#### **DISABLED FRIENDLY SOFTWARE-NVDA**

NonVisual Desktop Access (NVDA) is a free and open-source screen reader for the Microsoft Windows operating system. Providing feedback via synthetic speech and Braille, it enables blind or vision impaired people to access computers running Windows for no more cost than a sighted person. NVDA allows blind and vision impaired people to access and interact with the Windows operating system and many third-party applications. Major highlights include:

#### 1.1. General Features

- Support for popular applications including web browsers, email clients, internet chat programs and office suites
- Built-in speech synthesizer supporting over 80 languages
- Reporting of textual formatting where available such as font name and size, style and spelling errors
- Automatic announcement of text under the mouse and optional audible indication of the mouse position
- Support for many refreshable braille displays, including the ability to detect many of them automatically as well as braille input on braille displays with a braille keyboard
- Ability to run entirely from a USB flash drive or other portable media without the need for installation
- Easy to use talking installer
- Translated into 54 languages
- Support for modern Windows Operating Systems including both 32 and 64 bit variants
- Ability to run during Windows sign-in and other secure screens.
- Announcing controls and text while using touch gestures
- Support for common accessibility interfaces such as Microsoft Active Accessibility, Java Access Bridge, IAccessible2 and UI Automation
- Support for Windows Command Prompt and console applications
- The ability to highlight the system focus

## 1.2. System Requirements

• Operating Systems: all 32-bit and 64-bit editions of Windows 7, Windows 8, Windows 8.1, Windows 10, Windows 11, and all Server Operating Systems starting from Windows Server 2008 R2.

- o For Windows 7, NVDA requires Service Pack 1 or higher.
- o For Windows Server 2008 R2, NVDA requires Service Pack 1 or higher.
- at least 150 MB of storage space.

### 1.3 Braille support

For users that own a refreshable braille display, NVDA can output its information in braille. Both uncontracted and contracted braille input via a braille keyboard is also supported. Furthermore, NVDA will detect many braille displays automatically by default. NVDA supports braille codes for many languages, including contracted, uncontracted and computer braille codes.

### For Starting and Stopping NVDA

Name	Desktop key Laptop key		Description
Start NVDA	control+alt+n	control+alt+n	Starts or restarts NVDA
Exit NVDA	NVDA+q, then NVDA+q, then enter		Exits NVDA
Pause or restart speech	shift	shift	Instantly pauses speech. Pressing it again will continue speaking where it left off
Stop speech	control	control	Instantly stops speaking

# **Reading text**

Name	Desktop key	Laptop key	Description
Say all	NVDA+downArrow	NVDA+a	Starts reading from the current position, moving it along as it goes
Read current line	NVDA+upArrow	NVDA+1	Reads the line. Pressing twice spells the line. Pressing three times spells the line using character descriptions (Alpha, Bravo, Charlie, etc)
Read selection	NVDA+shift+upArrow	NVDA+shift+s	Reads any selected text
Read clipboard text	NVDA+c	NVDA+c	Reads any text on the clipboard

### Reporting location and other information

Name	Desktop key	Laptop key	Description
Window title	NVDA+t	NVDA+t	Reports the title of the currently active window. Pressing twice will spell the information. Pressing three times will copy it to the clipboard
Report focus	NVDA+tab	NVDA+tab	Reports the current control which has focus. Pressing twice will spell the information
Read window	NVDA+b	NVDA+b	Reads the entire current window (useful for dialogs)
Read status bar	NVDA+end	NVDA+shift+end	Reports the Status Bar if NVDA finds one. Pressing twice will spell the information. Pressing three times will copy it to the clipboard
Read time	NVDA+f12	NVDA+f12	Pressing once reports the current time, pressing twice reports the date
Report text formatting	NVDA+f	NVDA+f	Reports text formatting. Pressing twice shows the information in a window

NVDA allows blind and vision impaired people to access and interact with the Windows operating system and many third-party applications. Thus it's a disabled friendly software