Technical College of the Lowcountry
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TECHNICAL COLLEGE
OF THE LOWCOUNTRY

IST 236
MOBILE AND WIRELESS APPLICATIONS

Course Description
This course is a survey of the protocols and interface standards for mobile and wireless appliances accessing the internet. An introduction to development and deployment of applications is included in this course.

Prerequisites: IST 220.

Purpose is to develop the first steps in building computer competencies for a career in the web and app development field.

3 Cr (3 lect/pres, 0 lab, 0 other)

Course Focus
Upon completion of this course, the student shall have capabilities and understanding in the following areas:

1.   Creating and writing apps for android mobile devices
2.   familiarizes you with development software for Android apps
3.   discusses programming logic used in apps
4.   Uses an advanced developer kit (Eclipse with Android tools)
5.   Install complex packages for developers
6.   use emulators and smartphones/tablets
7.   write Java code to support apps
8.   Use forms, buttons, etc. for user interface development.

Text and References
Students should have access to a computer running Windows XP or later with internet access. You should have the ability to load software for Android SDK if you plan to work at home and have web access to send in homework via email or upload to blackboard site for TCL. You will need enough memory to run the software (512MB is the minimum). If you don't have the software tools, you will need to find a computer that has them (e.g., you can go to the TCL Learning Resource Center). The software is available on android eclipse web site for free.

To access the class web site:
Go to: or www.tcl.edu or http://tclbb.vmc3.com
Click on the Blackboard icon

Your Blackboard User Name is as follows:

Username:_____
Your seven-digit TCL Student ID number including the proceeding zeroes.
Example: 0012345

Your new Blackboard Password is as follows:

Password:_____
First letter of your first name, lowercase, and the last three digits of your social security number.
Example: j123
NOTE: Use lowercase letter and without spaces.

Click on class ist 236
If you cannot get to the site, please call the helpdesk 525 8344 or email them at helpdesk@tcl.edu.

Course Goals
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)
1. describe web app design process
2. describe android sdk workspace
3. install developer environment (android sdk package)
4. create a web app
5. set up android development tools in eclipse
6. set up android emulator
7. run android emulator
8. understand android features
9. list android versions
10. define android market
11. create android app package
12. build user interfafce
13. manage folders for site
14. upload to server
15. use widgets
16. test app in emulator
17. test app in android nexus
18. learn design techniques for apps
19. add control button
20. create xml layout file
21. add class file
22. define android manifest file
23. add activity to manifest file
24. use java code
25. define button event handler
26. code button event handler
27. create app
28. use android theme
29. add text field

30. use strings
31. declare variables
32. use text methods
33. format numbers
34. use an icon
35. set launcher icon
36. use radio controls
37. use radio button group
38. use if statement
39. use logic statements
40. validate data
41. use toast notification
42. code button event
43. write temp conversion app
44. create list
45. close project
46. publish app

Student Contributions

Each student will spend at least 6 hours per week preparing for class and preparing assignments to turn in weekly. Each week students will turn in a list of assignments as specified on the class website and also take chapter tests as each chapter in the book is completed. They will also take a final exam to demonstrate their knowledge of the material. Students will use a MS Expression Web environment on a TCL computer or they will set up the development environment on their own computers. Students will be expected to prepare Expression outputs and demonstrate them.

Course Evaluation

Students will have weekly homework assignments to turn in that are graded for 100 points each. there is also an online test for each chapter that the student will complete per the schedule. Each of these are worth 100 points. The student will have a final project to complete that is worth 100 points. these are averaged as:

Tests: 45%
Homework:40%
Final: 10%
Timeliness/Attendance/Participation: 5%

Course Schedule

The class can be taken online or as a web-enhanced in-class course. it meets for 1.5 lecture/presentation hours per week in the web-enhanced format.

Approved by: _Kenneth Flick_____Developed/Revised: 8/2013
Ken Flick, Division Dean for Business/Industrial Division

ADA STATEMENT

The Technical College of the Lowcountry provides access, equal opportunity and reasonable Accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

ACADEMIC MISCONDUCT

There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship. It is the student's responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification. The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the TCL Student Handbook, the Division Office, and the Learning Resources Center.

ATTENDANCE

The College's statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

"Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.

 "Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class.   Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.

"Reinstatement requires the signature of the division dean. "In the event it becomes necessary for a student to withdraw from the course OR if a student stops attending class, it is the student's responsibility to initiate and complete the necessary paperwork.   Withdrawing from class may have consequences associated with financial aid and time to completion.

" When a student exceeds the allowed absences; the student is in violation of the attendance policy. The instructor MUST withdrawal the student with a grade of "W", "WP", or "WF" depending on the date the student exceeded the allowed absences and the student's progress up to the last date of attendance or

o under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work.   This exception must be documented at the time the allowed absences are exceeded.

" Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.

"   A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.

" A copy of TCL's STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

HAZARDOUS WEATHER

In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVH 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WTGS TV, WJWJ TV, and WSAV TV.   Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

Emergency Text Message Alert
Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancelations via text messaging on their cell phones.   Participants can also opt in to receive non-emergency news and announcements.   Go to www.tcl.edu.   On the homepage, click on "emergency TextAlert at TCL" and fill out the form or go to www.tcl.edu/textalert.asp