From "Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web by Its Inventor" by Tim Berners-Lee with Mark Fischetti.

On the birth of the idea
Journalists have always asked me what the crucial idea was, or what the singular event was, that allowed the Web to exist one day when it hadn't the day before. They are frustrated when I tell them there was no "Eureka!" moment. It was not like the legendary apple falling on Newton's head to demonstrate that concept of gravity. Inventing the World Wide Web involved my growing realization that there was a power in arranging ideas in an unconstrained, weblike way. And that awareness came to me through precisely that kind of process. The Web arose as the answer to an open challenge, through the swirling together of influences, ideas, and realizations from many sides, until, by the wondrous offices of the human mind, a new concept jelled. It was a process of accretion, not the linear solving of one well-defined problem after another.

On the core of the idea
The larger vision had taken firm root in my consciousness. Suppose I could program my computer to create a space in which anything could be linked to anything. All the bits of information in every computer…on the planet would be available to me and to anyone else. There would be a single, global information space…Computers might not find the solutions to our problems, but they would be able to do the bulk of the legwork required, assisting our human minds in intuitively finding ways through the maze.

On creating the first instance of the Web
Despite the "Buy, don't build" credo [at CERN, the massive European particle physics lab where he worked at the time], I came to the conclusion that I was going to have to create the Web on my own. In October 1990 I began writing code for the Web on my new computer...My first objective was to write the Web client--the program that would allow the creation, browsing, and editing of hypertext pages. It would look basically like a word processor, and the tool on the NeXT's system [the desktop computer he was enamored of] were ideal for the task…No delay of gratification here. Already I could see what the system would look like.

I still had to find a way to turn text into hypertext [documents that include links to other, distributed documents like the Web of today], though…I delved into the files that defined the internal workings of the text editor, and happily found a spare 32-bit piece of memory, which the developers of NeXT had graciously left open for future use by tinkerers like me. I was able to use the spare space as a pointer from each span of text to the address for any hypertext link…I was then able to rapidly write the code for the Hypertext Transfer Protocol (HTTP), the language computers would use to communicate over the Internet, and the Universal Resource Identifier (URI), the scheme for document addresses. By mid-November I had a client program--a point-and-click browser/editor--which I just called WorldWideWeb. By December it was working with the Hypertext Markup Language (HTML) I had written, which describes how to format pages containing hypertext links…I also wrote the first Web server--the software that holds Web pages on a portion of a computer and allows others to access them.

On the progression of the World Wide Web
The WorldWideWeb browser/editor was working on my machine [and a colleague's], communicating over the Internet with the [original Web server they built] by Christmas
Day 1990...In March 1991, I released the *WorldWideWeb* program to a limited number of CERN people who had NeXT computers...In June we held talks and demonstrations within CERN and wrote about the Web in the CERN newsletter. Because I still had no more staff, it was taking longer than I had hoped to get the functionality of the NeXT version onto PCs and Macs and Unix machines.

I was still hoping that by spreading the word we could attract the attention of more programmers. Since those programmers were unlikely to be high-energy physicists, in August I released three things--the *WorldWideWeb* for NeXT, the line-mode browser, and the basic server for any machine--outside CERN by making them available on the Internet. I posted a notice on several Internet newsgroups...Unfortunately, there was still not much a user could see unless he had a NeXT.

In July and August 1991 there were from 10 to 100 hits (pages viewed) a day [to the CERN server, one of the few servers on the Web]. This was slow progress, but encouraging. I've compared the effort to the launch the Web with that required to launch a bobsled: Everyone has to push hard for a seemingly long time, but sooner or later the sled is off on its own momentum and everyone jumps in.

**On the birth of Mosaic**

Developing browsers had become a good vehicle for students and engineers to show off their programming skills. David Thompson, a manager at NCSA at the University of Illinois at Urbana-Champaign, wanted students to take a crack at it. He downloaded Viola [a popular, if complicated, contemporary browser], got it running, and demonstrated its use with the CERN server.

Marc Andreesen, a student, and Eric Bina, a staff member, decide to create a browser for X [X Windows, a common graphical-interface for Unix systems]. Eric [quietly programmed] the HTML code and [made] the thing work. Marc maintained a near-constant presence on the newsgroups discussing the Web, listening for features people were asking for, what would make the browsers easier to use. He would program these into the nascent browser and keep publishing new releases so others could try it. He listened intently to critiques...This was in total contrast to any of the other student developers. Marc was not so much interested in just making the program work as in having his browser used by as many people as possible. This was, of course, what the Web needed.

The resulting browser was called Mosaic. In February 1993 NCSA made the first version available over the Web. I tried it at CERN. It was easy to download and install and required very little learning before I had point-and-click access to the Web. Because of these traits, Mosaic was soon picked up more rapidly than other browsers. Mosaic was much more of a product.

**On his misgivings about Mosaic**

It troubled me in a way that NCSA was always talking about Mosaic, often with hardly a mention of the World Wide Web...At NCSA, something wasn't "on the Web," it was "on Mosaic."

[In a visit with NCSA developers, I] made my now-standard case for making the Mosaic browser an editor, too...I was amazed by the near universal disdain for creating an editor. Maybe it was too daunting. Or maybe it was just a balance between competing
demands on developers' time. But it was also true that most were more excited about putting fancy display features into the browsers--multimedia, different colors and fonts--which took much less work and created much more buzz among users.

I returned to CERN uneasy about the decidedly peremptory undertones behind NCSA's promotion of Mosaic. NCSA quickly started other projects to get Mosaic onto PCs running Windows and onto Macintoshes.

_on whether he is happy about the direction the Web took_ [People ask me whether I am] upset by the Web "going commercial." They still ask today. One part of the question means: "Are you upset that people still have to pay money for certain Web products, or at least for commercial support for them?" Of course I am not. The free software community was fundamental to the development of the Web and is a source of great creativity. But it was inevitable and important that if the Web succeeded, there would be a variety of free and commercial software available.

A second meaning to the question related to the fact that for a long time Web pages were posted by individuals and not-for-profit organizations...Certain people felt that commercially motivated material polluted the Web. I had little time for this point of view. The Web was designed as a universal medium. A hypertext link must be able to point to anything.