

Windows Operating System

- The Windows operating system has been developed by Microsoft. Its features are listed below.
- It supports graphical user interface that enables a naïve user to easily learn and use a computer.
 - It is a single user multi-tasking operating system, so a user can run more than one application at a time.
 - Microsoft Windows is not merely an operating system but also a complete operating environment. It just supports the functions of an operating system but also has programs that conform to a standard. For example, the working of MS Word is similar to that of MS Excel. Hence, if a user learns one program of Microsoft Windows, he can easily learn the other program developed by it.
 - Microsoft Windows not only allows users to run their applications but also allows them to manage files (copy, paste, delete, move, etc.).
 - It comes with a built-in web browser—Internet Explorer that helps users to access the Internet. Besides this, Windows also has a text editor called NotePad for writing notes, WordPad which is a word processing application, a Calculator, and many more useful programs.

When designing this operating system, Microsoft has taken two separate approaches in which one is suited for home users and the other is intended for the IT professionals. The home edition supports basic functionalities and multimedia features but has limited support for security and networking. The professional edition on the other hand is well suited for server environment, has limited multimedia features, but enhanced networking capability and security.

Different Versions of Windows Operating System The first version of Windows (Version 1.0) which was released in November 1985, was not very popular as it lacked functionality compared to Apple operating system. After two years, Version 2.0 was released which achieved slightly more popularity than its predecessor. Then in January 1998, version 2.03 was released which offered a totally different interface that resulted in Apple filing a lawsuit against Microsoft with accusations of infringement.

In 1990, version 3.0 was released which became the first edition to reach commercial success by selling two million copies within its first six months. Windows 3.0 had highly improved user interface along with new multi-tasking capabilities. Later in March 1992, version 3.1 was released that offered a facelift.

In July 1993, Windows NT was released that became the first operating system to be designed specifically for a professional platform.

In August 1995, Windows 95 was released that was meant to replace Windows 3.1. This operating system provided significant changes to the user interface. It was the first operating system by Microsoft that supported the plug-and-play system. Windows 95 had simply revolutionized the desktop platform and achieved a high level of popularity.

Later, Windows 98 was released in June 1998. But it was criticized for being slower and less reliable than Windows 95. So, many of those issues were addressed a year later with the release of Windows 98 Second Edition.

In February 2000, Microsoft bought another professional operating system known as Windows 2000, the consumer version of which was released as Windows ME in September of that year. October 2001 witnessed the release of Windows XP which was based on the NT kernel and managed to retain the extra functionality of its home-based predecessors. XP became very popular among the masses and was available in two different editions: Home and Professional. Windows XP was then succeeded by Windows Vista which included several new features with an emphasis on security. However, Windows Vista was not liked by critics. So, Windows 7 was released in 2009 which was praised by everyone for its increased performance, more intuitive interface, and other improvements.

Windows 8 (Figure A1.8) was released by Microsoft in the year 2012 and was specifically designed to be used on PCs and tablets. The first differentiating feature of Windows 8 was its Start Screen that is the screen displayed after a user logs in to Windows 8. The Start Screen is the main interface that is used to launch

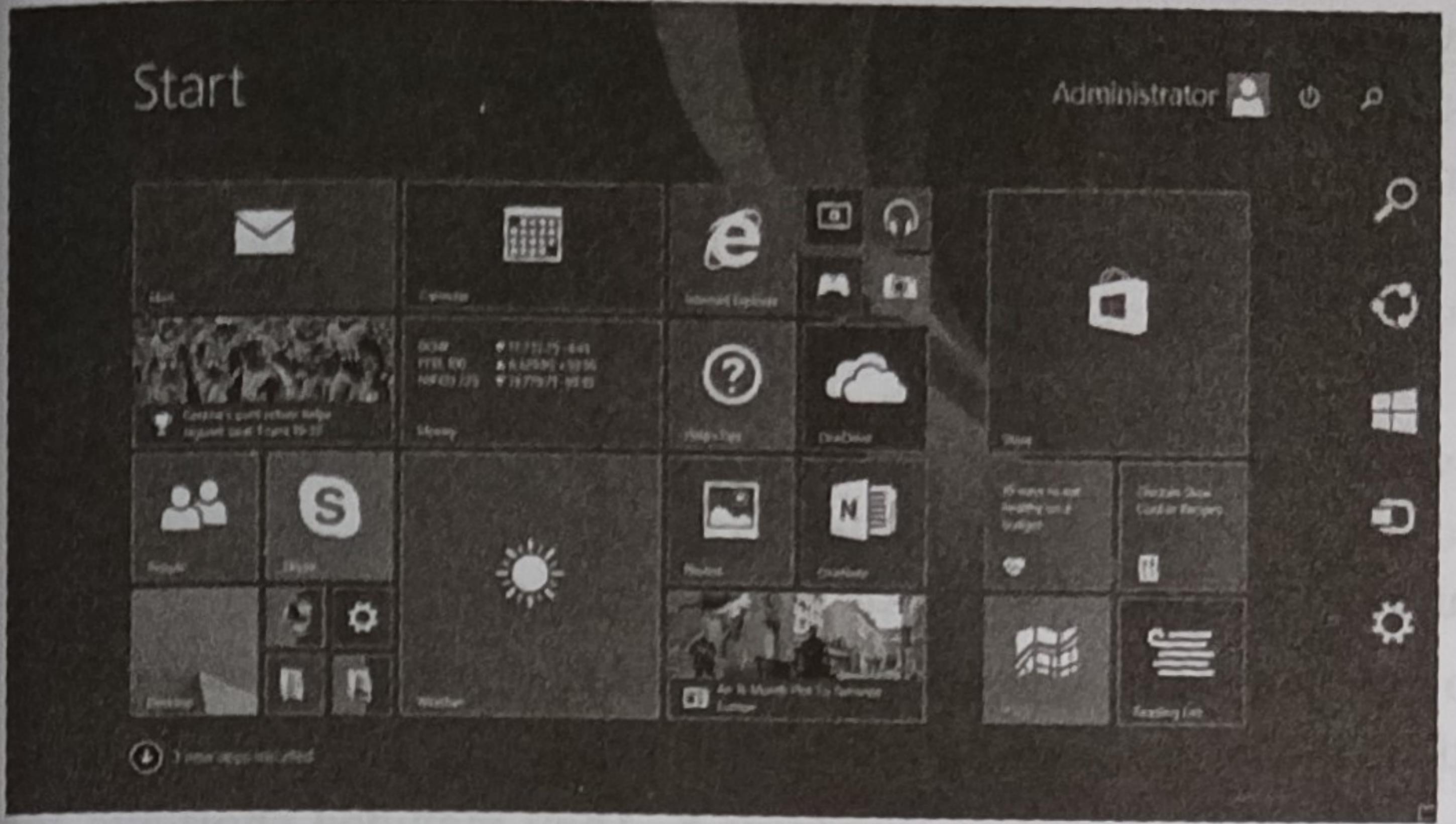


Figure A1.8 Windows 8 operating system

The Start Screen has a number of pages, where each page has different tiles. If there is no place for a tile on one page, then it can be added to other pages. Users can move the tiles from one page to another and organize them in categories.

Note Output of an app can be redirected to a projector by pressing the Window Key and the P key together.

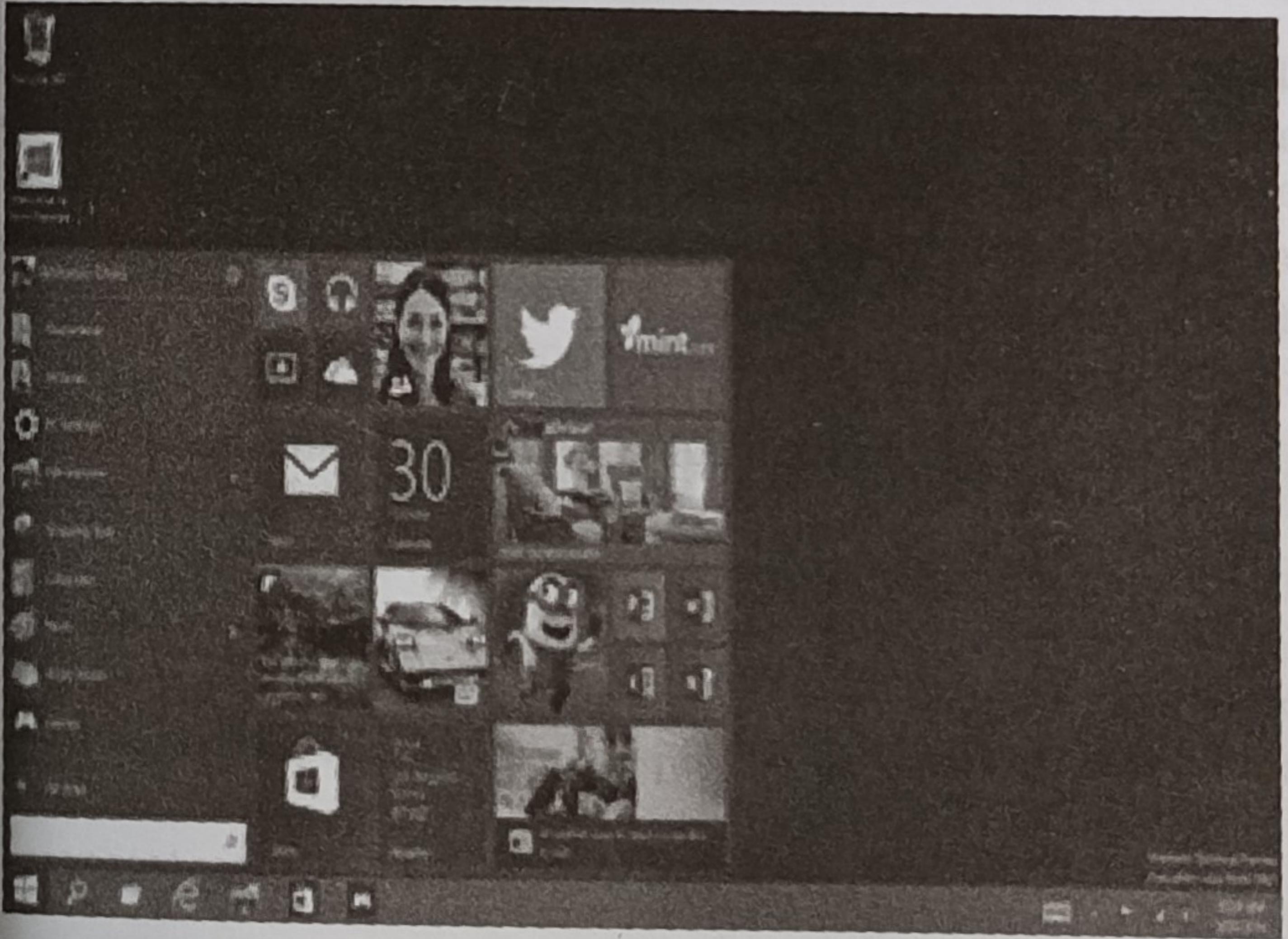


Figure A1.9 Windows 10 operating system

Note The upgrade process of Windows 10 is almost free for most Windows 7 and 8 users.

Some features of Windows 10 include:

One converged Windows platform Windows 10 has a universal app platform with a single security model, and the same deployment and management approach to render a unified experience across varied devices, ranging from smartphones to the industry devices.

Designed the way people work As the Start menu of Windows 7 is back in Windows 10, the desktop of Windows 10 is quite familiar to the users. Therefore, there is virtually no learning curve required as the Start menu has been expanded to provide one-click access to the functions and files that are used frequently.

All in all, Linux is one of the popular operating systems used by home and office users. It is mainly used for high performance business and in web servers. Moreover, Linux can be installed on a wide variety of computers ranging from mobile phones, tablet computers, routers and video game consoles, to desktop computers, mainframes, and supercomputers. Today, Linux is the most popular server operating system, and runs the 10 fastest supercomputers in the world.

Table A1.3 lists the differences between Windows and Linux operating systems.

Table A1.3 Differences between Linux and Windows operating systems

Parameters	Linux	Windows
Number of users	Linux supports multiple users simultaneously. The processor is distributed amongst the users.	Single-user operating system.
Open source	Yes	No
Cost	Free	Not free
GUI and Kernel separated	Yes	No
Secure	Less prone to viruses.	More prone to viruses.
Ease	Less user friendly than Windows.	Very user friendly.
Reliable	More reliable.	Less reliable as compared to Linux.
Used for	Mostly servers. Can also be used at homes.	Mostly used on home computers. Also used in companies and in organizations as servers.