

COEN 275 Final Project

Android Canvas

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ACKNOWLEDGEMENT

I would like to express my great gratitude towards my supervisor, Dr. Michael Santoro who had given me invaluable advice to this project.

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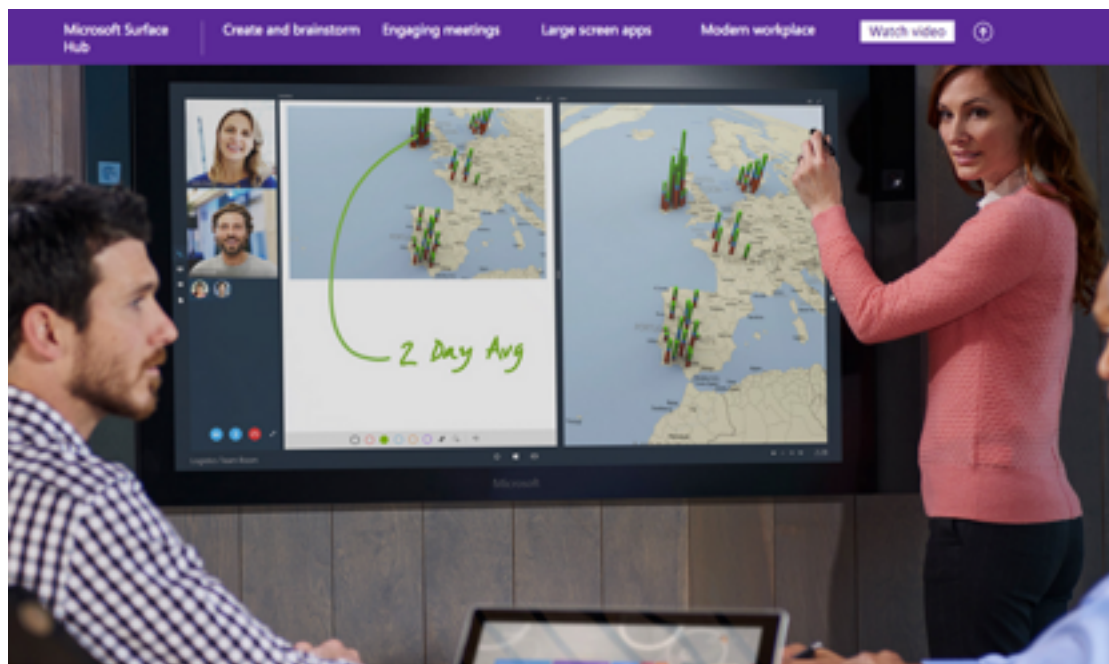
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ABSTRACT

This paper describes the concepts and implementation of an Android Canvas application on Android platform. Its main function is simulating a drawing board that allows user to take notes or draw anything they like on it.

2. Introduction

With the development of technology, people start to apply high technology equipment to aid with traditional teaching and meeting scenario nowadays. For example, Microsoft published Surface Hub, a powerful team collaboration device designed to advance the way people work. In this sense, information sharing and the way information is delivered has upgraded to the next level. This is an era that urge for efficiency and simplicity with technology advancement in various area, and classroom is our foci for this project. Note taking helps with retention of knowledge and aid with comprehension. This requires note taking equipment with the ability of fast taking notes and instant sharing.



2.1What is the problem

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However, although there are plenty of smart television that run on Android platform which allows users to play games, videos and do many other things. Android platform still need a product like Surface Hub that can improve the productivity of the meetings and teaching activities which is easy to use and use it on the spot.



2.2The relation between this project and this class

This project aims to design an application that helps teachers teaching with Android smart television, tablet thus allowing students to make notes simultaneously. The teaching method of our class is teacher exhibiting lecture notes in a notepad software in windows, while students are taking notes. When students are taking notes from the teacher, there's a time gap so that it's hard for them to note down their reflections towards teaching effects, like their own understandings or extended questions. Also the students could bring the question up to the teacher while showing where the problem comes from. In extension, the note taking application could be applied in

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other scenarios that allow user to take notes with their android device anywhere. For example, users could take notes while reading a book, or browsing the internet. Therefore we have come up with the idea of optimizing this knowledge sharing process. Meanwhile, applying the knowledge of what we have learned in object oriented programming class, to build the application on Android system.

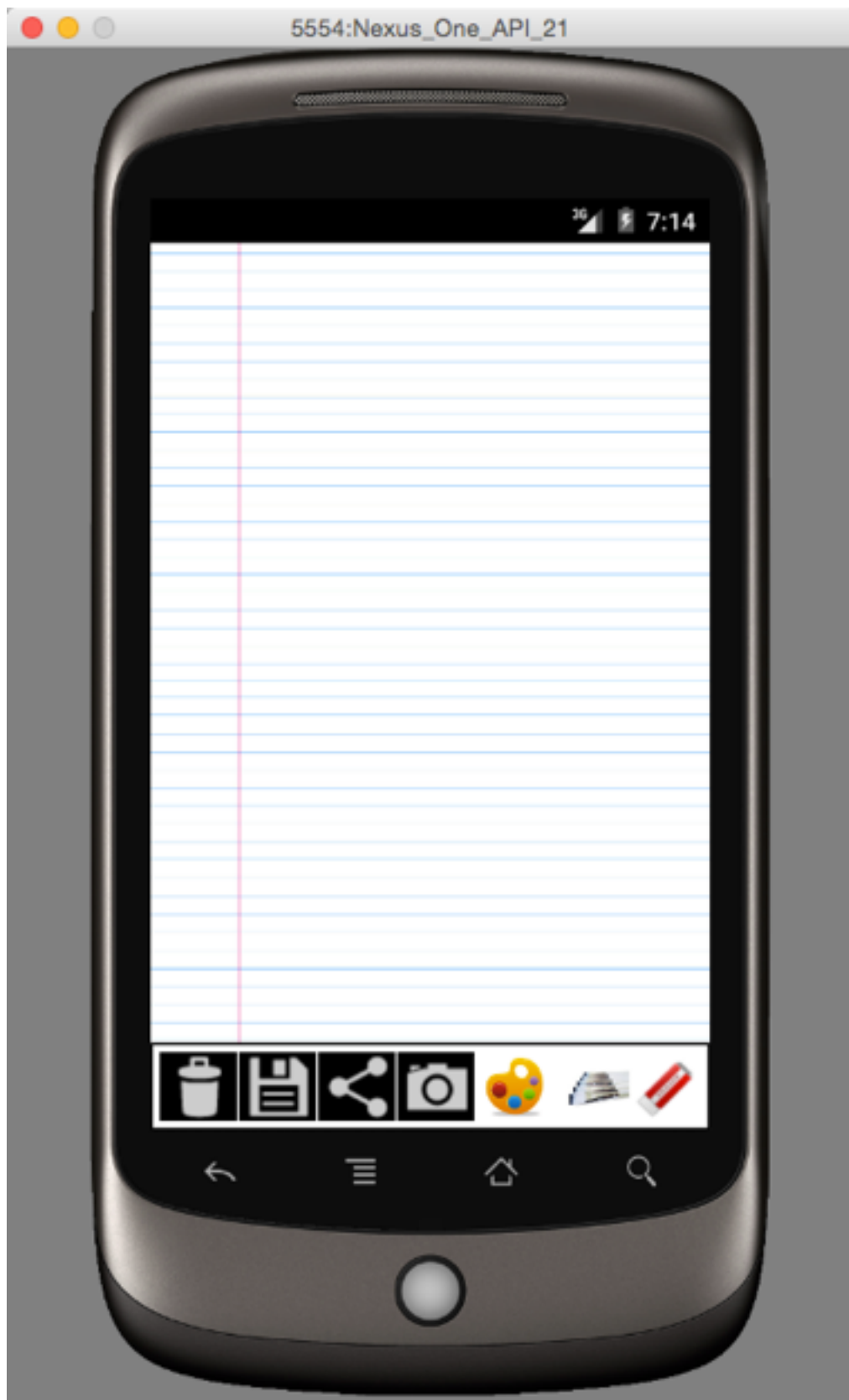
3. Methodology and Design

This project will be developed on Android Studio 1.1.0 in Mac OS X Yosemite 10.10.3. It will use a Linear Layout to control the whole screen and a Relative Layout to contain the tool bar which has the functionality of note taking.

The main features of this project will include creating a new page, saving/ creating new pages, sharing notes with friends through email or text message, taking photos as background, changing brush size, changing brush color and undo, and discard notes.

Users could simply take notes or pictures of what the teacher wrote on the blackboard and add notes to it, and then possibly sending notes to oneself or sharing with friends via their Android mobile device. Notes are saved in “.png” format with system time (format as: YYYY-MM-DD) as file name allowing user to insert notes and eventually making them into the final notebook through other application. This application allows users to make notes in an easy way, that whenever they need to take notes, there's no other consideration need to be taken when choosing among different

applications so that students will not stress about not being able to listen to the teacher and taking notes at the same time.



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4. Workload Distribution

Lin Wang: UI/UX Design, ideas, write paper, ppt

Xiaoguang Mo: Programming, write paper, ppt

5. References

[1] <http://www.microsoft.com/microsoft-surface-hub/en-us>

[2] <http://www.android.com/tv/>