Books\) \(Volume 1\)](#) by Richard Wagstaff
[A Byte of Python](#) by Swaroop C H
If you have any resources you would like to see added please PM me.

Videos: [Python](#) by thenewboston
[Python Programming](#) by learnerstv
[Python Training Tutorials](#) by lynda
If you have any resources you would like to see added please PM me.

Courses: [Python](#) by codecademy
[An Introduction to Python](#) by Joe Warren, Scott Rixner, John Greiner and Stephen Wong
[Learn Python](#) by learnpython

If you have any resources you would like to see added please PM me.

Hack Forums: [Welcome to Python \(Tutorials, Sources, and ebooks.\)](#) by [Daniel Faraday](#)
[Ultimate Python Beginners Guide](#) by [Vitani](#)
[--? Python Mega Tutorial & Guide ?--](#) by [Xerotic](#)
If you have any resources you would like to see added please PM me.

Revenge - December 4, 2013, 2:51 pm

Thanks to [Viral Dragon](#) and [Ethereal](#) for allowing me to use the Wiki sub forum to make this thread and also for the post holders

I got much of my information from Wikipedia and Google Searches as well as from on here. All threads are linked and a link to the profile is provided.

Revenge - December 5, 2013, 8:08 am

Thank you Para for moving. I'm glad to see this up and running. If anyone has any languages they would like to see added let me know!

Herbert - December 5, 2013, 8:14 am

Wow a lot of effort has put into this, deserves a sticky imho.

+mK - December 5, 2013, 10:12 am

Thanks for the thread dude, I'll probably be using this just for my own knowledge in about a month or so.

Freddy Kru?ger - December 5, 2013, 10:26 am

Great thread buddy, I also think it deserves a sticky.

Cyan - December 5, 2013, 10:28 am

Thanks for posting this, It will be helpful to a lot of people.

vitalitasia - December 5, 2013, 1:22 pm

Thanks for this awesome thread, I love it! I started learning Javascript but finished the stuff on Codecademy and needed new sites to learn. You helped me out ?

I bet this will be a sticky.

beta69 - December 5, 2013, 3:58 pm

I'd like to see D on the list, considering it's one of the most developing languages in this time and it's starting to get really popular. Recently Facebook started to use D.

Also C# is used more than VB when it comes to ASP.NET

Revenge - December 5, 2013, 3:59 pm

(Dec 5, 2013 02:22 PM)Lutan Wrote: [\[CITE\]](#) Thanks for this awesome thread, I love it! I started learning Javascript but finished the stuff on Codecademy and needed new sites to learn. You helped me out ?

I bet this will be a sticky.

Hey that's great man. The thread was designed for beginners to get into coding/programming, but it's great to see it helping people who aren't beginners as such also. Let me know how you get on from here on in bud haha

Hollywood Undead - December 5, 2013, 4:01 pm

Looks good dude. Bookmarking this, will definitely use this.

Revenge - December 6, 2013, 12:27 am

(Dec 5, 2013 05:01 PM)Prevail ? Wrote: [\[CITE\]](#) Looks good dude. Bookmarking this, will definitely use this.

That's good to hear. I will update it with more languages later, I'm thinking of including Pearl and Delphi by request. What does everyone think?

beta69 - December 6, 2013, 5:59 am

(Dec 6, 2013 01:27 AM)Revenge. Wrote: [\[CITE\]](#) That's good to hear. I will update it with more languages later, I'm thinking of including Pearl and Delphi by request. What does everyone think?

Did you read my post? But yeah include Peral and Delphi as well, don't limit languages by popularity. Maybe split it all up into categories etc. Some more indepth explanations, hello world examples and perhaps list IDE's & Compilers etc.

Revenge - December 6, 2013, 6:37 am

(Dec 6, 2013 06:59 AM)beta69 Wrote: [\[CITE\]](#) Did you read my post? But yeah include Peral and Delphi as well, don't limit languages by popularity. Maybe split it all up into categories etc. Some more indepth explanations, hello world examples and perhaps list IDE's & Compilers etc.

Oh sorry, I thought I replied to it. Yeah I will add that too when I get the chance. I don't think I need examples etc though, it's not what this thread is about do you not think? ?

beta69 - December 6, 2013, 8:13 am

(Dec 6, 2013 07:37 AM)Revenge. Wrote: [\[CITE\]](#) Oh sorry, I thought I replied to it. Yeah I will add that too when I get the chance. I don't think I need examples etc though, it's not what this thread is about do you not think? ?

Well hello world examples would show each languages syntax, thus you could pick languages based on syntaxes as well.

Revenge - December 7, 2013, 10:22 am

(Dec 6, 2013 09:13 AM)beta69 Wrote: [\[CITE\]](#) Well hello world examples would show each languages syntax, thus you could pick languages based on syntaxes as well.

They will learn that from the resources though? Anyway, the thread isn't getting as much attention

as I expected. If it does pick up, I'll start adding some more information and languages.

beta69 - December 7, 2013, 3:27 pm

(Dec 7, 2013 11:22 AM)Revenge. Wrote: [\[CITE\]](#) They will learn that from the resources though? Anyway, the thread isn't getting as much attention as I expected. If it does pick up, I'll start adding some more information and languages.

But then you have already chosen a language. The point was to show the different syntaxes for each languages, so you may choose a language that has a syntax you're already familiar with. Not saying you should add it, but it would be a great help for people looking to learn new languages.

d4rkj4y - December 8, 2013, 1:02 am

You are absolutely correct with no mention of malware in any of the languages mentioned

Revenge - December 11, 2013, 12:21 am

(Dec 8, 2013 02:02 AM)d4rkJ4y Wrote: [\[CITE\]](#) You are absolutely correct with no mention of malware in any of the languages mentioned

What? I'm unsure as to what you're trying to say.

Just under 20 replies makes me sad. This took a ton of work.

HazeFazeBRO - January 1, 2014, 3:49 pm

(Dec 11, 2013 01:21 AM)Revenge. Wrote: [\[CITE\]](#) What? I'm unsure as to what you're trying to say.

Just under 20 replies makes me sad. This took a ton of work.

That's how the world works. Here's 22 replies.

Obli - January 1, 2014, 3:49 pm

Great guide, man. Gave it a quick read, I got a better idea about coding in general.

This must be a sticky.

King of Hearts - January 1, 2014, 7:34 pm

Add the pros and cons for each language and this should be stickied. I see too many threads asking which language to learn/how do I start

Computer Forensics - January 1, 2014, 8:57 pm

I dislike the fact that alot of the e-books and such require payment when there are tons of free e-books around. But this does deserve a sticky very good for the newcomers who are stepping into code.

Revenge - August 13, 2016, 3:58 pm

I have decided to update this and spent a few hours updating some stuff. It's not totally finished yet, but I've added in pros and cons as suggested. I've added some new resources (Mostly Hack Forums related). I'm looking for a lot more courses to add in because I'm not too happy with the ones under the sections really. I'm thinking of adding in some new languages also, what do people want to see?

xLelouch - August 13, 2016, 8:24 pm

Thanks for the thread. It really helped.

Drakop - August 14, 2016, 12:28 am

Thanks, great thread ! found good ressources !

Revenge - August 14, 2016, 4:10 am

Glad you both like it. Is there anything that you would add into the guide? Looking to improve it further when I have the time to do so.

Fate Gaming - August 17, 2016, 11:22 am

thanks bro :) i finally decided which language to start with as it is my first, could i add you on skype to ask you some questions when i need some help? lol i understand if you don't want, ty.
?

creedypter - August 17, 2016, 11:46 am

Lol you deserve a award for this ,where as many people would take advantage of this by Selling A easiest programming language for about 20\$++.
your thread really needs a attention and i hopes it helps many newbies (including me).

once again thanks man and good luck in future

Revenge - December 13, 2016, 4:17 pm

Thanks for the kind words, both of you. I have updated it with more information and also changed the format. Let me know what you think of it now.

Sajuuk - December 13, 2016, 4:54 pm

Visual Basic .NET listed as the first language. Smh.

Revenge - December 13, 2016, 4:58 pm

(Dec 13, 2016 05:54 PM)Sajuuk Wrote: [\[CITE\]](#) Visual Basic .NET listed as the first language. Smh.

They are in no specific order. It's not even a language I've ever used anyway.

Sajuuk - December 13, 2016, 5:09 pm

(Dec 13, 2016 05:58 PM)Revenge. Wrote: [\[CITE\]](#) They are in no specific order. It's not even a language I've ever used anyway.

Order still implies recommendation even when no order is specified. What kind of person do you expect to read this guide? Exactly, beginner programmers because that's the target audience of this thread. A majority of those reading within that class will begin learning the first language listed. In this case, Visual Basic .NET. Which is bad. Really bad.

Hapi - December 13, 2016, 6:43 pm

I find the information in the 'pros/cons' part inaccurate. C# and Visual basic both target .NET so in theory they can be used to create the same products, apart from specific frameworks like Unity and Xamarin - I wouldn't call Unity games simple either. Also, you state that C++ can't be used on all operating systems? As far as I am aware it can be ran on mostly all of them, and even on embedded devices.

Technically you can use object-orientated programming with C there are various books on this to prove it. The pros on Obj-C are a bit vague and can be expanded a lot more.

A con for Java is it can be a bit slower than other languages; you should really state where and why because that is inaccurate compared to the languages on your list. PHP does not struggle with larger projects, you do realise Facebook is written in PHP~.

All in all I find this would be confusing for beginners and really should be researched more.

Perceptive - December 13, 2016, 6:44 pm

This actually helped me a lot, thank you.

Greater - December 13, 2016, 6:45 pm

Thanks for the thread. It really helped.

DarkWhytsoul - December 14, 2016, 10:48 am

If you want to become a programmer, start with learning Algorithms .

Introduction to Algorithms by Thomas H. Cormen is a great place to start.

Learning a language by itself will only make you a master in that language only.

A programmer is a problems solver, and sometimes sticking to one language will only limit you.

ltrant - December 15, 2016, 9:36 am

Vouch!

As already other people said this should get sticky. I see the "What programming language should I learn?" nearly everyday on HF.

Sajuuk - December 15, 2016, 10:52 am

(Dec 15, 2016 10:36 AM)ltrant Wrote: [\[CITE\]](#) Vouch!

As already other people said this should get sticky. I see the "What programming language should I learn?" nearly everyday on HF.

<https://hackforums.net/showthread.php?tid=3585894>

If only I still maintained that e-book.

SIM-3348025 - December 16, 2016, 6:56 pm

Great post you got there! nice list of most needed information

ItzClydeFrog - January 5, 2017, 7:15 pm

Posting for future reference. Thanks for the resource good sir.

Undefined - January 6, 2017, 2:09 pm

Might as well put ASP.NET under C# since it also applies to C# ?

HomunculusK - January 10, 2017, 2:11 pm

nice thread man, bookmarked