Kovtun B

Manych A

УДК 004.92

DirectX

Vinnitsya National Technical University

Abstract

The article considers application programming interfaces (APIs) DirectX ,the history of invention ,the main advantages and fields of application.

Keywords : DirectX, graphics visualization, multimedia applications, game engine, DirectX-compatible.

Анотація

В статті розглядається програмні інтерфейси DirectX , історія виникнення , основні переваги, сфери застосування.

Ключові слова : DirectX, графічна візуалізація , мультимедійна задачі, ігровий рушій, сумісність DirectX.

Introduction

Microsoft DirectX is a set of application programming interfaces (APIs) for simlifing graphics visualization tasks, especially for programming and video games. Initially, the names of these APIs began with Direct, such as Direct3D, DirectDraw, DirectMusic, DirectPlay, DirectSound, and so on.

The name DirectX was invented as a shortened term for all of these APIs (X, which means certain API names) and soon became the name of the collection. When Microsoft later developed the game console, X was used as the basis for the Xbox name to indicate that the console is based on DirectX technology. The initial value X was passed to the Xbox APIs, such as the XInput and the Cross-platform Audio Creation Tool (XACT), while the DirectX template was distributed to the Windows API, for example Direct2D and DirectWrite.

At the end of 1994, Microsoft was ready to release the next operating system, Windows 95. There were programs that could work on it, an important factor consumers could place on it. Three Microsoft employees, Craig Eisler, Alex Saint John and Eric Endstrem were worried that programmers tended to see Microsoft's previous operating system, MS-DOS, as the best platform for game programming, that is, several games would be developed for Windows 95 and the operating system would not have been so successful. This is compounded by the negative trick around the Windows Lion King video game console. The game used by WinG, which crashed into Compaq Presarios, comes with it after the Compaq and Disney collaboration, as the Cirrus Logic displays used by Presarios were not fully tested by the API. DOS allowed direct access to video cards, keyboards, mice, audio devices and all other parts of the system, while Windows 95 with a secure memory model restricted access to all of these devices by working on a much more standardized model. Microsoft needed a quick solution for programmers; the operating system has remained in just a few months. Eisler (Development Leader), St. John and Engstrom (program manager) worked together to solve this problem, with the solution that they eventually called DirectX.

The first version of DirectX was released in September 1995 as a Windows SDK. This was the replacement of Win32 on the DCI API and WinG for Windows 3.1. DirectX has allowed all versions of Microsoft Windows, starting with Windows 95, to include high-performance multimedia. Eisler wrote of the madness to create DirectX 1 through 5 in his blog.

DirectX 2.0 became the Windows component itself with the release of Windows 95 OSR2 and Windows NT 4.0 in mid-1996. Since Windows 95 itself was still new and several games were released, Microsoft has been actively involved in the development of DirectX for developers who tend not to trust Microsoft's ability to create a gaming platform in Windows. Alex St John, an Evangelist of DirectX, organized the development of the 1996 1996 Computer Games Developers Conference, where game developer Jay Barnson called the Roman theme, including real lions, jumbled and something like a covered carnival. It was on this occasion that Microsoft first introduced Direct3D and DirectPlay and demonstrated that the multi-player MechWarrior 2 is being played on the Internet.

The DirectX team faced the challenge of every DirectX release on an array of computer hardware and software. Various graphics cards, audio cards, motherboards, processors, input devices, games, and other multimedia applications have been tested with every beta and final release. The DirectX team also built and distributed tests that allowed the hardware industry to confirm that the new hardware solutions and drivers are DirectX-compatible.

Conclusion

DirectX is used in creation computer games for Microsoft Windows OS and visualizing graphics application. DirectX is a component of almost every game engine. This technology can be used in study . We created the game that help peoples to throw rubbish to proper can . You earn points when you collect correct rubbish and lose your health when you collect not proper .

References

https://uk.wikipedia.org/wiki/DirectX

https://uk.wikipedia.org/wiki/Direct3D_11

https://ru.bmstu.wiki/Microsoft_DirectX

Ковтун Богдан Валентинович – студент групи 3ПІ-18б, факультет інформаційних технологій та комп'ютерної інженерії, Вінницький національний технічний університет, Вінниця, e-mail: kirpich1337228@gmail.com

Манич Андрій Михайлович – студент групи 3ПІ-18б, факультет інформаційних технологій та комп'ютерної інженерії, Вінницький національний технічний університет, Вінниця, e-mail: andriyman@gmail.com

Науковий керівник : **Рудницька Тетяна Григорівна ,** старший викладач кафедри іноземних мов Вінницького національного технічного університету **.** e-mail:rudnytska5@ukr.net

Kovtun Bohdan Valentinovich - student of 3PI-18b group, Faculty of Information Technologies and Computer Engineering, Vinnytsia National Technical University, Vinnytsia, e-mail: kirpich1337228@gmail.com

Manich Andrey Mikhailovich - student of the 3PI-18b group, Faculty of Information Technologies and Computer Engineering, Vinnytsia National Technical University, Vinnytsia, e-mail: andriyman@gmail.com

Scientific supervisor: **Rudnytska Tetiana Hrygorivna ,**Assistant Professor of Foreign Languages Department of Vinnytsia National Technical University . **.**e-mail:rudnytska5@ukr.net