

OPERATING SYSTEM WINDOWS 10

ВИКОНАВ СТУДЕНТ ГРУПИ 121-16СК-1: ГГНАТЕНКО Д.К.

WINDOWS 10



Windows 10 is a personal computer operating system developed and released by Microsoft as part of the Windows NT family of operating systems. It was officially unveiled in September 2014 following a brief demo at Build 2014. The first version of the operating system entered a public beta testing process in October, leading up to its consumer release on July 29, 2015.

USER INTERFACE AND DESKTOP



A new iteration of the Start menu is used on the Windows 10 desktop, with a list of places and other options on the left side, and tiles representing applications on the right. The menu can be resized, and expanded into a full-screen display, which is the default option in Tablet mode. A new virtual desktop system was added. A feature known as Task View displays all open windows and allows users to switch between them, or switch between multiple workspaces.

SYSTEM SECURITY



Windows 10 incorporates multi-factor authentication technology based upon standards developed by the FIDO Alliance. The operating system includes improved support for biometric authentication through the Windows Hello and Passport platforms; devices with supported cameras (requiring infrared illumination, such as Intel RealSense) allow users to log in with iris or face recognition, similarly to Kinect.

MULTIMEDIA AND GAMING



Windows 10 provides heavier integration with the Xbox ecosystem. Xbox SmartGlass is succeeded by the Xbox App, which allows users to browse their game library (including both PC and Xbox console games), and Game DVR is also available using a keyboard shortcut, allowing users to save the last 30 seconds of gameplay as a video that can be shared to Xbox Live, OneDrive, or elsewhere.



Windows 10 includes DirectX 12, alongside WDDM 2.0. Unveiled March 2014 at GDC, DirectX 12 aims to provide "console-level efficiency" with "closer to the metal" access to hardware resources, and reduced CPU and graphics driver overhead. Most of the performance improvements are achieved through low-level programming, which allow developers to use resources more efficiently and reduce single-threaded CPU bottlenecking caused by abstraction through higher level APIs

