Journal

# CSC 0780-01 Application Development for Mobile Devices Fall 2015

Instructor: Dr. Puder.

Authors: Pooja Kanchan and Syed Omer Salar Khureshi

## Week 1 – Sep 14-20:

1. Created design document – CSC 780\_Journal.docs
2. Created wireframes using ninjamocup.com
3. Went through some Bluetooth tutorials.
4. Created a prototype app that uses Bluetooth Adapter
   1. Sets up Bluetooth.
   2. Perform device discovery and query paired devices.
   3. Created an app to test Bluetooth socket programming between two devices. First device works in server mode and the second device works in client mode.
   4. Once the connection is established between them, the two devices can exchange the messages between them.

## Week 2 - Sep 21-27:

1. Bug fixes in prototype app.
2. Worked on resolving issues related to transferring string between two paired devices.
3. Developed the feature to transfer strings between two devices via Bluetooth.
4. Started exploring options to implement drawing actions.

## Week 3 – Sep 28 – Oct 4:

1. Added drawing canvas.
2. Added NFC feature to pair devices.
3. Explored methods in the android class: DrawingCanvas and Bitmap.

Week 4 – Oct 5 – Oct 11

1. Debugged NFC and Bluetooth connectivity.
2. Explored options to transfer drawing data between devices.
3. Added Pen tool and tip sizes and colors to drawing canvas.

## Week 5 – Oct 12 – Oct 18

1. Implemented marshalling. User drawn data is marshalled and transferred to second device. The second device reconstructs the drawing and displays.
2. Implemented color picker and seek bar for pen tip size and eraser size.
3. Background color changes as per color of pen.

## Week 6 & 7– Oct 19 – Nov 1

1. Bug fixes and improvements in marshalling, to add functionality like erasing, change of colors etc.
2. Improvements on UI for drawing tools.
3. Implemented difficulty and change colors on both devices based on difficulty and pen color.

## Week 8: Nov 2 – Nov 8

* 1. Implemented a way to exchange of data from activities other than drawing activity.
  2. Fixed the code to maintain aspect ratio of drawing on screen with different resolutions
  3. Fixed a marshalling to handle data append if the drawing JAVA object which stores drawing details is sent in multiple blocks.

## Week 9: Nov 9 – Nov 15

1. Added text file containing words with difficulty level and hint.
2. Implemented a database class to load the text file into a table and perform CRUD operations on the table.

## Week 10: Nov 16 – Nov 22

1. Implemented a “guess a word” logic for the user who is guessing. The screen shows scrambled word to be guessed. The user can guess the word with the help of drawing by first user and by selecting letters.
2. Added a code to display words from database on DifficultyActivity from levels: easy, medium and hard
3. Added a logic to allow user to open “new drawing” and “save drawing” to gallery
4. Changed frequency of transfer of drawing details to make it look real time drawing.
5. Fixed some bugs, including disabling touch for second device when first user is drawing.

## Week 11: Nov 23 – Nov 29

1. Bug fixes
2. UI changes for DrawingActivity and ViewDrawingActivity
3. Added few more controls on drawing screen

## Week 11: Nov 30 – Dec 6

1. Implemented logic to transfer chosen word to second user. Added a screen for second user, when first user is choosing a word.
2. When drawing is guessed, the roles of players are switched.
3. Implemented an interface:OnWordSelectListenerinMediumFragment and HardFragment to pass the chosen word to host activity: DifficultyActivity
4. Added timer on DrawingActivity and ViewDrawingActivity. Time to draw is set as 3 minutes for easy word, 4 minutes for medium level word and 5 minutes for difficult word.

## Week 12: Dec 7 – Dec 14

1. UI updates for secondary difficulty screen.
2. Commenting and code clean up.
3. Minor bug fixes.
4. Handled back button: When a user presses back button, the screen on second
5. Added sound effects when the word is guessed correctly, when the time is up and when the user presses back button.

## Week 13: Dec 15 – Dec 18

1. Added splash screen and icon for the app.
2. Added progress bar animation, improved UI screens.
3. Functional testing and bug fixes
4. Updated readme with the instructions for installation and troubleshooting and added screenshots.