CSC-461 Project Proposal

Project name:

What is internet streaming and how it works

Team member:

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Why is it important:

Internet streaming is considered as one of the most important application of multimedia systems all over the world. It makes huge contribution for changing people's way from work, study, and entertainment. It is important to understand that streaming is the technology that transfer datas and deliver contents through computers and mobiles over the internet.

Problem description(what has been done):

when internet streaming starts, it transmits huge amount of data through internet, usually audio and video forms and also includes other kinds as well. As there is an continuous flow, it allows the recipients and audience to watch, listen and sharing through internet from all over the world. It is obvious that streaming requires relatively strong internet connection and extremely fast downloading speed, therefore sometimes it is easy to cause the delays or even lost the internet connection at any time. Taking to the streaming concepts. In order to allow video from a regular camera to be streamed, the video must be firstly converted to a form of data that can read by the computer which is called transcoding. Moreover, in order to let a streaming engine to work, the high level instances needs to be established like a computer or server that tells the application to receive a stream from one specific location and then send into another ones.

Things to explore further:

We know that streaming was traditionally been used to deliver in video and audio forms, but with the time goes by, it has recently developed technology that allows streaming to work with games and apps mostly on mobile devices. More and more famous streaming website and apps appear like Youtube and Twitch. This new efficient technique called on-demand resources which provides games and apps with features and functions that allows users first download them and then stream the new content as their need.

Expected deliverables:

1. Report
2. A screen captured video of how to stream
3. Some code/pseudocode of how the stream application captures your screen data and sends them to the stream platform.

Weekly schedule:

- Week 1, start at March 28th: research about the streaming software(OBS) to understand how it works.
- Week 2, start at June 4th: research about the streaming platform(twitch.tv) to understand how it works.
- Week 3, start at June 11th: record and edit an video of how to stream.
- Week 4, start at June 18th: further research about the codes that are used through the stream and start to work on the report paper.
- Week 5, last week: final edit the paper.

Course project website url:

https://github.com/lingyaot/csc461project/