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ADAVNCE MEDIA PLAYER

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Abstract - *In this project, we are developing an advanced media player which plays and pauses the video by detecting the users face looking at screen or not and also the field of computer vision based hand gesture interfaces for Human-Computer Interaction (HCI). System monitors whether the user is looking at the screen or not using a web camera. If yes then doesn't interrupts the video and allows it to play. Along with these, the web camera will also detect the users hand gestures which can be used for performing various events like increasing or decreasing the volume, changing to next video or previous video, etc. In case if the user is not looking at the or say the system couldn't detect the users face then it immediately stops the video. Currently we propose to build prototype for exploring the use of marking menus in gesture-based interaction for controlling the Media player*

Key Words: **LOOK BASED MEDIA PAYER, GESTER CONTROL, EYE, DETECTION.**

1.INTRODUCTION

When watching any media on your device may it be a computer screen, a tablet, mobile phone etc the video keeps playing whether you are watching the media or not. If the user is away from the device they may miss parts of the media they are watching. When a user uses look based media player which pauses any media until the user looks back at the screen. this is done by using a webcam that is placed on the computer or an inbuilt camera in a laptop or a mobile device. This software is capable of gesture control and gesture detection which with the help of the webcam detects your eye and pauses the media whenever the user is not looking. Additional features like volume up, volume down, next and previous are included for a better experience

The following short-comings of ordinary media players:

1) Media has to be paused, played manually

2) Parts of media is missed by the user if not paused manually

3) The media has to be dragged back wherever the user last watched it.

Therefore, through look based media player these problems can be solved by making the ordinary media player more advance thus creating a better experience for the user.

1.1 Problem Definition

The aim of this project is to provide a better experience to the user. Since nowadays people use their screens to gather news and stay updated Therefore a media players play an important role when it comes to watching any videos, movies etc on your device. A look based media player gives a better experience to the user thus solving a few drawbacks the ordinary standard media player has. The look based media player uses gesture control and gesture detection to make an overall better experience for the user

2. PROPOSED MODEL

The proposed systems is used to solve the problem of pausing and playing the media form where the user last left multiple times. It also eliminates the problems of touching the screen almost entirely while watching the media. This is done by using Eye detection, gesture control and gesture detection which is carried out by the software and the webcam that is placed on the top of the computer screen

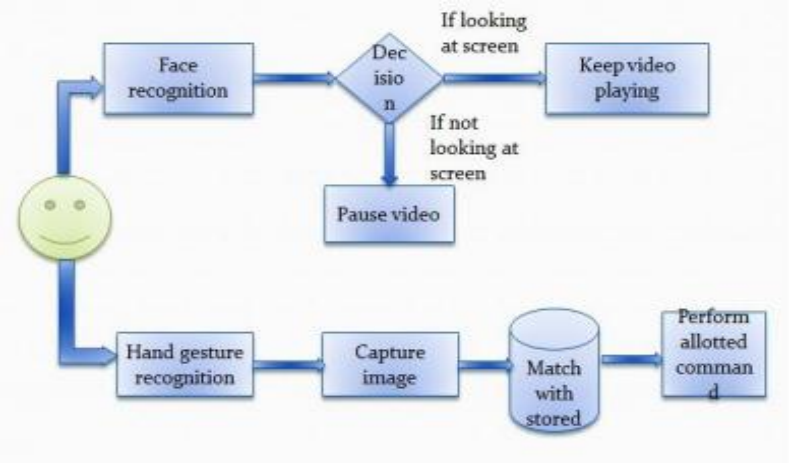
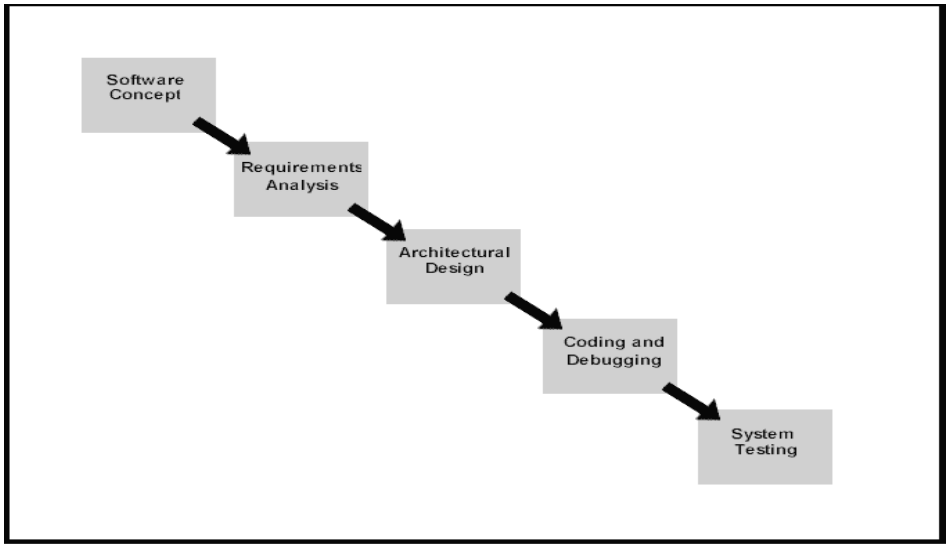


Fig -1: Basic Block diagram of system.

2.1 Literature Survey

SR NO.	PAPER	AUTHORS NAME	RESULT	DISADVANTAGES
1	Controlling Multimedia Applications Using Hand Gesture Recognition.	Neha Roka de, et. All.	Easy & simple to control Real time system such as multimedia apps.	Conversion of original image into so many forms such as HSV Scale image, Threshold image, Filtered image.
2	A Vision Based Hand Gesture Interface for Controlling VLC Media Player.	Sidharth Rauta ray, et. All.	Can easily control VLC Media player using Hand gestures.	Use of complex algorithms such knearest, neighborhood pyramid ,lucas kanade optical flow
3	Emotion Detection Using Facial Expression.	Jyoti Rani, et. All.	1. Automated Facial Express ion Recognition System. 2. Face Detection. 3.Emoti on Detection	1. May occur delay while displaying results. 2. Invariant to different distraction like glasses,styles,facial hairs



3. SYSTEM SPECIFICATION:

HARDWARE REQUIREMENTS:

- 1 GB ram
- 200 GB HDD
- Intel 1.66 GHz Processor Pentium 4
- Web Camera

SOFTWARE REQUIREMENTS:

- Windows XP, Windows 7,8
- Visual Studio 2010
- Windows Operating System

4. Objectives

1. It helps the user to interact with the media player without touching the screen.

2. This system also provides the feature of controlling other functions of media player such as volume up, volume down, forward and backward using hand gestures.

3. The media player pause the video as soon as the user face is not detected.

4. The hand gestures should be captured accurately and actions associated to them should performed perfectly.

Features

Look based media player following advantages:

1. Users cannot miss any part of the video.
2. The video stops as user changes their view from the video thereby no need of users to keep on dragging back to the point from where they missed.
3. You can also forward and backward the video if required.
4. It saves time and electricity.
5. It gives accurate result.

7. CONCLUSIONS

The look based media player provides added features as compared to the standard media player which includes eye detection, gesture controls etc
which makes an overall better experience for any user using this media player.
Eye detection feature is used to play and pause the media automatically while the hand gesture detection feature is used to access the components
of the media player without touching the screen. The main goal of our project is to provide a better experience for the users while using this media player.

8. REFERENCES

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