

ASSIGNMENT 1
DUE ON: Feb 20, 2020
TheShoppy

1 Overview: This document specifies the functional, non-functional, and deliverable requirements for the **TheShoppy** application development assignment.

2 Scope: This assignment is designed to allow you to master the implementation of the standard GUI elements that you will encounter on the current generation of mobile phones. You are tasked to implement a user interface that uses the UI elements outlined in this document and to store their attributes and states in the Preferences Store that exists for your Mobile OS of choice, for developing an Android application for an online shopping store dealing with computer sales.

3. Functional Requirements: The following functional requirements must be implemented to complete the assignment.

3.1 View the App Title in a Label: The user must be able to view a label object centered horizontally at the top of the view space that says **'TheShoppy'**

3.2 Enter Text in a Textbox: The user must be able to enter and view a customer's name in a text box located on the view space.

3.3 Manipulate AutoCompleteTextView: The user must be able to select the name of the province by typing the first two letters of the province.

3.4 Pick the Date of Purchase: Use date picker to populate the purchase date into an Edit Text.

3.5 Check a Radio Button: The user must be able to view and manipulate the type of computer 'Desktop' or 'Laptop'.

3.6 Two scroll views with card views: for showing images of desktops/laptops as per the selection of the above radio buttons specified in 3.4

3.7 Manipulate a Spinner Control: The user must be able to view and manipulate a Spinner Dropdown list to select the brand of computer (Dell, HP or Lenovo).

3.8 Check a Checkbox: The user must be able to view and manipulate the addition of SSD and/ or Printer.

3.9 Manipulate a Radio Button Group: The user must be able to select any added peripherals.

- • For laptop this could be Laptop Cooling Mat, USB C-HUB or Laptop Stand.
- • For desktop this could be None, Webcam or External Hard Drive.

3.10 Manipulate Button: The program will compute the amount of money that the customer owes for the Desktop/Laptop and display a multiline output describing the computer selected and the cost, in a multiline TextView as below when a button is clicked.

3.11 TextView for Invoice: Use a multiline TextView for the output invoice describing the following:

Customer: Peter
Province: Ontario
Date of Purchase: 02-06-2020
Computer: Laptop
Brand: Dell
Additional: SSD
Added Peripherals: Cooling Mat
Cost: \$

3.12 The cost: Cost depends on the type of computer, brand, additional, and added peripherals. The costs are as follows:

a. Brands of Laptop:

- i. Dell: \$1249
- ii. Lenova: \$1549
- iii. HP: \$1150

b. Brands of Desktop:

- i. Dell: \$475
- ii. Lenova: \$450
- iii. HP: \$400

c. Additional: SSD and/or Printer

- i. SSD: \$60
- ii. Printer: \$100

d. Laptop Added Peripherals:

- i. Cooling Mat: \$33
- ii. USB C-HUB: \$60
- iii. Laptop Stand: 139

e. Desktop Added Peripherals:

- i. Webcam: \$95
- ii. External Hard Drive: \$64

3.12.1 The program should compute the total cost of the computer with additional taxes; taxes are 13%. The final cost, with tax included, should be rounded to the nearest cent. (Note: make sure that the amount of money billed is displayed with a dollar sign and two decimal points).

4 Non-Functional Requirements: The following non-functional requirements must be implemented to complete the assignment.

4.1 Mobile Application: The 'TheShoppy' mobile application must be implemented on a mobile device of your choosing.

5 Deliverable Requirements

5.1 Comment the Code: You must provide comments to every class, method, and every and any significant code segment.

5.2 Source Code: You must submit YOUR OWN WORK via DropBox on eConestoga (i.e. All app package files in a compressed file).

5.3 Screen Shots: All the relevant screen shots of your running application in a word document should be submitted separately. Paste the properly commented java code also in this document. Java code pasted as an image will be discarded. **Do not zip this document.**

5.4 Rubrics: Assignment should satisfy all the rubrics specified in the rubrics document for assignment 1, and general rubrics

5.3 Due Date: Feb 20, 2020