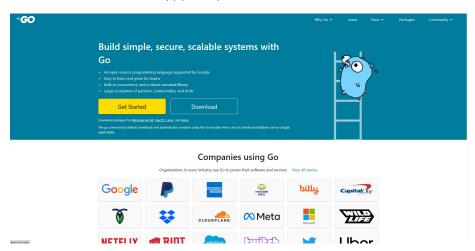
Go Guide Learning

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1 Go Lang Installation

1. Go to the website https://go.dev/



- 2. Press the **Download** button
- 3. This page will show up.



- 4. Choose Microsoft if you have Microsoft or Apple if you have apple.
- 5. A .msi file will be downloaded so once you click on the .msi file this window will pop-up. Wait for gathering all the info and hit \mathbf{next}



6. You will see this image when you are good to GO!



1.1 Hello World in GO

If you got up to here, Congratulations! Now we are going to build our first GO app!

- 1. Open the visual studio code a create a new file called HelloWorld.go
- 2. Just load the package main; after import the fmt package so you can print anything in the terminal and write everything in the main function see the output results.

```
package main

import (
    "fmt"

)

func main() {
    fmt.Print("Hello World!")
}
```

Listing 1: Hello World Example

3. Go to your terminal and just type it in:

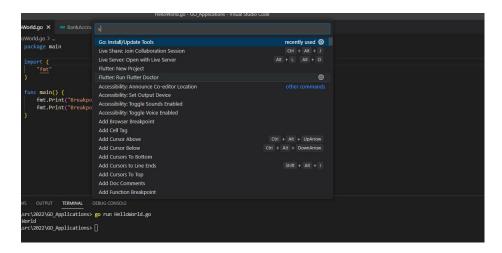
```
go run HelloWorld.go
```

3. Now you should see this in your terminal.

```
PS C:\src\2022\GO_Applications> go run HelloWorld.go
Hello World
```

1.2 Debugging In Go

1. To implemeng Debugging in GO, you can go to VS code and hit ctrl+Shift+P or Cmd+Shift+P(Mac), this bad should show up to you.



- 2. Now you need to choose Go: Install/Update tools if you can't see type it in.
- 3. After, search for "dlv".

4. Now you are good to go when you see this message!

```
Tools environment: GOPATH=C:\Users\lucia\go
Installing 1 tool at C:\Users\lucia\go\bin in module mode.

dlv

Installing github.com/go-delve/delve/cmd/dlv@latest (C:\Users\lucia\go\bin\dlv.exe) SUCCEEDED

All tools successfully installed. You are ready to Go. :)
```

5. Now go to Run and Debug and create a Jason File.

```
Run and Debug

To customize Run and Debug create a launch ison file.

Show all automatic debug configurations.

**HelloWorld.go / ** ballottcont.go / **

1  package main

2  import (
4  "fmt"
5 )

6  func main() {
8  fmt.Print("Breakpoint 1")
9  fmt.Print("Breakpoint 2")
10 }

11
```

6. After that Debugging is all set in GO.

2 Assignment Instructions

The purpose of this assignment is just to introduce the basic concepts of how to manage server side /HTTP response-request using GO.

- Create a HandleFunc to handle the home page. It will show the option to add another person or list all people.
- Create another HandleFunc to add the person.
- Creat a HandleFunc to list all the people.
- HTTP ListenAndServe to setup the port for a server
- Create a struct Person with two fields Name and Age, both strings data type.
- After that, create a function called handleHome having as input parameters a request and response. The role of this method is to open the Jason File and read all the people's info and display it in the index.html file.
- Create a function called handleAdd having as input parameters a request and response.

Create a switch or If to get the if the request is a GET or POST.

If it is a GET redirect to add.html

if it is a POST is going to add a person object

- *First thing you need to retrieve the form's information
- *Open the Jason File and have an slice to retrieve all the people
- *You need to create a new object using the form information.
- *After that append the new person object to your slice.
- *Convert everything back to Jason.

Handle any error if you would like to.

- Create a function handleList having as input parameters a request and response.
- This Function will open the Jason file load all the people into a slice and then send it back to the list.html with the slice passed in.
- In the list.html loop over the people slice and print every person.
- Handle any errors if you would like to.