Настройка среды разработки Java. Лабораторная работа №1

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1 Код решения

Файл main.go

```go
package main

import (
        "encoding/xml"
        "fmt"
        "io/ioutil"
        "log"
        "net/http"
        "strings"
)

type RssFeed struct {
        XMLName xml.Name `xml:"rss"`
        Channel Channel  `xml:"channel"`
}

type Channel struct {
        Title       string `xml:"title"`
        Link        string `xml:"link"`
        Description string `xml:"description"`
        PubDate     string `xml:"pubDate"`
```

```go
        LastBuildDate string `xml:"lastBuildDate"`
        Items         []Item `xml:"item"`
}

type Item struct {
        Title       string `xml:"title"`
        Link        string `xml:"link"`
        Description string `xml:"description"`
        PubDate     string `xml:"pubDate"`
        Guid        string `xml:"guid"`
}

func rssRouterHandler(w http.ResponseWriter, r *http.Request) {
        resp, err := http.Get("http://www.rssboard.org/files/sample-rss-2.xml")
        if err != nil {
                http.Error(w, err.Error(), http.StatusInternalServerError)
                return
        }
        defer resp.Body.Close()

        body, err := ioutil.ReadAll(resp.Body)
        if err != nil {
                http.Error(w, err.Error(), http.StatusInternalServerError)
                return
        }

        var feed RssFeed
        err = xml.Unmarshal(body, &feed)
        if err != nil {
                http.Error(w, err.Error(), http.StatusInternalServerError)
                return
        }

        html := "<h1>RSS Feed</h1>"
        html += "<h2>" + feed.Channel.Title + "</h2>"
        html += "<p>" + feed.Channel.Description + "</p>"
        html += "<p><a href=\"/\">Back to Home</a></p>"
```

```go
        html += "<ul>"
        for _, item := range feed.Channel.Items {
                html += "<li><a href=\"" + item.Link + "\">" + item.Title + "</a><
                html += "<p>" + item.Description + "</p>"
        }
        html += "</ul>"

        w.Write([]byte(html))
}

func HomeRouterHandler(w http.ResponseWriter, r *http.Request) {
        r.ParseForm()
        fmt.Println(r.Form)
        fmt.Println("scheme", r.URL.Scheme)
        fmt.Println(r.Form["url_long"])
        for k, v := range r.Form {
                fmt.Println("key:", k)
                fmt.Println("val:", strings.Join(v, ""))
        }
        fmt.Fprintf(w, `
                <h1>Welcome to the Home Page!</h1>
                <ul>
                        <li><a href="/link1">Page 1</a></li>
                        <li><a href="/link2">Page 2</a></li>
                        <li><a href="/link3">Page 3</a></li>
                        <li><a href="/rss">RSS Feed</a></li>
                </ul>
        `)
}

func PageRouterHandler(w http.ResponseWriter, r *http.Request) {
        r.ParseForm()
        fmt.Println(r.Form)
        fmt.Println("scheme", r.URL.Scheme)
        fmt.Println(r.Form["url_long"])
        for k, v := range r.Form {
                fmt.Println("key:", k)
                fmt.Println("val:", strings.Join(v, ""))
```

```go
        }

        switch r.URL.Path {
        case "/link1":
                fmt.Fprintf(w, `
                        <h1>Page 1</h1>
                        <p>This is Page 1.</p>
                        <p> Voluptate voluptate qui labore aliqua cillum cillum eu
                        <p><a href="/">Back to Home</a></p>
                `)
        case "/link2":
                fmt.Fprintf(w, `
                        <h1>Page 2</h1>
                        <p>This is Page 2.</p>
                        <p>))))))</p>
                        <p><a href="/">Back to Home</a></p>
                `)
        case "/link3":
                fmt.Fprintf(w, `
                        <h1>Page 3</h1>
                        <p>This is Page 3.</p>
                        <p> Id dolore non in aliquip nisi ea ullamco et magna mini
                        <p><a href="/">Back to Home</a></p>
                `)
        default:
                fmt.Fprintf(w, "Not found")
        }
}

func main() {
        http.HandleFunc("/", HomeRouterHandler)
        http.HandleFunc("/link1", PageRouterHandler)
        http.HandleFunc("/link2", PageRouterHandler)
        http.HandleFunc("/link3", PageRouterHandler)
        http.HandleFunc("/rss", rssRouterHandler)

        err := http.ListenAndServe(":9003", nil)
        if err != nil {
```

```
                log.Fatal("ListenAndServe: ", err)
        }
}
```

2   Пример работы программы

Welcome to the Home Page!

- [Page 1](#)
- [Page 2](#)
- [Page 3](#)
- [RSS Feed](#)

Page 1

This is Page 1.

Voluptate voluptate qui labore aliqua cillum cillum eu ipsum dolor ea. Eu magna eiusmod fugiat ut ex elit occaecat irure amet excepteur consequat culpa esse. Proident magna elit et aliquip qui exercitation sit adipisicing ea. Magna quis irure elit nisi consequat cupidatat ea. Non laboris fugiat consectetur proident incididunt. Velit adipisicing duis mollit sit est minim elit nulla cupidatat nulla eu Lorem reprehenderit.

[Back to Home](#)

RSS Feed

NASA Space Station News

A RSS news feed containing the latest NASA press releases on the International Space Station.

[Back to Home](#)

- [Louisiana Students to Hear from NASA Astronauts Aboard Space Station](#)

  As part of the state's first Earth-to-space call, students from Louisiana will have an opportunity soon to hear from NASA astronauts aboard the International Space Station.

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  NASA has selected KBR Wyle Services, LLC, of Fulton, Maryland, to provide mission and flight crew operations support for the International Space Station and future human space exploration.

- [NASA Expands Options for Spacewalking, Moonwalking Suits](#)

  NASA has awarded Axiom Space and Collins Aerospace task orders under existing contracts to advance spacewalking capabilities in low Earth orbit, as well as moonwalking services for Artemis missions.

- [NASA to Provide Coverage as Dragon Departs Station](#)

  NASA is set to receive scientific research samples and hardware as a SpaceX Dragon cargo resupply spacecraft departs the International Space Station on Thursday, June 29.

- [NASA Plans Coverage of Roscosmos Spacewalk Outside Space Station](#)

  Compared to earlier spacecraft, the International Space Station has many luxuries, but laundry facilities are not one of them. Instead, astronauts have other options.