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| American University of SharjahCollege of Engineering Dept of Computer Science & Engg  P. O. Box 26666  Sharjah, UAE |  | Instructors: Dr. Tamer [Shanableh](javascript:detailw('detail.asp?ID=@00010457')) **Lab Instructor:** Ms. Praveena Kolli  **Office** EB2-126  **Phone**: 971-6-5152352  **e-mail**: [pkolli@aus.edu](mailto:pkolli@aus.edu)  **Semester**: Spring 2023 |

**CMP354L -** [**Mobile Application Development**](https://banner.aus.edu/axp3b21h/owa/bwckschd.p_disp_detail_sched?term_in=201410&crn_in=11136)

**Lab3**

**Topics:**

* Nested and table Layouts
* Widgets -> EditText, TextView, Button, Spinner, Radio and check boxes
* developing a Custom Tip Calculator

The **Custom Tip Calculator** app calculates and displays tips for a restaurant bill.

It has the following features,

1. Tip percent (10%, 15% or 20%) can be chosen from radio group.
2. Total bill amount can be split among persons. Number of persons that can share the bill must be in a range 1 to 4 only. This selection is done through a spinner.
3. There are three kinds of discounts customers can opt for. More than one discount applies.
   1. Members get 5% discount
   2. On weekdays 2% discount apply.
   3. On special occasions there is 3% discount given.
4. On button click Total Amount is calculated based on the tip and discounts and Total per Person is calculated by dividing the total amount by spinner selection. Display the results in the respective text views as shown below.

Graphical user interface, application

Description automatically generated

**Designing**

* Replace default constraint layout with Linear Layout (vertical).
* Drag a text view to display the title Custom Tip Calculator.
* Include a table layout to design the page. Set stretchColums, layout\_span, layout\_column properties as applicable. Or you may choose to have Horizontal Linear Layouts inside table rows.

**Coding**

* Write a function that calculates and prints the results.
* Add a listener to the button.

**Note**: Submit Design xml, string xml, java code, screenshots and **APK.**