
BREAKPOINT CODING EXERCISE

Using Variables to Store and Calculate Values



SYNOPSIS

You have been approached by a customer that would like to open a business selling rare and exotic items. Fortunately, they have no trust in any “off-the-shelf” software products and have approached you with a business opportunity. They will pay you handsomely to build the software for them. The catch is that they are unsure of what they want the application to do right now. They offer to place you on retainer to create portions of their application as they figure out what they want.

PHASE ONE: The Business Registration

Before your customer can start to sell their wares legally, they have to submit their information to the government. They don’t want to be bothered with filling the forms themselves. They request that you create an application that will take their input, format it in the manner needed by the government, and provide the total cost for the start-up fees.

Capture Information:

The application must capture the following pieces of information

- Company Name
- Company Purpose
- Owners Name
- Preferred Start Up Date
- Expected Monthly Sales

Fee Calculation

For every new business registration, the following fees are owed

- Registration fee: \$125.50
- Processing fee: \$90
- DBA Lookup fee: \$110.25

In addition to the standard fees, there are particular circumstances fees

- This particular agency is corrupt and adds a fee called "Servicing" that is equal to 8% of the expected sales for one year.
- Corruption knows no bounds. Every day between the submission date of the form and the preferred start-up date, a 0.05 cost is added under a fee titled "Extended Processing."

Payment Options

Luckily the government offers the option to pay the fees in one lump sum or in monthly payments due by the preferred start-up date.

Display Information

Once you have gathered and calculated all of the information, display the following information to the user.

Fill in the square brackets with the actual data from your application.

Business registration for [Business Name] – Owner [Owner Name]

Submitted on: **[Today's Date (no time)]** – Business start date : [Preferred date]

List of Fees:

[Registration]

[Processing]

[DBA Lookup]

[Servicing]

[Extended Processing]

Total Fee Amount: [Fee Total]

Payment Option: [Fee Total] / [Number of Months] = [Monthly Payment Amount]