

# ITMD:469/569 - WEEK 3 LAB 1

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## Lab Summary

In this lab, you will demonstrate how to utilize structs and methods in Go to represent data and perform calculations in a structured manner.

## Program Specifications

You are required to write a program where you instantiate an 'Employee' struct type and display all the details pertaining to that employee, including their yearly cost to the company. The details to be included are: Name, Age, Position, and Monthly salary. The task of printing the employee details and the computation of yearly salary should be performed in their respective methods, not functions. The yearly salary must not be hard-coded.

## Steps

1. Begin by creating an 'Employee' Struct with the following fields:
  - Name (of type string)
  - Age (of type int)
  - Position (of type string)
  - MonthlySalary (of type float64)
2. In the main function, initialize an instance of the 'Employee' type. Make sure all fields are populated. You can choose any values for the fields.
3. Now, create a method associated with the 'Employee' type named 'calcYearlyCost()'. This method should return the cost as a float64. The purpose of this method is to calculate and return the employee's yearly cost to the company.
4. Next, create another method associated with the 'Employee' type called 'printInfo()'. This method should print out all of the fields of the 'Employee' type instance created in Step 2.
5. After initializing the 'Employee' instance in the main function, call the 'printInfo()' method.
6. Then, use the 'calcYearlyCost()' method (created in Step 3) to retrieve the yearly cost for the employee.
7. Finally, print out this yearly cost as the employee's yearly salary.

A screenshot of a terminal window with a dark blue background and light gray text. The terminal shows a command prompt followed by the command 'go run main.go'. The output displays 'Employee Info' followed by five lines of colored text: 'Name: John Smith' (purple), 'Age: 45' (pink), 'Position: Senior Software Engineer' (purple), 'Monthly Salary: \$10,000' (purple), and 'Yearly Salary: \$120,000' (purple). The terminal window has three colored window control buttons (red, yellow, green) in the top left corner.

```
> go run main.go

Employee Info

Name: John Smith
Age: 45
Position: Senior Software Engineer
Monthly Salary: $10,000
Yearly Salary: $120,000
```

## Submission

Please compress your source code into a ZIP file and upload it to Blackboard. Additionally, attach a separate screenshot demonstrating your code running successfully. week