MLC

MOBILE LEARNING COMMUNITY

CS 241

UNIVERSITY OF ILLINOIS AT URBANA - CHAMPAIGN

Presented by MLC team @ UIUC

Mobile Learning Community

Mobile Learning Communities (MLC) Project

Who are we?

□ Group of faculty, undergraduate and graduate students who develop educational applications to be used in undergraduate courses

    ◘ Mobile learning community

    https://agora.cs.illinois.edu/display/mlc/Home

    ◘ Members

    https://agora.cs.illinois.edu/display/mlc/Members

□ Sponsored by

    ◘ NSF

    ◘ Google Inc.

    ◘ Vodafone Inc.

What's mi-clicker (mobile Illinois clicker)?

- You will be provided Android Google phone between **March 29-May14,** 2010 to be used in cs241 and outside of cs241 course

  - G1   G2   Motorola Droid
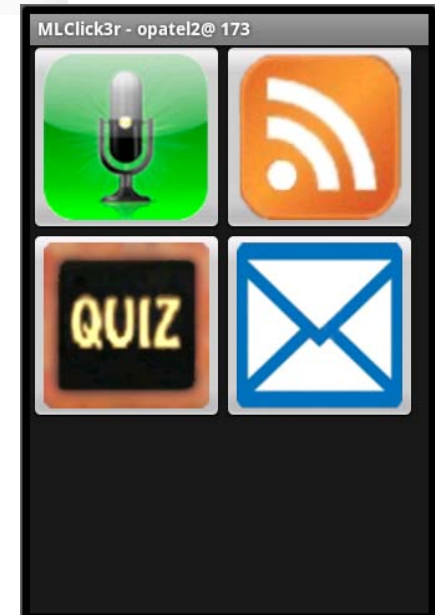
- Applications

  - Main Educational Services
    - Take quizzes
    - Get course announcement (MPs, HW, ..)
    - Text messaging with instructor/TA
    - Audio Q&A with instructor/TA
  - Bluetooth scanner
    - Capture MAC address of nearby phones in the proximity nodes measurements
    - No personal information is collected

Getting started – Consider carefully the following steps

(0) Participation

(1) Lease a phone or use your own Android phone

(2) Insert your SIM card and use it as a usual phone (optional)

(3) Install Ulwpa2

(4) Download apps from Android market

(5) Use MLC tool (mi-clicker) in class for quizzes, notifications, messaging

- ◘ Enjoy convenience of the smart phone after class

(6) Return phone

(7) What if …. – FAQ

0) Participation

- Voluntary participation
- Privacy preserved – any metadata are anonymized
- We have limited number of phones this semester (approx. 100-110) – assignment based on FCFS
- Usage of phone in class
  - Answer impromptu 'ungraded' quiz questions
  - Get announcements
  - Text message to TA/instructor your questions during the class
  - Audio message to TA/instructor
- Usage of phone outside of class
- Phone has **1 Gbyte** external disk space – good for **music and pictures storage**.

1) Lease a phone

- **Pick up a lease form**
  - Today, March 15, at the end of the cs241 class you can pick up the leasing form from Prof. Nahrstedt (in-class)
  - If you did not attend cs241 on March 15, you can pick up the leasing form on March 29 at the end of the cs241 class from the instructor/TA (in-class)
  - We have only **limited number of phones (approximately between 100-110 phones),** so the leasing forms are going to be given based on first come and first serve (FCFS)
- **Fill out the lease form**
  - You need to read carefully the leasing form

1) Lease a phone

- Pick up the phone from Paula Welch
    - Once you filled out the lease form, bring the form to Paula Welch
    - Paula Welch is in room **1330 SC,**
        - **M T W Th F: 9:30-11:30 am, 1:30-3:30 pm**
    - Bring
        - Lease form – initialized by Prof. Nahrstedt
        - Your student ID – Icard
        - Copy of your Icard on 8 1/2" x 11" white paper
    - Phones will be given out during the week of **March 29-April 2**
- **If you drop the course, you need to return the phone immediately**

2) Insert your SIM card (optional)

- A smart phone
  - Check your UIUC email, Gmail
  - Sync your calendar
  - Browser
  - YouTube
  - GPS

- Educational applications
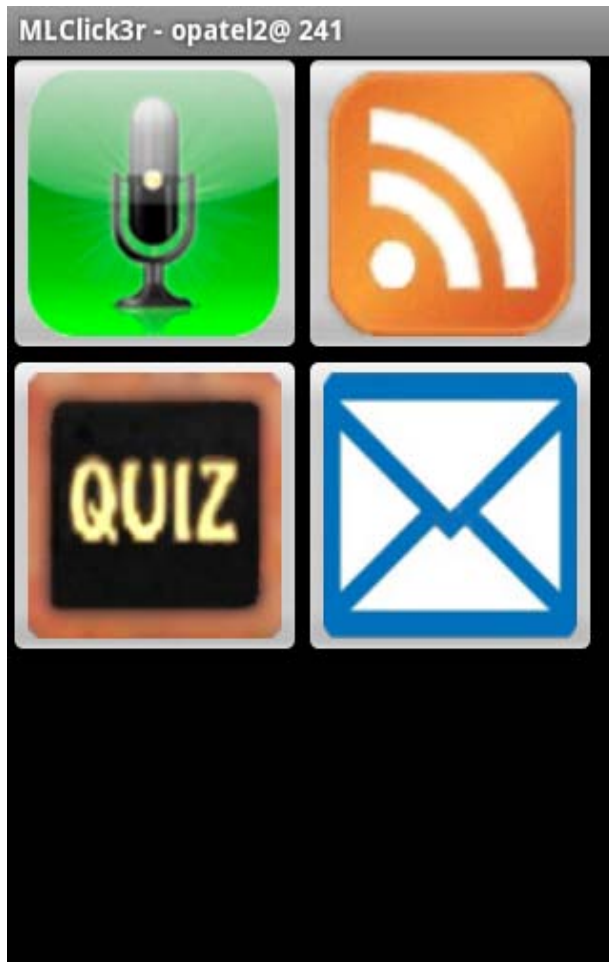 - Mi-Clicker
  - Bluetooth scanner

3) Install UIwpa2

- Get connected to Internet

- Optional if your SIM card comes with data plan

- Otherwise, setup UIwpa2 networks
  - Configure once, use always. No need to input password again and again as in UIUCnet
  - https://agora.cs.illinois.edu/pages/viewpage.action?pageId=29660256

- You can also setup other wireless networks, like in your apt.

4) Download Edu Applications

- Google Android Market
  - Easy installation
  - Update notification
  - http://mlc.web.cs.illinois.edu/download_page.php
  - Search for Mi-Clicker, … and install the application
- Documentation
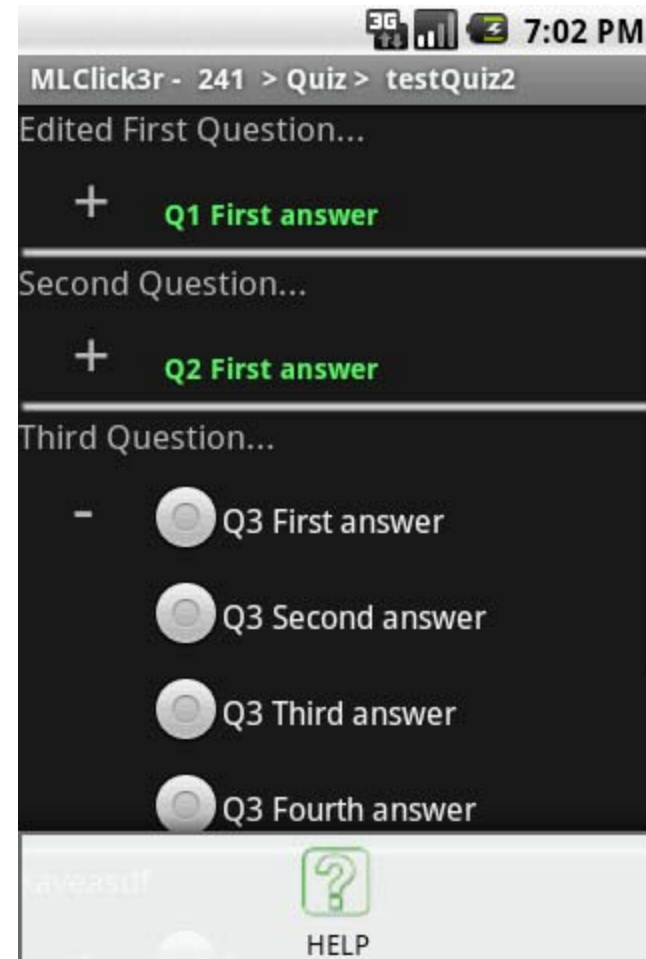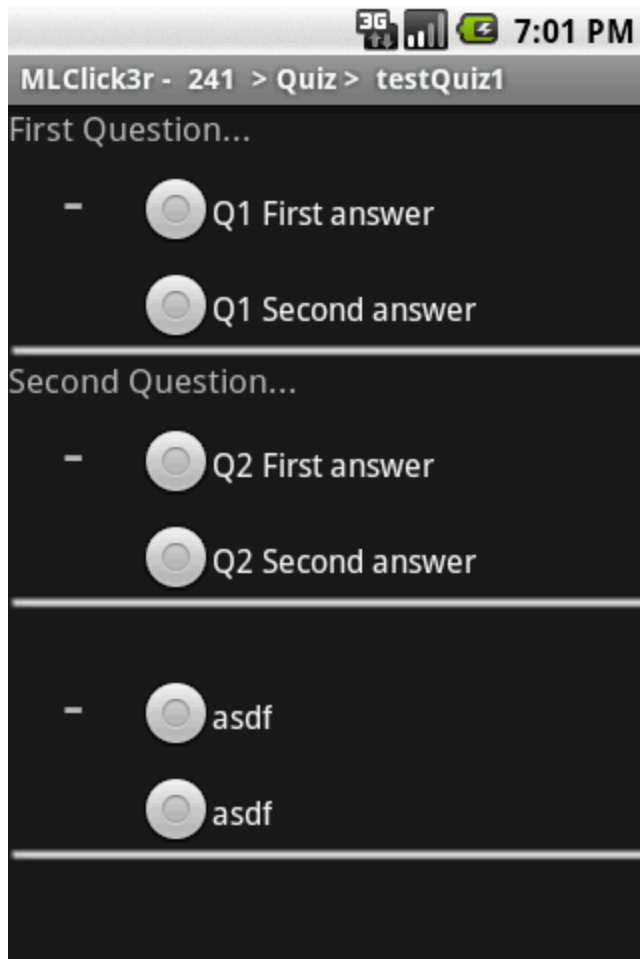 - http://mlc.web.cs.illinois.edu/

Application List

MLClick3r - opatel2@ 241
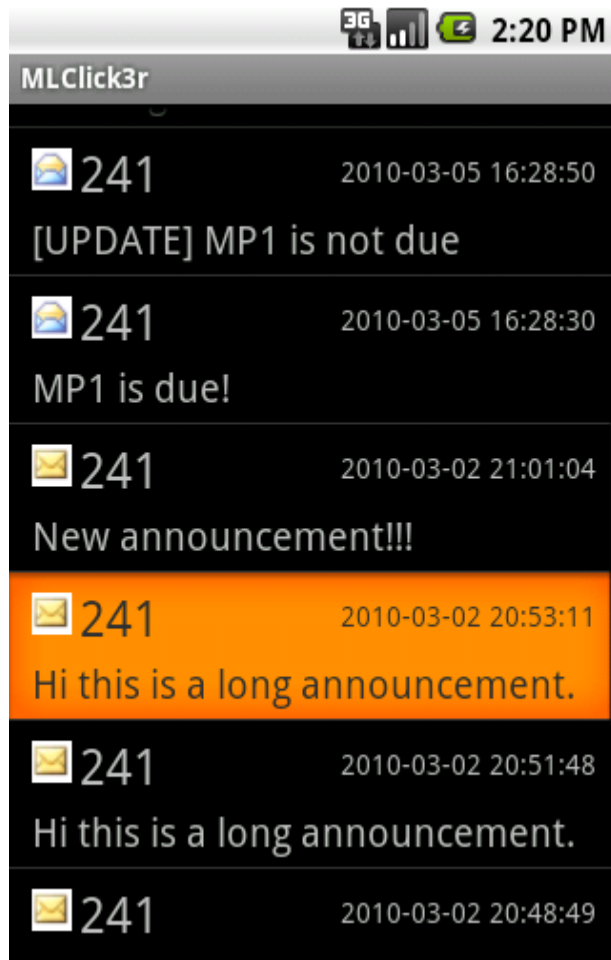
□ This is the the main list of the four application, from the top left, clock wise, they are:

① Recorder,

② Announcement,
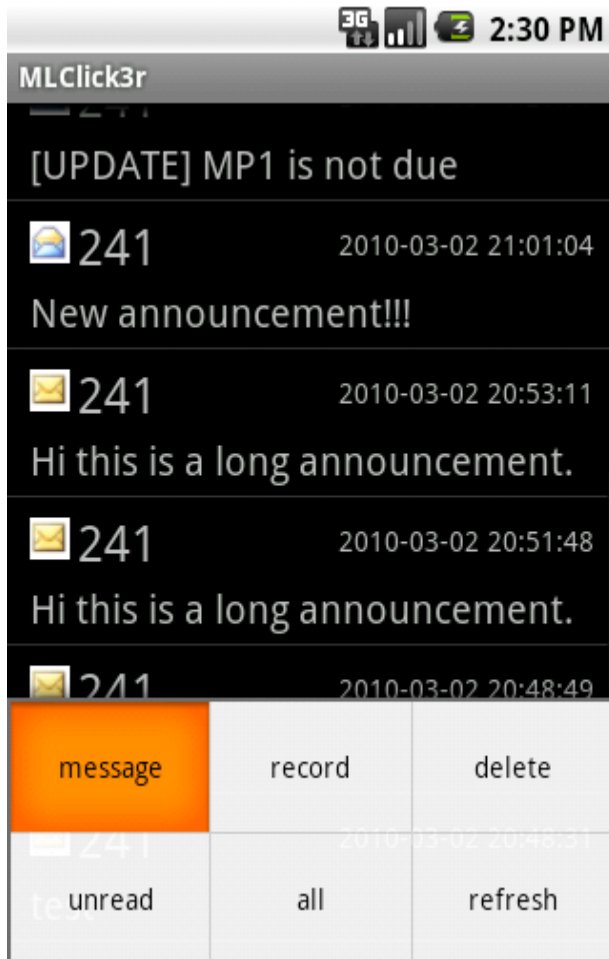
③ Quiz,

④ Message.
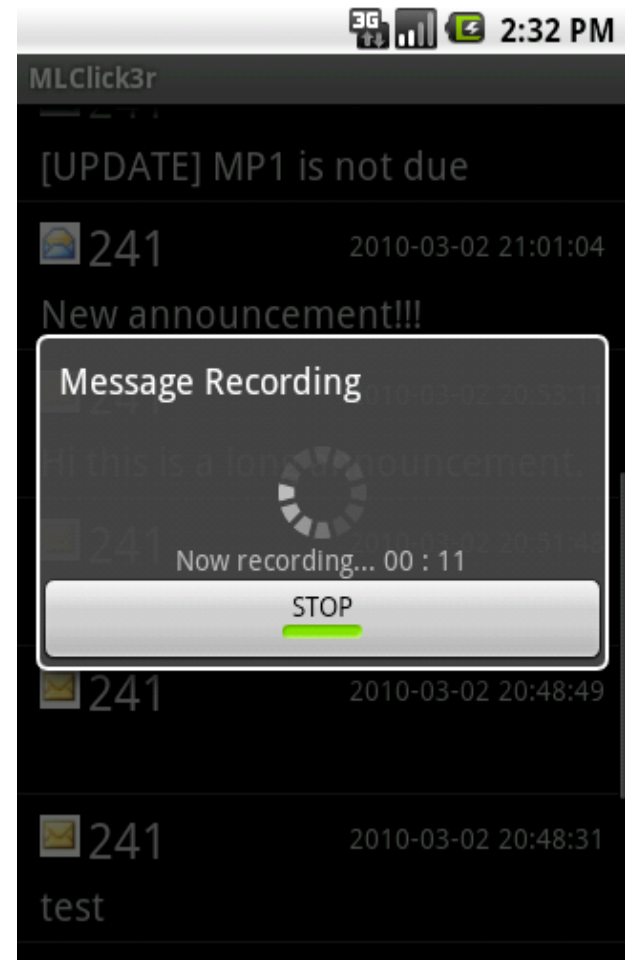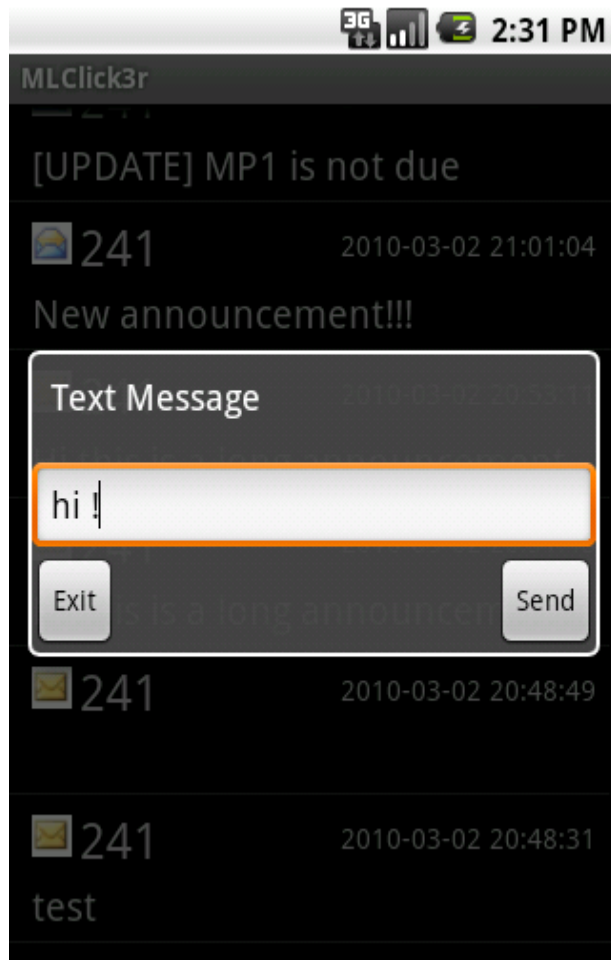
Quiz

Announcement

- This is the main view of the announcement application.
- The current view shows the announcement for cs241

Announcement Menu

- This is the view when you click the menu button on the phone.
- There are six choices.
- Message allows you to send message
- Record allows you to record questions or comment.

Message View and Recording View

Bluetooth Scanner

- You don't have to download anything, it is already pre-installed
- Do not delete the "btlog" directory in your sdcard since we put our log files there.
- This Bluetooth scanning experiment is for research purpose for now, however can be used to improve the education later
- MAC addresses will be anonymized if published later for research purpose. So, no real MAC addresses are exposed.
- No location or personal information is collected.

5) Use Mi-Clicker in CS241

- Before you start, get your password
  - Go to website
  - Password is sent to your UIUC Email account
  - Sorry, you cannot change it, but if you forget your password, you can ask and it will be resent to you

- Q&A
  - http://mlc.web.cs.illinois.edu/dev/faq_page.php

- **MLC Developers User-Help:** mlc-help@illinois.edu
  - Bug report, customized help

- **MLC Developers Office hour:** **Monday 2-4pm, Tuesday 4-5pm, Room: 208 SC**

6) Return the phone

□ Importantly, your grade will be held upon your return of the phone by May 14. If you don't return the phone by May 117, you will be charged $399 (for G1), around $500 (for G2), …

□ Return your phone to Paula Welch
- Room: 1330 SC
- Office hours: **M T W Th F: 9:30-11:30 am, 1:30-3:30 pm**
- Period: **May 10- May 14**

□ Before return, erase your personal and Ulwpa2 credential information
- https://agora.cs.illinois.edu/pages/viewpage.action?pageId=29660256

7) What if I...

- Lose a phone or somebody steals the phone
  - Get Police report
  - Bring the Police report to Paula Welch in Room 1330 SC (In this case, you will not be charged for the lost/stolen phone.)
  - Replace the phone (pick up a phone from Paula Welch)
- Encounter hardware problem with phone
  - Bring the problem-phone to Paula Welch in Room 1330
  - Explain the problem
  - Ask for replacement

Have Fun

- Interested, Excited, and want to participate?

- Join MLC project
  - Improve software quality
  - Invent new educational apps

- You can develop new software, you can use it for new projects
- Undergraduate research symposium – develop project for it, gain experiences for new exciting platform;
- If there is interest, we can provide tutorial(s) for Android programming;

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