Kinect Presentation System (KPS)

Supervisor: Dr. Tsoi Yau-chat, Desmond

Development Environment:

Operating Platform:

Hardware Requirement:
Front-end Presentation Client: Kinect, 32-bit Architecture PC with Internet Connectivity, Back-end Administration Client: Devices with Web Browsing Ability, Back-end Server: 32-bit or 64-bit Architecture PC with Internet Connectivity

Database Server:
Microsoft SQL Server 2008 R2 Service Pack 1

Programming Language:
Microsoft C#.Net 4.0, Microsoft .NET Language Integrated Query (LINQ), Microsoft ASP.NET 4.0 (Master Pages, MVC 3), Asynchronous JavaScript XML (AJAX), Cascading Style Sheets 4 (CSS4)

Development Tools:
Microsoft Kinect for Windows SDK 1.0, Microsoft Speech SDK 5.1, Microsoft Visual Studio 2010, Microsoft Internet Information Services 7.5 (IIS), Microsoft .NET Framework 4.0, Windows Presentation Foundation 4.0 (WPF), YouTube API versions 2.1, Bytescout Screen Capturing SDK 1.60, OpenCV 2.3.1, jQuery 1.8, Zxing 2.0, FFmpeg 0.10, Dhtmmscheduler v3.0

Project Description

Effective lecturers combine the talents of scholar, writer, producer, comedian, showman, and teacher in ways that contribute to student learning. Wilbert J. McKeachie, Teaching Tips

Everyone knows having a good presentation style enhances what audience receives from the presenter. Presenters spend tons of time improving their presenting skills. But the development of hardware for presentation still lags back to the day mouse was invented. Most people still use a computer mouse or a handheld presentation controller to control the flow of presentation. However, they have a lot of limitations. For example, the presenter cannot move freely during his presentation using a mouse as a controller.

Looking at the most innovative controller in the gaming industry, Kinect from Microsoft Xbox360 looks perfect to become the next generation presentation controller, or maybe, a next generation integrated presentation & education system.

Brief overview of Kinect Presentation System (KPS):
1. Users of KPS, not just only smoothen their presentation, limitations such as mobility are also reduce drastically. Furthermore, no hardware is required to be hold in the hand.
2. With KPS, users can perform complex manipulation just by speaking what they want to do.
3. Walk-in directly without any pre-configuration, KPS can recognize the user, log into their account, and retrieve materials required for the presentations.
4. The audience of the presentation need not be physically present anymore. If they missed the presentation, they could enjoy the full presentation environment anywhere and anytime.
5. For the disabled, they can perform a presentation smoothly with KPS aid. They may have a chance to give a presentation like normal person.

Project Highlights

Effective lecturers combine the talents of scholar, writer, producer, comedian, showman, and teacher in ways that contribute to student learning. Wilbert J. McKeachie, Teaching Tips

Everyone knows having a good presentation style enhances what audience receives from the presenter. Presenters spend tons of time improving their presenting skills. But the development of hardware for presentation still lags back to the day mouse was invented. Most people still use a computer mouse or a handheld presentation controller to control the flow of presentation. However, they have a lot of limitations. For example, the presenter cannot move freely during his presentation using a mouse as a controller.

Looking at the most innovative controller in the gaming industry, Kinect from Microsoft Xbox360 looks perfect to become the next generation presentation controller, or maybe, a next generation integrated presentation & education system.

Brief overview of Kinect Presentation System (KPS):
1. Users of KPS not just only smoothen their presentation, limitations such as mobility are also reduce drastically. Furthermore, no hardware is required to be hold in the hand.
2. With KPS, users can perform complex manipulation just by speaking what they want to do.
3. Walk-in directly without any pre-configuration, KPS can recognize the user, log into their account, and retrieve materials required for the presentations.
4. The audience of the presentation need not be physically present anymore. If they missed the presentation, they could enjoy the full presentation environment anywhere and anytime.
5. For the disabled, they can perform a presentation smoothly with KPS aid. They may have a chance to give a presentation like normal person.

Project Highlights