

Android Class Projects

- 1) Use Eclipse to write a console Java program to calculate the difference between two times in a given day (9:30:10 and 13:15:05, for example).
- 2) Write an Android version of the Time Difference application, allowing the user to enter two times and click a button, causing the difference to be displayed in hh:mm:ss format.
- 3) Write a Gallery Android application, where the user can switch among items through the options menu. Each item will be displayed in an ImageView and a TextView, the images and text files being stored in the /res directory.
- 4) Write an Android Flash Cards application using swipe gestures (flings) and animation when moving to the next and previous cards. Single-tapping a card results in the opposite side showing. Like with real flash cards, each card has questions on the front, answers on the back.
- 5) Write an Android application with a simple dialog box asking the user for a string and then adding it to the main TextView, retaining what had already been there and adding the latest item at the bottom. Trigger the dialog from a menu.
- 6) Write a Grocery List application for a user to store and remember a list of items, enabling the user to add and clear items. Show the items in a ListView with a CheckBox by each and persist the data in app-level text files.
- 7) Write an application to read a list of XML files from a server and use it to populate a Spinner (drop-down combo box). Choosing a file results in its being downloaded, parsed, and displayed in TextViews, ImageViews, and Spinners.
- 8) Write a Tic Tac Toe application, drawing the 9x9 board on a canvas with the Android drawing API. When the user taps a cell, draw an X there and have previous Xs persist. Have the computer respond with an O after each move.
- 9) Write a simple database application to interface with a Words table. Include menus and dialogs as necessary for the user to add a word, show all words, and clear the table.
- 10) Write a Word Quiz application driven by database tables Words, Definitions, and Questions (relating the first two). Use radio buttons to show the proposed definitions for a given word and provide buttons for the user to move to next and previous words. Provide an interface for the user to see their score.
- 11) Write a jQuery Mobile web app to display a month's calendar in standard seven-column format with month and year supplied by the user, a perpetual calendar. Extra: use Ajax to support notes for given days - clicking (touching) a cell for one of those days causes the browser to show that day's note.

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