Project: *Using Mobile Devices as Learning Tools for Alternative Teaching and Learning Models*
University of British Columbia, Vancouver, B.C. Canada

Natalia Lopes, The University of British Columbia

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This is a transcript of an interview with Natalia Lopes. Video is available in SOL*R.

Q. Could you introduce yourself and give us a bit of background about the project and your role?

My name is Natalia. I work as a volunteer in the Brain and Attention Lab. So the project originated in the Brain and Attention Lab, which is run by Alan Kingstone from the Psychology Department, and a few months ago he ran a small project, developed by themselves, where he was trying to understand how people pay attention to videos, and if different people pay attention to different segments for different aspects of the video. And after running these experiments, he wanted to do a follow-up project to try to explore a little a bit further, and that's when I got in. I was asked to try to come up with an application that would help him improve his experiments. So we kind of brainstormed together to try to figure out the best way to implement that, and we thought that the Arts department could help in the implementation side of things. So he got in contact with Shane Dawson, and we kind of brainstormed all together. And we kind of figured out that the idea of annotating videos and the idea of trying to figure out how people pay attention to videos was actually very useful in the real-world setting, and the educational setting. We decided to expand the experiment and actually implement a real application that will not only be useful for running the experiments, but also as a learning tool, a learning aid in an online environment. One of the main requirements for us in the beginning of the project was that it was really mobile-compatible, so that we can use it in a class setting if necessary, and that is one of the things that we were able to go through all the way. And so the application is actually compatible with iPads and iPhones and a really nice range of mobile technology. What the application does is it lets you watch videos of any type, and lets you create annotations.
So what annotations are, they are a little segment of the video that has semantic information. So the user can define a small period of the segment of the video, and can attribute tags, like it can say that it was important, it was funny, it was relevant. And they can also add some text and some comments, so when they are reviewing the video or the lecture later, they can contextualize and learn better. The application also gives the opportunity to make not only segments, but also flags, which are just specific points in time that the user considers important or relevant.

Q. How is this going to be deployed into classes?

Okay. In terms of the experiment and the research project, the application is going to be used to run further experiments, and we are going to try to figure out, with a little bit more detail, how people pay attention to videos and especially how people pay attention to different kinds of videos, and if they show a different kind of answer to different teaching techniques, and/or perhaps if students who eventually show better results had paid attention differently, and if there is a better way to pay attention. And the interesting thing about this project is that it started as a research project, and in a sense it was focused on an experiment, but it kind of grew out of it and grew into a real application that is probably going to be used by different departments.

So now we have interest from the Medicine department. They are willing to use it as a student tool to help them learn better from the interview process with patients. And there is also interest

from the Music department, where they are willing to use it as a tool for reviewing performance on conducting musical pieces.

Q. Tell us a bit about where you might see this going in the future, what you would like to be able to use it for, what you hope will come out of it.

Okay. I think for the application itself, one of the neatest features that it could evolve to have is the ability to use it for live annotation, so that people could just use the application in the class environment, in a real lecture, and they could annotate simultaneously while the teacher is explaining or exposing any feature in a class. And then perhaps you can go back later at home, when you want to study that class, and you can re-watch the video of the class with your annotations synchronized, so you kind of remember all the cues and all the interesting bits. So this is one of the features that we really hope to implement in the future.

Q. That would be fantastic. Lots of departments would love to use that.

That is one of the reasons why we focused so much on making it mobile-compatible. It's not an easy thing to do technically. It presents a lot of challenges. In some sense, it's kind of a new thing. But it's one of the thing that we really pushed to make it compliant with, because we thought in the future it might have a really nice use in class environment.

There are some similarities with applications that are used for movie reviewing, or film and perhaps those pre-screening tests with audiences. There is some similarities with tools they use there.

Q. That's interesting, sort of a live feedback tool.

Exactly. And then you say whenever you think it's funny, whenever you think it's romantic or just pleasant.

Q. For the live feed, do you think you'll run into issues with people making obnoxious comments?

There are certainly some complications, especially on security and making sure that if necessary the comments are anonymous, or even private. But one of the neat features of the system is that it will allow you to understand how are the trends for each video. So you might not see other person's comments, but you might see which bits and which segments are more popular or being more annotated. So it's a nice way to sort of reach into the crowd, crowd-sourcing, crowd intelligence, and try to figure out the tendencies and what are the segments that everyone thinks are important or more relevant.

Q. So it's more your annotations are for yourself, not necessarily publicly displayed. I was thinking of SoundClick, where multiple people can annotate an audio file. YouTube also has something similar.

I know that YouTube has annotations. I think the concept that we are using is a little bit different. What we decided was to go for a segment with beginning and end, and I think YouTube is using the concept of flag, of one point in time, to receive a comment or something like that.

Submitted by Natasha Boskic (natasha.boskic@ubc.ca), July 2012