

Mõned asjad, mida iga IT-inimene peab teadma.

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2015-10-28

IT maailmas on ainult üks keel, mida igaüks peab teadma.

Inglise keel!

That's why the rest of this presentation will be in
English.

Plan

- Code written by a student vs code written by a programmer
- Unicode
- Software licenses
- Social networks
- Programming languages
- Operating systems
- How not to escape strings passed to databases
- Text editors
- Cookies
- How to make hackers grumpy
- English

Plan

10. Code written by a student vs code written by a programmer
9. Unicode
8. Software licenses
7. Social networks
6. Programming languages
5. Operating systems
4. How not to escape strings passed to databases
3. Text editors
2. Cookies
1. How to make hackers grumpy
0. English

XSS

“Pffft. Not gonna to happen with me!”

“I double-checked that all user-submitted data is filtered!”

Fair enough! Let's see how it works in real life...

eKool

Задания

Показать: [Все](#) [Сделать](#) [Сделано](#)

Новое задание



К сегодня

К следующему дню(дням)

В будущем

Предметы

Все задания



29.01.2012 03:18

Домашние задания??? Не, не слышал.

OK

Напоминание

(Редактировать)

-Я



Geograafia Aleksander Haak 26.01.2012 12:30
87-91

30.01.2012

(Редактировать)



Muusika Merike Raudkivi 25.01.2012 03:32

Bach ja Händel - seminari kava

[Открыть файл](#)

I Johann Sebastian Bach

1. Aaria Orkestrisüidist nr.3 D-duur

<http://www.youtube.com/watch?v=NIT8yeEYbMs>

2. Toccata ja fuuga d-moll BWV565

CV Keskus



Print
| Send to Friend
Europass CV format
Download as PDF

CV number: 765608

<http://www.cvkeskus.ee/cv/765608>



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Programmer

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“OK-OK!”

Maybe there is a better way?

Most XSS attacks target theft of session cookies.

「 **HttpOnly** 」 flag – no cookies for you!

(by the way, 「 **secure** 」 flag is also very helpful)

Still a broad range of attacks are possible.

Well, let's disable inline javascript!

「 CSP 」 (Content Security Policy)

No inline javascript = no XSS, no problems!

HA-HA!

Well, not completely.
Browser support is not that great.

Security problems aside...

Text editors

「 Vim 」 ! 「 Emacs 」 !

Uh, so Vim or Emacs?

Use both – 「 Spacemacs 」 !

Back to our boring security vulnerabilities...

SQL Injection

~~mysqli_real_escape_string~~

Use 「PDO」 in PHP

Search for 「 Prepared Statements 」 or
「 Parameterized Queries 」 to find how to do that
in other languages.

Social networks??

GitHub, BitBucket, GitLab...

If you have no GitHub account...

... then you have great potential to become a professional burger flipper!

“「Free software」?”
“And what are these licenses?”

Search for 「choose a software license」

A couple of words about
programming languages...

New project!
Which language would you choose?

Programming language is a tool.

You should choose appropriate tool for each task.

Your previous experience does not necessarily play any role in that decision.

Same goes for operating systems.

Windows Server? Uhh... Try 「GNU/Linux」.

⇒ Unicode ♡

“Ä” vs “Ä”

What's the length of these strings?

Come on! It's a no-brainer! ONE!

If only your programming language was that
smart...

“Ä” vs “Ä”

	Ä	Ä
Bytes	2	3
Code points	1	2
Glyphs	1	1

「 Combining Characters 」 !

Also, you can read about 「 Unicode Normalization 」 .

Finally, how to identify a student by his code?

A

```
package baz;

public class Baz {

    public static void main(String[] args) {
        if (Math.random() < 0.5) {
            System.out.println("Foo");
        } else {
            System.out.println("Bar");
        }
    }
}
```

B

```
package baz;

public class Baz {

    public static void main(String[] args) {
        if(Math.random() < 0.5)
        {
            System.out.println("Foo");
        } else {
            System.out.println("Bar");
        }
    }
}
```

OK, he fixed it!

C

```
package baz;

public class Baz {

    public static void main(String[] args) {
        if (Math.random() < 0.5) {
            System.out.println("Foo");
        } else {
            System.out.println("Bar");
        }
    }
}
```

D

```
package baz;

public class Baz {

    public static void main(String[] args) {
        if (Math.random() < 0.5) {
            System.out.println("Foo");
        } else {
            System.out.println("Bar");
        }
    }
}
```


No difference?

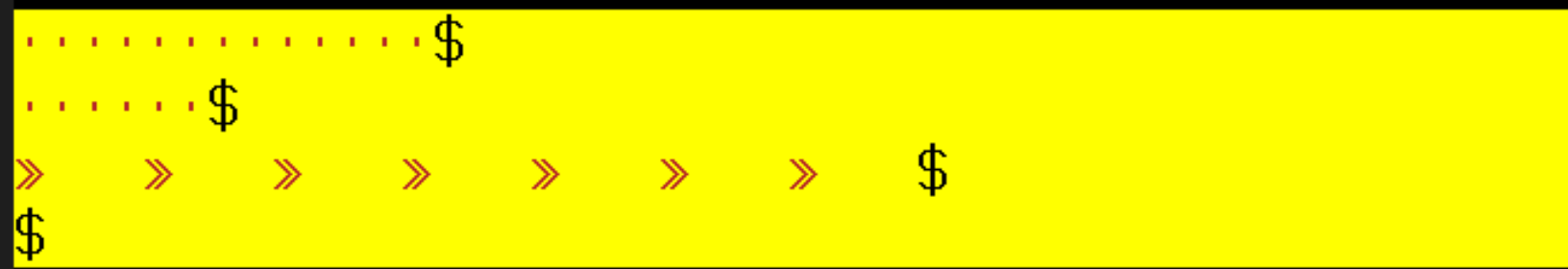
Maybe this is going to help...

```
package baz;

public class Baz {
    public static void main(String[] args) {
        if (Math.random() < 0.5) {
            System.out.println("Foo");
        } else {
            System.out.println("Bar");
        }
    }
}
```

No-o-o!

```
package baz;  
  
public class Baz {  
    .....  
    >> public static void main(String[] args) {  
    >> >> if (Math.random() < 0.5) { .....  
    >> >> >> System.out.println("Foo"); .....>>  
    >> .....} else {>> >> >>  
    >> >> >> System.out.println("Bar");  
    .....}  
    >> }  
    .....  
}
```



See 「PEP8」 (Python)

Search for 「Code Conventions」 in other languages.

Enough for now!

Thank you!

