```
<<abstract>>
                  JewelleryItem
                - ItemCode: string |
               | - ItemName: string |
               | - weightGrams: double|
                | - purity: int
                +displayDetails(): void <<pur> <pur virtual>>
                +calculatePrice(): double <<pure virtual>>
  GoldJewellery
                                | DiamondJewellery
                                  -----+
| - goldKarat: int
                               | - numDiamonds: int
                          | - DiamondCarat: double
                                 ----+
| +setGoldKarat()
                                 | +addDiamonds()
| +calculatePrice()
                                | +calculatePrice()
| +displayDetails()
                                | +displayDetails()
   Customer
| - customerID: string
| - name: string
| - purchasedGold:
   JewelleryItem*
| - purchasedDiamond:
   JewelleryItem*
| +purchaseGold()
| +purchaseDiamond()
| +calculateTotalPurchasePrice() |
```