MegaDesk

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Desk

MAX_WIDTH: double
MAX_LENGTH: double
MAX_DEPTH: double
MIN_DEPTH: double
MAX_DRAWERS: 7
+width : double
+depth : double
+drawers : int
+deskTop: material

+Desk(width: double, depth: double, drawers: int, enum: material
+surfaceArea: double

DeskQuote

BASE_PRICE
SQ_INCH_PRICE: 1
COST_PER_DRAWER
+desk : Desk
+rushDays : int
+name : string
+date : date

+quoteTotal : double
+ToString: string;
+costPerDrawer(drawers:int): decimal
+rushOrders(rushDays: int, surfaceArea: int):

```
enum
materialCost {
      Laminate = $100
      Oak = $200
      Pine = $50
      Rosewood = $300
      Veneer = $125
}

costPerDrawer() {
      drawers * COST_PER_DRAWER
}

quoteTotal() {
      if surfaceArea > 1000 {
      BASE_PRICE + (surfaceArea * SQ_INCH_PRICE) + deskTop + costPerDrawer + rushOrders
} else {
      BASE_PRICE + deskTop + costPerDrawer + rushOrders
}
```

This can possiblly be accomplished using a switch statement

```
rushOrders () {
      if 14 days {
            return 0
} else if 7 days {
      if surfaceArea < 1000 return 30
      else if surfaceArea > 1000 && surfaceArea <=2000 return 35
      else return 40
} else if 5 days {
      if surfaceArea < 1000 return 40
      else if surfaceArea > 1000 && surfaceArea <=2000 return 50
      else return 60
} else if 3 days {
      if surfaceArea < 1000 return 60
      else if surfaceArea > 1000 && surfaceArea <=2000 return 70
      else return 80
}
```