

Golang Session

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Topic : Logging Go Programs

Logging in Golang

- The standard library package `log` provides a basic infrastructure for log management in GO language that can be used for logging our GO programs. The main purpose of logging is to get a trace of what's happening in the program, where it's happening, and when it's happening. Logs can be providing code tracing, profiling, and analytics. Logging(eyes and ears of a programmer) is a way to find those bugs and learn more about how the program is functioning.

```
import (
    "log"
)
```

Sample Code

```
// Program in GO language to demonstrates how to use base log package.
package main
import (
    "log"
)
func init(){
    log.SetPrefix("LOG: ")
    log.SetFlags(log.Ldate | log.Lmicroseconds | log.Llongfile)
    log.Println("init started")
}
func main() {
    // Println writes to the standard logger.
    log.Println("main started")
    // Fataln is Println() followed by a call to os.Exit(1)
    log.Fataln("fatal message")
    // Panicln is Println() followed by a call to panic()
    log.Panicln("panic message")
}
```

Sample Code

```
// Program in GO language with real world example of logging.
package main
import (
    "log"
    "net/smtp"
)
func init(){
    log.SetPrefix("TRACE: ")
    log.SetFlags(log.Ldate | log.Lmicroseconds | log.Llongfile)
    log.Println("init started")
}
func main() {
    // Connect to the remote SMTP server.
    client, err := smtp.Dial("smtp.smail.com:25")
    if err != nil {
        log.Fatalln(err)
    }
    client.Data()
}
```