# Main Activity

## MainActivity

- etBaseAmount: EditText
- seekBar: SeekBar
- tvTipPercentLabel: TextView
- tvTipAmount: TextView
- tvTipDescription: TextView
- tvTotalAmount: TextView
- etNumberPeople: EditText
- tvTotalPerson: TextView
- tvPerPerson: TextView
- tvTaxAmount: TextView
- spinner: Spinner
- spinnerMonitor: SpinnerActivity
- etCustomTaxPercentage: EditText
- etDiscount: EditText
- discountPercentage: Double = 0.0

---

- computeEverything(): void
  - *compute and update tax, tip, discount and total amount*
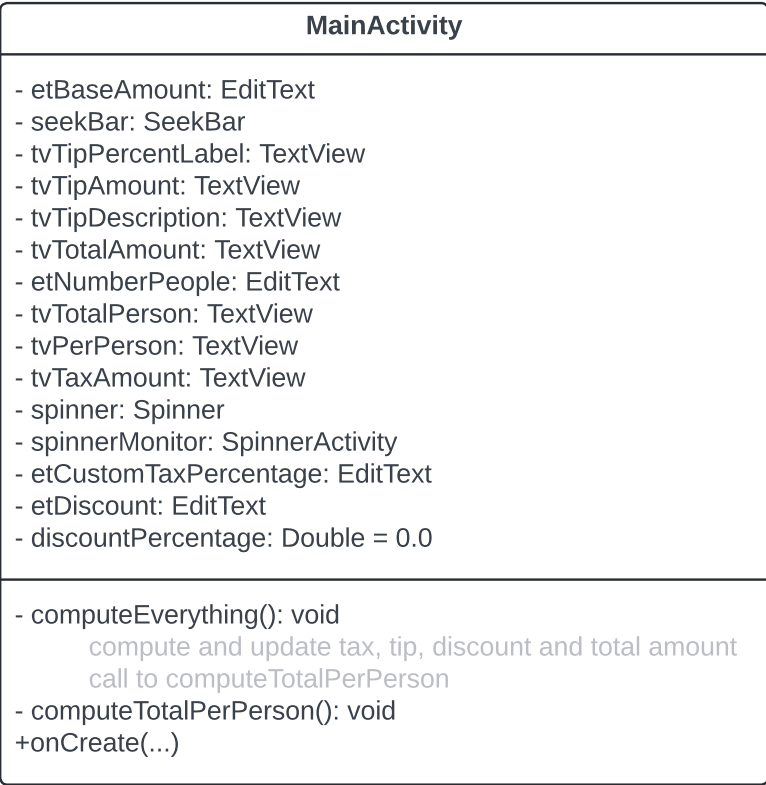  - *call to computeTotalPerPerson*
- computeTotalPerPerson(): void
- +onCreate(...)

### Anonymous classes within MainActivity's onCreate method

#### <<interface>> TextWatcher

- + beforeTextChanged()
- + onTextChanged()
- + afterTextChanged(s: Editable?)

*implements*

#### (base amount)

- + afterTextChanged(s: Editable?)
  - *computeEverything()*

#### (number people splitting)

- + afterTextChanged(s: Editable?)
  - *computeTotalPerPerson()*

#### (custom tax)

- + afterTextChanged(s: Editable?)
  - *spinnerMonitor.setTaxPercentage()*
  - *computeEverything()*

#### (discount)

- + afterTextChanged(s: Editable?)
  - *update discountPercentage*
  - *computeEverything()*

---

## <<interface>> AdapterView.OnItemSelectedListener

- + onItemSelected(...)
- + onNothingSelected(...)

*implements*

## SpinnerActivity

**Constructor arguments:**
- mainActivity: MainActivity,
- taxProvinces: List<Map<String, Double>>,
- etCustomTax: EditText,

**Attributes:**
- taxPercentage: Double = 0.0
- selectedProvince: String = null

---

- + onItemSelected()
  - *retrieve selected province*
  - *enable customTax if N/A*
  - *retrieve tax %*
  - *mainActivity.computeEverything()*
- + setTaxPercentage(customTax: Double)
- + getTaxPercentage(): Double

---

## <<interface>> SeekBar.OnSeekBarChangeListener

- + onProgressChanged(...)
- + onStartTrackingTouch(...)
- + onStopTrackingTouch(...)

*implements*

## TIpSeekBar

**Constructor arguments:**
- tvTipPercentLabel: TextView,
- tvTipDescription: TextView,
- seekBarTip: SeekBar,
- mainActivity: MainActivity,

---

- + onProgressChanged()
  - *update tip percent label and description*
  - *mainActivity.computeEverything()*
- - updateTipDescription(tipPercent: Int)
  - *based on tip % bracket, update adjective and color*
- + initialize()
  - *initialize everything to 15%*