LATE BHAUSAHEB HIRAY S.S. TRUST'S INSTITUTE OF COMPUTER APPLICATION, MUMBAI

Web Technology with Node js, Angular js and MySQL

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WEB TECHNQLQGY WITH Node JS, Angular JS And Mysql

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LATE BHAUSAHEB HIRAY S.S. TRUST'S INSTITUTE OF COMPUTER APPLICATION BANDRA, EAST MUMBAI- 51

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A Laboratory Manual For Web Technologies with Node.js, Angular.js and MySQL



First Edition, 2023

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Module 1 Node js

Practical I(a) Installation of Node js

Node.js development environment can be setup in Windows, Mac, Linux and Solaris. The following tools are required for developing a Node.js application on any platform.

- 1. Node.js
- 2. Node Package Manager (NPM)
- 3. IDE (Integrated Development Environment) or TextEditor

NPM (Node Package Manager) is included in Node.js installation since Node version 0.6.0., so there is no need to install it separately.

Step 1 - Install Node.js on Windows

Visit Node js official website is https://nodejs.org/en/



It will automatically detect OS and display download link as per your Operating System. For example, it will display following download link for 64 bit Windows OS.



Download Node.JS Installer for Windows





Download node MSI for windows by clicking on 18.15.0 LTS or 19.8.1 Current button.



After you download the MSI, double-click on it to start the installation as shown below.

↓ ↓ ↓ ↓ Downloads File Home Share View					
Image: Pin to Quick access Copy paste Pin to Quick access Paste	hortcut	kete Rename New folder	ten vew item v ten vew item vew	Properties	Select all Select none Invert selection
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> 🛄 This PC	Image: Provide the second s	1	5-03-2023 13:12	Windows Installer	30.864 KB
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Node.js Installation

Click Next to read and accept the License Agreement and then click Install. It will install Node.js quickly on your computer. Finally, click finish to complete the installation.

Step 2 - Verify Installation

Once you install Node.js on your computer, you can verify it by opening the command prompt and typing node - v. If Node.js is installed successfully then it will display the version of the Node.js installed on your machine, as shown below.

E East E Daragraph E	Stylar
🔤 Command Prompt	-
Microsoft Windows [Version 10.0.19044.2604] (c) Microsoft Corporation. All rights reserved.	
C:\Users\Admin>node -v v19.1.0	
C:\Users\Admin>	

Install Node.js on Mac/Linux

Visit Node.js official web site https://nodejs.org/en/download page. Click on the appropriate installer for Mac (.pkg or .tar.gz) or Linux to download the Node.js installer.

	download/			☆	63	e	ø	î.	0
Download the Node.js source code of	or a pre-built installer fo	r your platfe	orm, and start o	level	opin	g too	day.		1
LTS Recommended For Most U	sers		Current Latest Features						ł
	Ś		ĺ		Ì				
Windows Installer	macOS Installer Sour		rce C	ce Code					
node-v8.11.3-x84.msi	node-v8.11.3.pkg		nod	e-v8.11.3.t	ar.gz				
Windows Installer (.msi)	32-bit		64-bit					1	
Windows Binary (.zip)	32-bit			64-bit					
macOS Installer (.pkg)		64-	bit						
macOS Binary (.tar.gz)		64-	bit						
Linux Binaries (x86/x64)	32-bit 64-		64-bit	4-bit					
Linux Binaries (ARM)	ARMv6	ARM	1v7		ARM	v8			
Source Code	node-v8.11.3.tar.gz								

Node

Environment Setup

Once downloaded, click on the installer to start the Node.js installation wizard. Click on Continue and follow the steps. After successful installation, it will display summary of installation about the location where it installed Node. js and NPM.



Node.js Installation on OS X

After installation, verify the Node.js installation using terminal window and enter the following command. It will display the version number of Node.js installed on your Mac.

\$ node -v

Optionally, for Mac or Linux users, you can directly install Node.js from the command line using Homebrew package manager for Mac OS or Linuxbrew package manager for Linux Operating System. For Linux, you will need to install additional dependencies, viz. Ruby version 1.8.6 or higher and GCC version 4.2 or higher before installing node.

\$ brew install node

Practical I(b) Installation of IDE or Texteditor

IDE

Node.js application uses JavaScript to develop an application. So, you can use any IDE or texteditor tool that supports JavaScript syntax. However, an IDE that supports auto complete features for Node.js API is recommended e.g. Visual Studio code, Visual Studio, Sublime text, Eclipse, Aptana etc.

Here, showing Visual Studio code installation

Step 1 – Visit the official website of the **Visual Studio Code** using any web browser like Google Chrome, Microsoft Edge, etc.

https://code.visualstudio.com/Download

Step 2 - Click on Download for windows

Windows

x64

×64

x64 x86 Arm64

User Installer

System Installer

.zip

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.deb

deb x64

Snap

.tar.gz x64 Arm32

.rpm x64 Arm32 Arm64

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zip Intel chip Apple silicon Universal

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Step 3: Click on the installer icon to start the installation process of the Visual Studio Code.

Step 4: After the Installer opens, it will ask you for accepting the terms and conditions of the Visual Studio Code. Click on **I accept the agreement** and then click the **Next** button.

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Please read the following important information before continuing	g.
Please read the following License Agreement. You must accept th continuing with the installation.	he terms of this agreement before
This license applies to the Visual Studio Code pro	oduct. Source Code for Visual 🔷
Studio Code is available at <u>https://github.com/M</u>	<u>licrosoft/vscode</u> under the MIT
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 I accept the agreement 	