

BALDAGO

```
> tree balda-go
balda-go
├── Dockerfile
├── LICENSE
├── README.md
├── conf
│   ├── conf.go
│   └── config.json
├── db
│   └── db.go
├── dict
│   ├── dict.go
│   └── dictionary.txt
├── docker-compose.yml
├── flags
│   └── flags.go
├── game
│   ├── game.go
│   └── square.go
├── hooks
│   └── pre-commit
├── presentation
├── logger
│   └── logger.go
├── main.go
├── mysql
├── server
│   ├── pool.go
│   ├── server.go
│   ├── telnet.go
│   └── user.go
├── vendor
│   ├── github.com
│   │   ├── go-sql-driver
│   │   │   └── mysql
│   │   ├── jinzhu
│   │   │   └── gorm
│   │   ├── jessevdk
│   │   │   ├── go-flags
│   │   │   └── inflection
│   │   ├── op
│   │   │   └── go-logging
│   └── vendor.json
```

```
// Date: 22 hours ago
Merge branch 'master' of github.com:BaldaGo/game into AsyncGracefullyStoppingServer

* commit d5b1556
Merge: 442f984 b519b56
Author: Боярских Никита Игоревич <N02@yandex.ru>
Date: 22 hours ago

Merge pull request #10 from BaldaGo/database_dev

Database API. + Changed config file. Preparing for Docker db.

* commit b519b56
Merge: b3105b0 faaed53
Author: George <gabolaev98@gmail.com>
Date: 23 hours ago

Fix merge with game package changes.

* commit faaed53
Merge: 3d6b80d 442f984
Author: George Gabolaev <gabolaev98@gmail.com>
Date: 24 hours ago

Merge branch 'master' into database_dev

* commit 442f984
Merge: 5259a61 66f1228
Author: George Gabolaev <gabolaev98@gmail.com>
Date: 26 hours ago

Merge pull request #9 from BaldaGo/Game

Game

* commit 66f1228
Author: AlenaFedotova <nyonk@mail.ru>
Date: 3 days ago

Now it may be built

* commit d3b32f2
Author: AlenaFedotova <nyonk@mail.ru>
Date: 3 days ago
```



SERVER



DOCKER



CONFIGS



LOGGING



git GIT FLOW

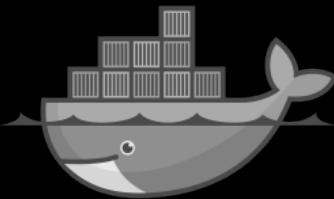


ARCHITECTURE

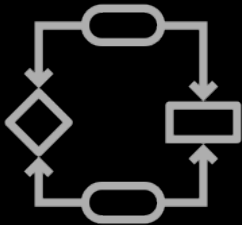


ASYNCHRONOUSNESS

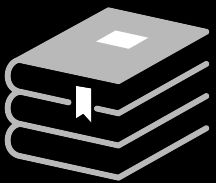
```
> tree balda-go
balda-go
├── Dockerfile
├── LICENSE
├── README.md
├── conf
│   ├── conf.go
│   └── config.json
├── db
│   └── db.go
├── dict
│   ├── dict.go
│   └── dictionary.txt
├── docker-compose.yml
├── flags
│   └── flags.go
├── game
│   ├── game.go
│   └── square.go
├── hooks
│   └── pre-commit
├── presentation
├── logger
│   └── logger.go
├── main.go
├── mysql
├── server
│   ├── pool.go
│   ├── server.go
│   ├── telnet.go
│   └── user.go
├── vendor
│   ├── github.com
│   │   ├── go-sql-driver
│   │   │   └── mysql
│   │   ├── jinzhu
│   │   │   └── gorm
│   │   ├── jessevdk
│   │   │   ├── go-flags
│   │   │   └── inflection
│   │   └── op
│   │       └── go-logging
│   └── vendor.json
```



DOCKER



WORD SEARCH ALGORITHM



RUSSIAN DICTIONARY: 124049 WORDS



MySQL®

DATABASE ARCHITECTURE AND API FOR GAME

```
type User struct {
    gorm.Model

    Name      string `gorm:"type:VARCHAR(100) CHARACTER SET"`
    Wins      uint   `gorm:"default:0"`
    Password  uint32
    IpAddr    string
    Games     uint   `gorm:"default:0"`
    Scores    uint   `gorm:"default:0"`
    WordsCount uint   `gorm:"default:0"`
}

type UserConnection struct {
    gorm.Model

    UserID uint
    IpAddr string
    User   User `gorm:"ForeignKey:UserID"`
}

type RusWord struct {
    gorm.Model

    Word          string `gorm:"type:VARCHAR(100) CHARACTER SET"`
    Popularity    uint   `gorm:"default:0"`
}
```

```
type GameSession struct {
    gorm.Model

    WinnerID uint
    Winner   User `gorm:"ForeignKey:WinnerID"`
}

type UsersLexicon struct {
    gorm.Model

    UserID      uint
    RusWordID   uint
    Count       uint   `gorm:"default:1"`
    User        User   `gorm:"ForeignKey:UserID"`
    RusWord     RusWord `gorm:"ForeignKey:RusWordID"`
}

type UserInGame struct {
    gorm.Model

    UserID      uint
    Score       uint
    GameID      uint
    User        User   `gorm:"ForeignKey:UserID"`
    GameSession GameSession `gorm:"ForeignKey:GameID"`
}
```


> tree balda-go

balda-go

├── Dockerfile

├── LICENSE

├── README.md

├── conf

│ ├── conf.go

│ └── config.json

├── db

│ └── db.go

├── dict

│ ├── dict.go

│ └── dictionary.txt

├── docker-compose.yml

├── flags

│ └── flags.go

├── game

│ ├── game.go

│ └── square.go

├── hooks

│ └── pre-commit

├── presentation

├── logger

│ └── logger.go

├── main.go

├── mysql

├── server

│ ├── pool.go

│ ├── server.go

│ ├── telnet.go

│ └── user.go

└── vendor

├── github.com

│ ├── go-sql-driver

│ │ └── mysql

│ ├── jinzhu

│ │ └── gorm

│ ├── jessevdk

│ │ ├── go-flags

│ │ └── inflection

│ └── op

│ └── go-logging

└── vendor.json

GAME LOGIC

<div><div>×</div><div>./balda-go (balda-go)</div><div>≡</div></div> <div>3[- - - - -] 4[- - - - -]'. Continue: %!b(bool=true) > 16:06:58.615 server.go:253 ►WARN 023 Timeout while reading... > 16:06:59.004 server.go:226 ►DEBU 024 Readed 'help' from client > 16:06:59.006 server.go:230 ►DEBU 025 Generic answers 'Game balda area Shows game area words Shows used words step Shows name of user who's step is now score Shows score of every user in game help Help for you skip Command to skip (if your step is now) put Command to put letter and tell word (if your step is now) stat_topusers Shows top of users. Parameters: mode(score, games, wins), limit stat_topwords Shows top of words. Parameters: limit stat_wordtopusers Shows top of users used this word. Parameters: word, limit stat_user Shows top of users. Parameters: username, limit'. Continue: %!b(bool=true) > 16:07:03.589 server.go:226 ►DEBU 026 Readed 'help' from client > 16:07:03.590 server.go:230 ►DEBU 027 Generic answers 'Game balda area Shows game area words Shows used words step Shows name of user who's step is now score Shows score of every user in game help Help for you skip Command to skip (if your step is now) put Command to put letter and tell word (if your step is now) stat_topusers Shows top of users. Parameters: mode(score, games, wins), limit stat_topwords Shows top of words. Parameters: limit stat_wordtopusers Shows top of users used this word. Parameters: word, limit stat_user Shows top of users. Parameters: username, limit'. Continue: %!b(bool=true) > 16:07:06.937 server.go:226 ►DEBU 028 Readed 'area' from client > 16:07:06.937 square.go:133 ►DEBU 029 Gaming area printed > 16:07:06.937 server.go:230 ►DEBU 02a Generic answers ' 0 1 2 3 4 0[- - - - -] 1[- - - - -] 2[n e n e л] 3[- - - - -] 4[- - - - -]'. Continue: %!b(bool=true) > 16:07:09.666 server.go:253 ►WARN 02b Timeout while reading... █</div>	<div><div>×</div><div>telnet (telnet)</div><div>≡</div></div> <div>de(score, games, wins), limit stat_topwords Shows top of words. Parameters: limit stat_wordtopusers Shows top of users used this word. Parameters: word, limit stat_user Shows top of users. Parameters: username, limit petooh> 0 1 2 3 4 0[- - - - -] 1[- - - - -] 2[n e n e л] 3[- - - - -] 4[- - - - -] 2> 2 doesn't catch his move █</div>	<div><div>×</div><div>telnet (telnet)</div><div>≡</div></div> <div>stat_topusers Shows top of users. Parameters: mode(score, games, wins), limit stat_topwords Shows top of words. Parameters: limit stat_wordtopusers Shows top of users used this word. Parameters: word, limit stat_user Shows top of users. Parameters: username, limit petooh> 0 1 2 3 4 0[- - - - -] 1[- - - - -] 2[n e n e л] 3[- - - - -] 4[- - - - -] 2> 2 doesn't catch his move █</div>	<div><div>×</div><div>telnet (telnet)</div><div>≡</div></div> <div>de(score, games, wins), limit stat_topwords Shows top of words. Parameters: limit stat_wordtopusers Shows top of users used this word. Parameters: word, limit stat_user Shows top of users. Parameters: username, limit petooh> 0 1 2 3 4 0[- - - - -] 1[- - - - -] 2[n e n e л] 3[- - - - -] 4[- - - - -] 2> 2 doesn't catch his move █</div>	
	<div><div>×</div><div>telnet (telnet)</div><div>≡</div></div> <div>area Shows game area words Shows used words step Shows name of user who's step is now score Shows score of every user in game help Help for you skip Command to skip (if your step is now) put Command to put letter and tell word (if your step is now) stat_topusers Shows top of users. Parameters: mode(score, games, wins), limit stat_topwords Shows top of words. Parameters: limit stat_wordtopusers Shows top of users used this word. Parameters: word, limit stat_user Shows top of users. Parameters: username, limit area petooh> 0 1 2 3 4 0[- - - - -] 1[- - - - -] 2[n e n e л] 3[- - - - -] 4[- - - - -] 2> 2 doesn't catch his move █</div>			

Nikita Boyarskih

github.com/Nikita-Boyarskikh

George Gabolaev

github.com/gabolaev

Alëna Fedotova

github.com/AlenaFedotova