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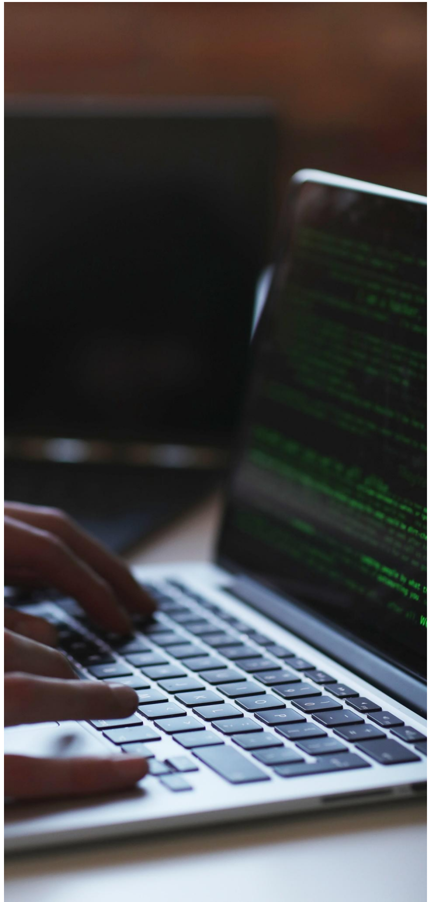
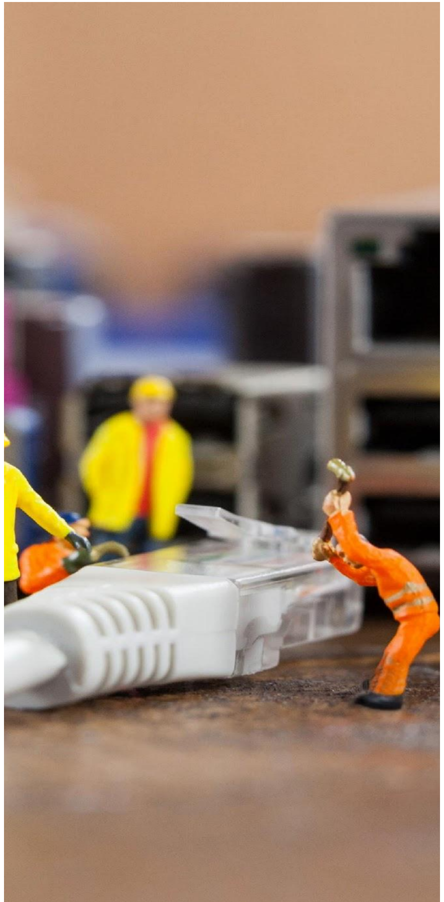
API Implementation and Introduction to GORM

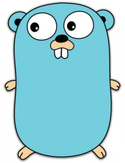
```
9 hptmunix
3 lib
5 mdec
9 rkunix
9 rl2unix
9 rphtunix
9 rptmunix
0 tmp
3 lib
5 man
5 mdec
5 pub
5 spool
2 src
```





What to Learn Today?

API Implementation



1. Net/Http Part 2
2. Private Project Explanation

GORM

1. Introduction to GORM
2. Database Connection and Migration

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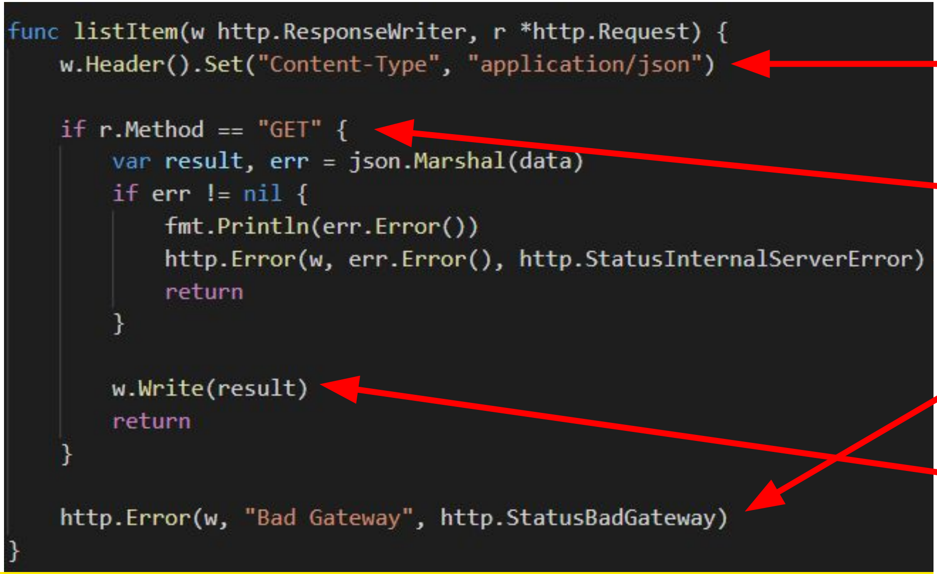
API Implementation with Net/Http



```go
func listItem(w http.ResponseWriter, r *http.Request) {
    w.Header().Set("Content-Type", "application/json")

    if r.Method == "GET" {
        var result, err = json.Marshal(data)
        if err != nil {
            fmt.Println(err.Error())
            http.Error(w, err.Error(), http.StatusInternalServerError)
            return
        }

        w.Write(result)
        return
    }

    http.Error(w, "Bad Gateway", http.StatusBadGateway)
}
```

With http.ResponseWriter you can set header to the response that will be received by the user.

http.Request contain any request from the user, including the request method. You can also parse/decode any JSON request body from user by accessing the r.Body. For example: json.NewDecoder(r.Body).Decode(&response).

http.ResponseWriter let you set HTTP response with the built-in HTTP status error library.

With http.ResponseWriter you can set response that will be received by the user.

> Basically, you can build and API services without a framework.
> Net/http let you handle request from user and give back response to user.

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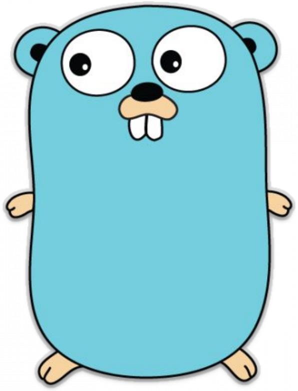
Object-Relational Mapping (ORM)

Object–relational mapping (ORM, O/RM, and O/R mapping tool) in computer science is a programming technique for converting data between incompatible type systems using object-oriented programming languages. This creates, in effect, a "virtual object database" that can be used from within the programming language. There are both free and commercial packages available that perform object–relational mapping, although some programmers opt to construct their own ORM tools.



Reference:
https://en.wikipedia.org/wiki/Object%E2%80%93relational_mapping

Introduction to GORM

GORM Installation

```
go get gorm.io/gorm
```

GORM

You can create database migration with GORM by defining gorm.Model in your struct.

Don’t forget to run the migration by defining the AutoMigrate on the main function as you can see on the right side!

```
type Blog struct {
    gorm.Model
    Title string `sql:"type:text"`
    Slug  string `gorm:"unique_index"`
    Desc  string `sql:"type:text"`
}


func main() {
    db.AutoMigrate(&Blog{})
}
```

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Private Project Explanation