



Displaying ‘Hello World’ On Your Web Browser

Introduction

Programming can be a useful and fun skill to have, especially for web development. For anyone who is interested in learning to create web pages, displaying ‘Hello World’ on your web browser is an easy and fun way to get started.

What You Will Need

- A computer
 - Visual Studio Code
 - *Ruby on Rails* language
 - This document
-

Before You Start

Before you start, make sure you have access to a good Wi-Fi connection to download the required programs and that your laptop or computer is fully charged.

Instruction Set

Step 1

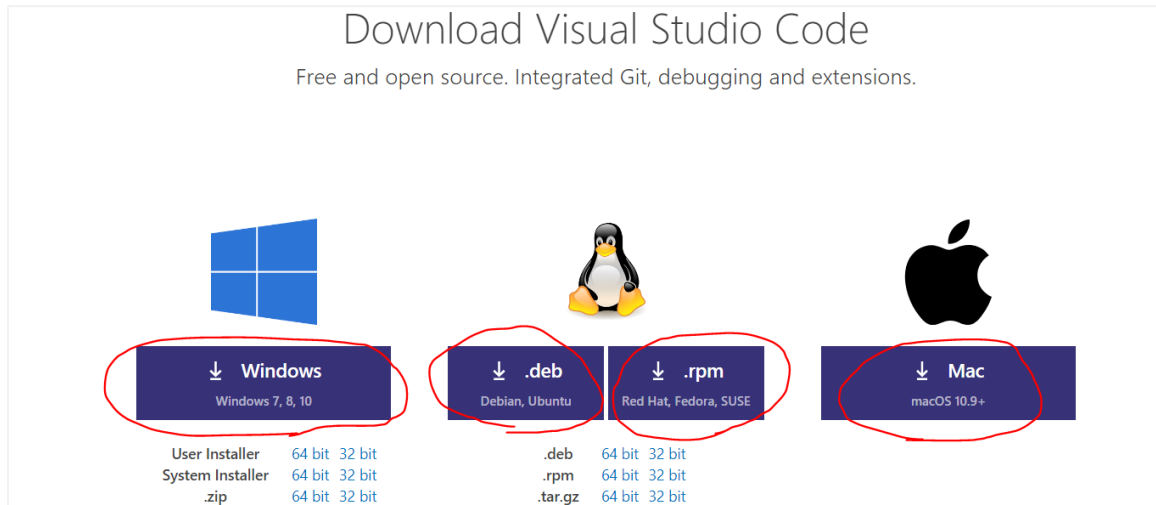
Set up and turn on your computer.

Step 2

Navigate to Google and type in “visual studio code” and click *Download Visual Studio Code*.

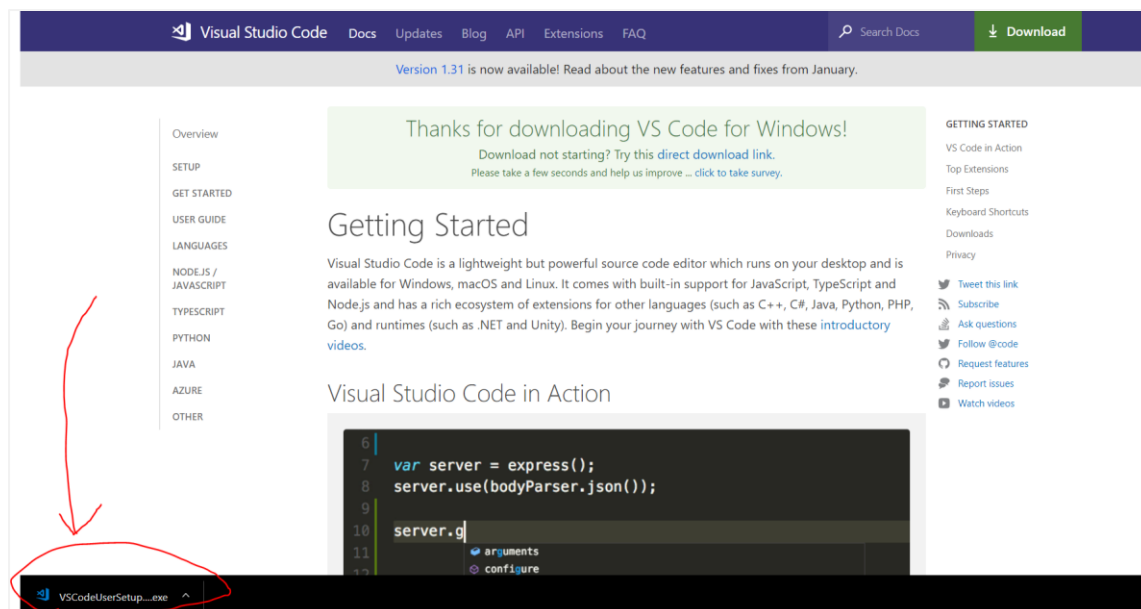
Step 3

Next, download the version of Visual Studio Code that is right for you. If you have a pc that runs on Windows 7, 8, 10 click on *Windows*. If you have a pc that runs on linux, such as Ubuntu, click on *.deb* or *.rpm*. And if you have a mac, click on *Mac*.



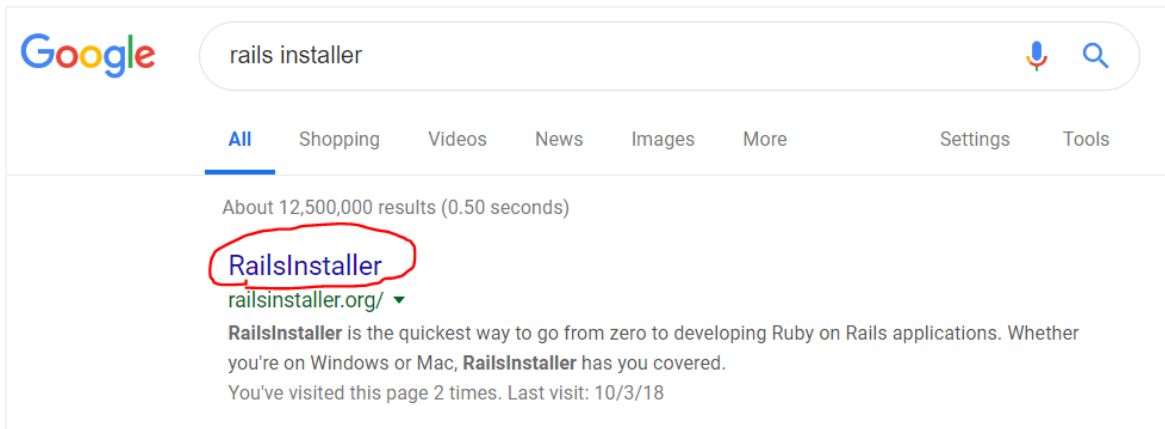
Step 4

Once Visual Studio has downloaded go ahead and start the application. Visual Studio Code will aid you in set up. Go ahead and click agree with all the default settings and agree to the terms and conditions.



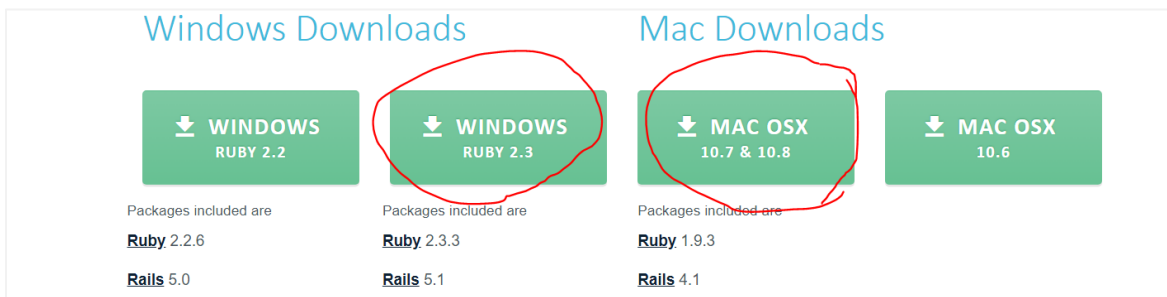
Step 5

Next, we need to install *Ruby on Rails*. Search “rails installer” on Google and go ahead and click on the first link.



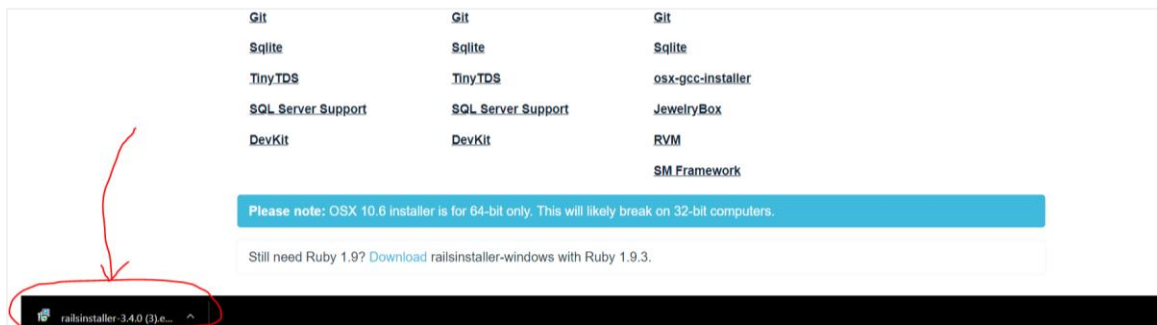
Step 6

Choose which version of Ruby on Rails to download depending on the operating system on your computer. Be sure to download the latest version.



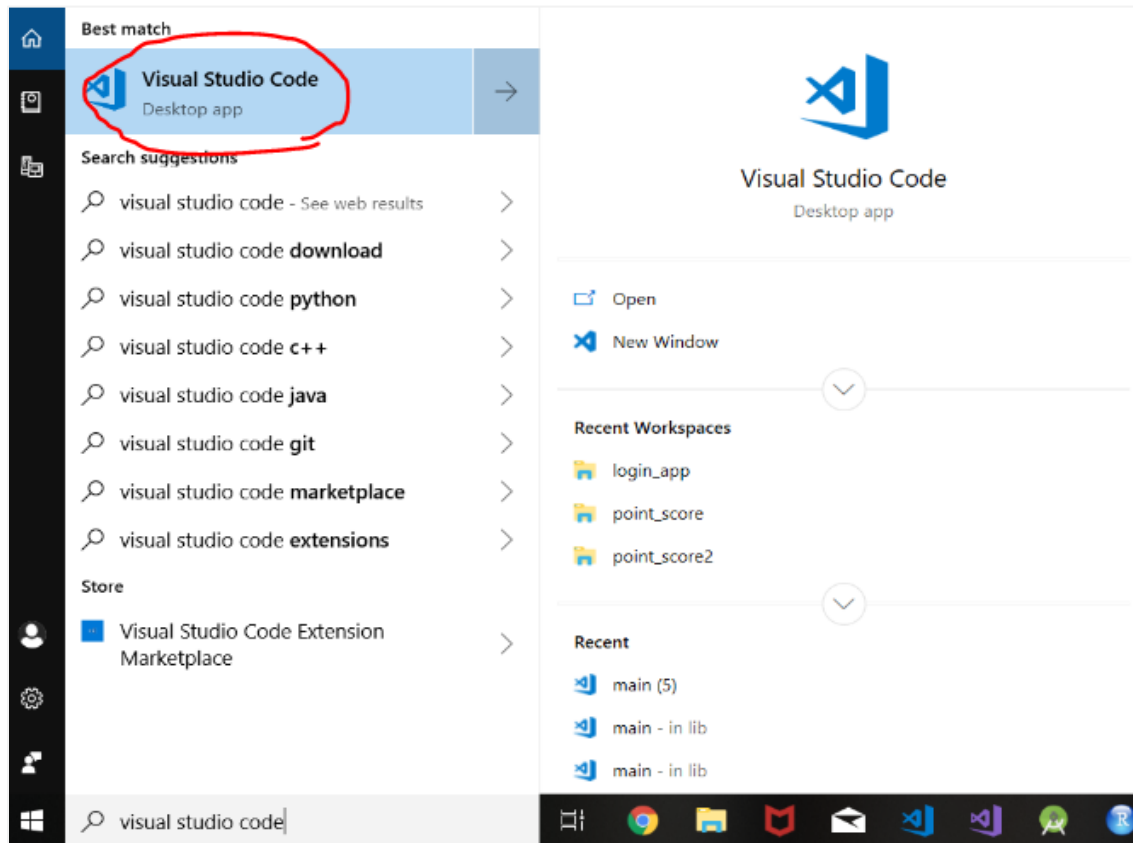
Step 7

Go ahead and run the application and agree to all the default setting and to the terms and conditions.



Step 8

Go ahead and start up Visual Studio Code we had downloaded earlier. You click on the windows icon and type “visual studio code” on the search tap, then click on *Visual Studio Code*.



Step 9

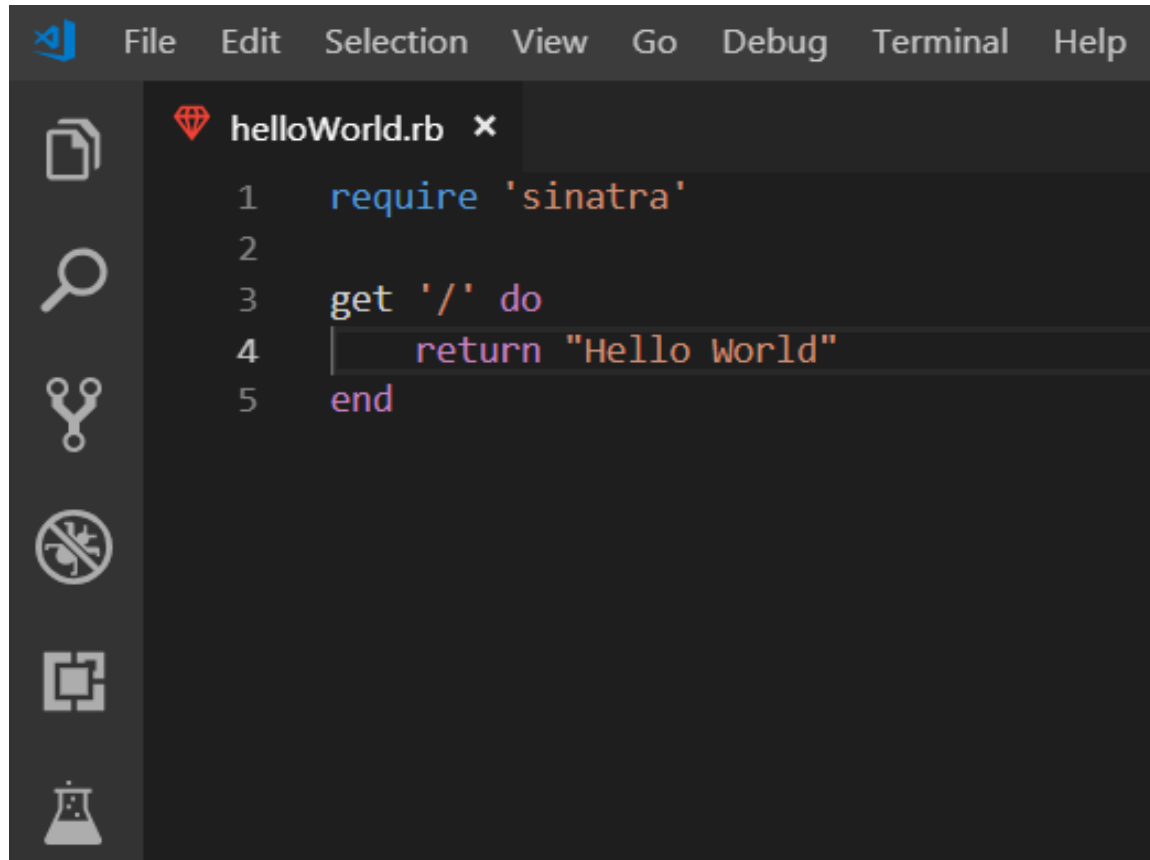
Once Visual Studio Code is open go ahead and make a new file. You can do this by clicking on File at the top left corner and then clicking on New File.

Step 10

Go ahead and save that file. I saved mine on my Desktop and named it “helloWorld”. Next on the Save as type: tab, scroll down and let’s save our new file as type Ruby to be able to use the language.

Step 11

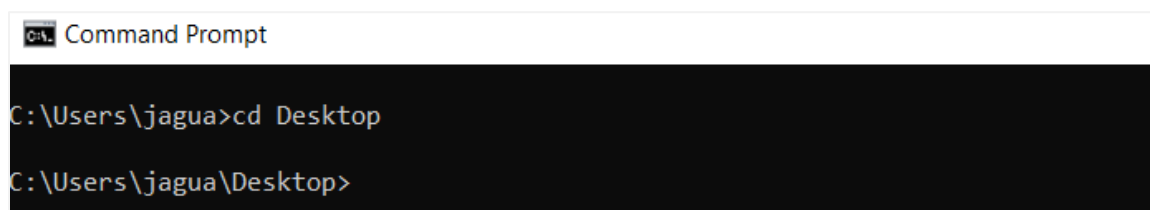
Now we're going to write our code. Go ahead and type the following code onto Visual Studio Code. "require 'sinatra'" calls on a special gem in the Ruby language that will allow us to connect to the server once we run our code. The following code is "get '/' do return "Hello World" end". Is a function that creates a get request to the server and returns a string "Hello World".

A screenshot of the Visual Studio Code editor interface. The top menu bar includes File, Edit, Selection, View, Go, Debug, Terminal, and Help. On the left sidebar, there are icons for Explorer, Search, Source Control, Run and Debug, Extensions, and Testing. The main editor area shows a file named 'helloWorld.rb' with the following Ruby code:

```
1  require 'sinatra'
2
3  get '/' do
4    return "Hello World"
5  end
```

Step 12

Open your command screen. You can do this by simply typing "cmd" on the search tab after clicking the windows icon. Next type in "cd Desktop" this will take you to your Desktop where we saved our helloWorld file.

A screenshot of a Windows Command Prompt window. The title bar says 'C:\ Command Prompt'. The command prompt shows the following sequence of commands and directory changes:

```
C:\Users\jagua>cd Desktop
C:\Users\jagua\Desktop>
```

Step 13

Next type in “gem install sinatra”. Sinatra is a specific add on to Ruby that will allow our program to connect to the server.

```
C:\Users\jagua\Desktop>gem install sinatra
Successfully installed sinatra-2.0.5
Parsing documentation for sinatra-2.0.5
Done installing documentation for sinatra after 2 seconds
1 gem installed

C:\Users\jagua\Desktop>
```

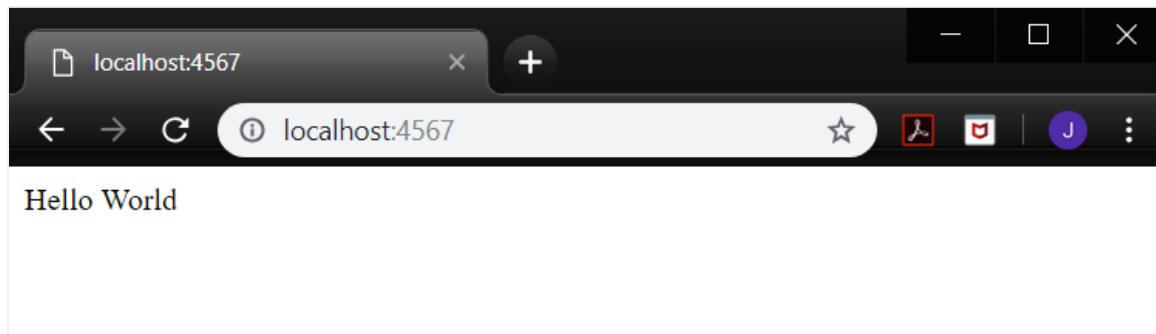
Step 14

And now let's run our code! Go ahead and type in “ruby helloWorld.rb”.

```
C:\Users\jagua\Desktop>ruby helloWorld.rb
[2019-02-27 19:25:39] INFO WEBrick 1.3.1
[2019-02-27 19:25:39] INFO ruby 2.3.3 (2016-11-21) [i386-mingw32]
== Sinatra (v2.0.5) has taken the stage on 4567 for development with backup from WEBrick
[2019-02-27 19:25:39] INFO WEBrick::HTTPServer#start: pid=25096 port=4567
```

Step 15

Go to your internet browser and type “localhost:4567” and watch the fruits of your labor.



You're Done!

Congratulations! You have successfully displayed 'Hello World' on your web browser and taken your first step towards software development.

User Test

Strategy

To test the effectiveness of my instruction document, I will conduct an in person user test with a subject who is interested in learning programming. For my user test I will be providing the test subject with a laptop, a quiet space to focus, and this instruction document. Prior to the user test I will conduct a brief interview on the test subject to determine their current level of knowledge on programming. During the user test I will be present to answer any questions the test subject might have regarding the instruction document or any complications that may arise during any of the steps. Once the user test is complete, I will conduct a second brief interview on the test subject on his experience during the user test. If the test subject found the instruction document easy to understand or he/she was able to display 'Hello World' on their web browser, then the user test will have been a success. However, if the opposite happens then the user test will have been a fail and corrections will be made.

Usability Report

Test Subject

The test subject for my report was a 23-year-old male with little experience with programming. He had previously taken a computer science class his freshman year of college. The test subject was provided with this instruction document and a laptop.

Time and Place

The user test was conducted on March 31st, 2019 at 4 p.m. at University of Texas Rio Grande Valley in Edinburg, TX.

Performing the Task

During the user test the test subject was able to successfully download Visual Studio Code and Ruby on Rails without any assistance. He was able to type the required code successfully and save the created files accordingly. He did have a question regarding downloading the ruby gem 'gem install sinatra' through the command prompt. The rest of the user test went smoothly, and he was able to display 'Hello World' successfully through his web browser.

Feedback

After the user test, a brief interview was conducted to receive feedback on his experience with the instruction document. He found the instruction document helpful, but slightly difficult to understand some of the steps.

Conclusion

The user test was a mild success, the user was able to understand and follow majority of the instruction document. In response to his feedback, I have done some editing on the instruction document to make it easier to follow and look more aesthetically pleasing.