

# 12 temeljnih značajki Scriptrunner-a

## 1. Udaljeni datotečni sustav (remote file system)

- Osobni (My\_Files) folder/datoteke
- Objavljene (shared, published) datoteke
- Stablo odgovara *stvarnom* Linux stablu servera
- Svaka datoteka ima svoj jedinstveni identifik. broj (ID)



The screenshot shows the 'Shared Files' interface. The left sidebar includes links for 'Search', 'Messenger', 'Settings', and 'Admin'. The main area displays a tree view of shared folders and files.

- desni gumb na folder



The screenshot shows the 'New | Rename | Share' interface. A 'New folder' dialog is open, prompting for a folder name and type. The 'Folder type' dropdown is set to 'file folder'.

The screenshot shows the 'New folder' dialog with a list of folder types:

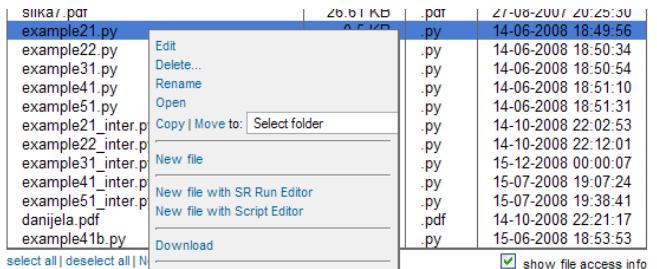
- file folder
- Develop docs
- console
- regulator
- XHTML & JavaScript Task
- Task
- Exercise
- Glagolitics
- Player
- Console2 - Python
- SAGE
- Web exam
- Survey
- HomeWork
- Report
- Tabulator

The screenshot shows the 'Rename folder' dialog with the folder name 'mathos\_radno' entered.

- New – folder ili plug-in
- Rename – mijenja ime
- Share - objavljuje

## 2. Osnovne operacije s datotekama (lokalno računalo ↔ server)

- desni klik na datoteku – file info
- edit, delete, rename, open, ...
- arhiviranje (tar.gz/zip)
- download



File name	Size	Type	Date
engleska_verzija.tex	14.44 KB	.tex	15-07-2008 19:37:30
greda.pdf	15.6 KB	.pdf	13-12-2008 12:29:24
luk.pdf	18.28 KB	.pdf	13-12-2008 12:29:36
opruga.pdf	16.77 KB	.pdf	13-12-2008 12:30:00
slika1.pdf	24 KB	.pdf	27-08-2007 20:26:16
slika2.pdf	25.58 KB	.pdf	27-08-2007 20:26:52
slika3.pdf	26 KB	.pdf	27-08-2007 20:27:10
slika4.pdf	25.95 KB	.pdf	27-08-2007 20:27:38
slika5.pdf	52.88 KB	.pdf	27-08-2007 20:28:46
slika6.pdf	24.52 KB	.pdf	27-08-2007 20:29:18
slika7.pdf	26.61 KB	.pdf	27-08-2007 20:25:30
example21.py	0.5 KB	.py	14-06-2008 18:49:56
example22.py	0.82 KB	.py	14-06-2008 18:50:34
example31.py	1.27 KB	.py	14-06-2008 18:50:54
example41.py	1.73 KB	.py	14-06-2008 18:51:10
example51.py	2.38 KB	.py	14-06-2008 18:51:31
example2	0.6 KB	.py	14-10-2008 22:02:53
example2	0.86 KB	.py	14-10-2008 22:12:01
example3	1.35 KB	.py	15-12-2008 00:00:07
example4	1.82 KB	.py	15-07-2008 19:07:24
example5	2.6 KB	.py	15-07-2008 19:38:41
danijela.pdf	0.17 KB	.pdf	14-10-2008 22:21:17
example41b.py	1.75 KB	.py	15-06-2008 18:53:53

select all | deselect all | File ID (example21.py) | 7605

File access info  
select all | deselect all | show file access info | show upload form

- selektiranje lijevim klikom na datoteku ili 'select all' izborom
- Arhiviranje (ZIP/TAR) na serveru

The page at [http://scriptrunner.fsb...](http://scriptrunner.fsb.hr/)

Enter archive file name:

OK Cancel

engleska_verzija.tex	14.44 KB	.tex	15-07-2008 19:37:30
greda.pdf	15.6 KB	.pdf	13-12-2008 12:29:24
luk.pdf	18.28 KB	.pdf	13-12-2008 12:29:36
opruga.pdf	16.77 KB	.pdf	13-12-2008 12:30:00
slika1.pdf	24 KB	.pdf	27-08-2007 20:26:16
slika2.pdf	25.58 KB	.pdf	27-08-2007 20:26:52
slika3.pdf	26 KB	.pdf	27-08-2007 20:27:10
slika4.pdf	25.95 KB	.pdf	27-08-2007 20:27:38
slika5.pdf	52.88 KB	.pdf	27-08-2007 20:28:46
slika6.pdf	24.52 KB	.pdf	27-08-2007 20:29:18
slika7.pdf	26.61 KB	.pdf	27-08-2007 20:25:30
example21.py	0.5 KB	.py	14-06-2008 18:49:56
example22.py	0.82 KB	.py	14-06-2008 18:50:34
example31.py	1.27 KB	.py	14-06-2008 18:50:54
example41.py	1.73 KB	.py	14-06-2008 18:51:10
example51.py	2.38 KB	.py	14-06-2008 18:51:31
example2	0.6 KB	.py	14-10-2008 22:02:53
example2	0.86 KB	.py	14-10-2008 22:12:01
example3	1.35 KB	.py	15-12-2008 00:00:07
example4	1.82 KB	.py	15-07-2008 19:07:24
example5	2.6 KB	.py	15-07-2008 19:38:41
danijela.pdf	0.17 KB	.pdf	14-10-2008 22:21:17
example41b.py	1.75 KB	.py	15-06-2008 18:53:53

select all | deselect all | New file | show file access info | show upload form

- prebacivanje, npr. netom ZIP-ane datoteke, sa servera na lokalno računalo (**download**)

example51_inter.py	2.6 KB	.py	15-07-2008 19:38:41
danijela.pdf	180.17 KB	.pdf	14-10-2008 22:21:17
example41b.py	1.75 KB	.py	15-06-2008 18:53:53
SVE.zip	324.82 KB	.zip	05-09-2008 21:40:50

select all | deselect all | New file | show file access info | show upload form

- Prebacivanje s lokalnog računala na server (**upload**), bez FTP programa.

Opening SVE.zip

You have chosen to open

**SVE.zip**  
which is a: Mathematica Package  
from: <http://scriptrunner.fsb.hr>

What should Firefox do with this file?

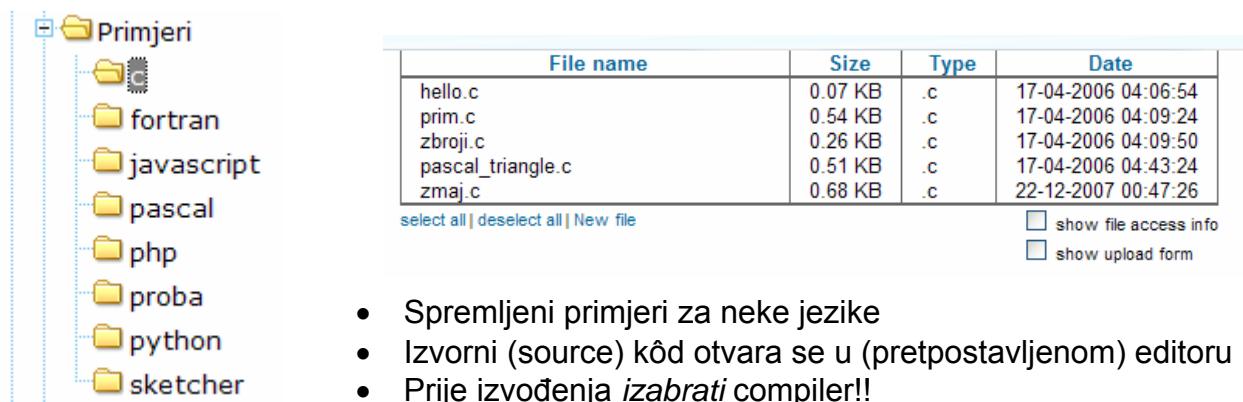
Open with WinRAR.ZIP (default)  
 Save to Disk  
 Do this automatically for files like this from now on.

OK Cancel

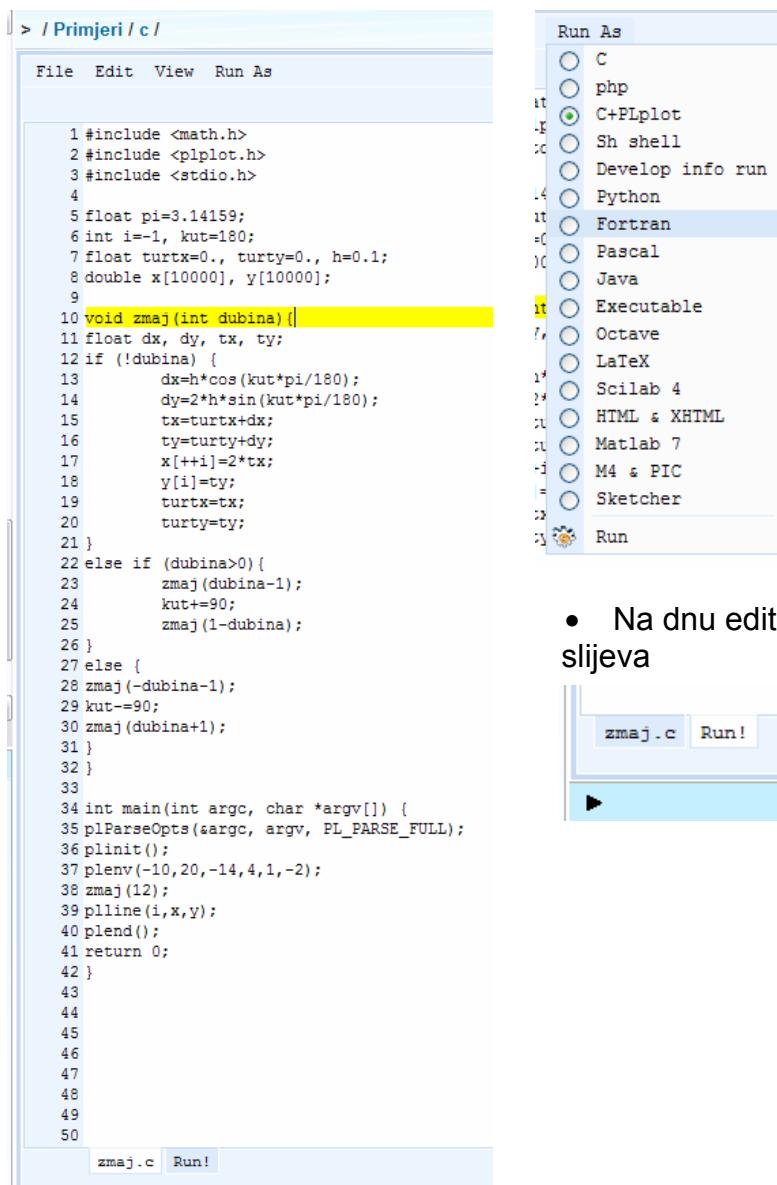
Files for upload  
1. C:\Benchmark2.pdf   
2.    
3.    
Upload files | add file  show upload form

File access info  
File ID (SVE.zip):  
7837  
Web path (web address):  
[http://scriptrunner.fsb.hr/scriptrunner3/user\\_files/mario/My/](http://scriptrunner.fsb.hr/scriptrunner3/user_files/mario/My/)  
To run file use this link:  
[http://scriptrunner.fsb.hr/scriptrunner3/user\\_files/mario/My/SVE.zip](http://scriptrunner.fsb.hr/scriptrunner3/user_files/mario/My/SVE.zip)  
To edit this file use the link:  
[http://scriptrunner.fsb.hr/scriptrunner3/user\\_files/mario/My/SVE.zip](http://scriptrunner.fsb.hr/scriptrunner3/user_files/mario/My/SVE.zip)

### 3. Izvođenje programa pisanih u programskom (C++/Java/Python) ili matematičkom (Octave/Matlab/.../R/SAGE) jeziku na daljinu



- Spremljeni primjeri za neke jezike
- Izvorni (source) kôd otvara se u (prepostavljenom) editoru
- Prije izvođenja izabratи compiler!!

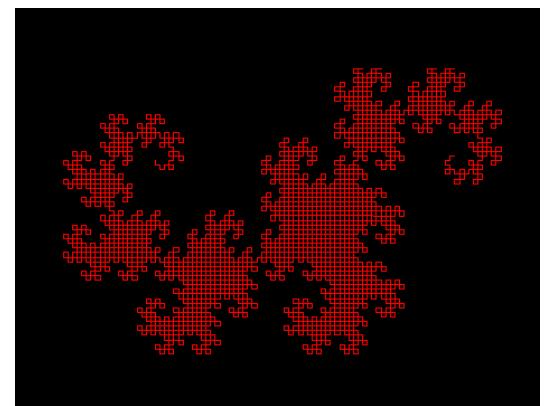


```

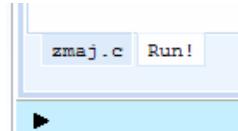
1 #include <math.h>
2 #include <plplot.h>
3 #include <stdio.h>
4
5 float pi=3.14159;
6 int i=-1, kut=180;
7 float turtx=0., turty=0., h=0.1;
8 double x[10000], y[10000];
9
10 void zmaj(int dubina){
11 float dx, dy, tx, ty;
12 if (!dubina) {
13     dx=h*cos(kut*pi/180);
14     dy=2*h*sin(kut*pi/180);
15     tx=turtx+dx;
16     ty=turty+dy;
17     x[++i]=2*tx;
18     y[i]=ty;
19     turtx=tx;
20     turty=ty;
21 }
22 else if (dubina>0){
23     zmaj(dubina-1);
24     kut+=90;
25     zmaj(1-dubina);
26 }
27 else {
28     zmaj(-dubina-1);
29     kut-=90;
30     zmaj(dubina+1);
31 }
32 }
33
34 int main(int argc, char *argv[]) {
35 plParseOpts(&argc, argv, PL_PARSE_FULL);
36 plinit();
37 plenv(-10,20,-14,4,1,-2);
38 zmaj(12);
39 plline(i,x,y);
40 plend();
41 return 0;
42 }
43
44
45
46
47
48
49
50

```

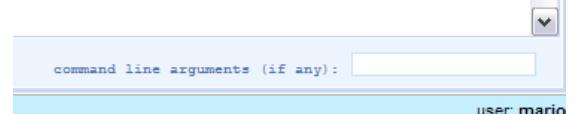
Rezultat: strašan zmaj :-)



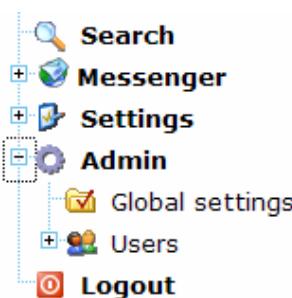
- Na dnu editorskog okvira: slijeva



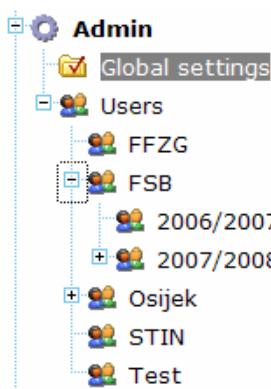
zdesna



## 4. Hiperarhijski sustav korisnika (admin, group admin, user, public)



- Grupe korisnika



- Dopuštenja plug-inova

Permissions for all users in this group

Show permissions for users in this group

Run:

- C+PLplot (id: 52)
- C (id: 50)
- Executable (id: 123)
- Fortran (id: 120)
- Java (id: 122)
- Pascal (id: 121)
- php (id: 51)
- Python (id: 115)
- Sh shell (id: 53)
- LaTeX (id: 1010)
- M4 & PIC (id: 1600)

SR Develop:

- Documentation for SR developers (id: 100)
- Develop info run (id: 80)

File manager:

Archives:

- Archive extractor (id: 112)
- Tar.gz archiver (id: 110)
- Zip archiver (id: 111)

Other:

- HTML & XHTML (id: 1020)
- Octave (id: 125)
- Search (id: 124)

	OS600	Ivana	Šovagović	15-04-2008 17:54:46	user
<input type="checkbox"/>	OS592	Marina	Španić	14-04-2008 19:23:19	user
<input type="checkbox"/>	OS328	Renata	Šporčić	15-04-2008 08:08:19	user
<input checked="" type="checkbox"/>	OS364	Andreja	Šratel		user
<input type="checkbox"/>	OS554	Maja	Štajduhar	14-04-2008 20:01:30	user

- select all

Change passwords | delete | Move to: 2006/2007

Installed plugins

- C+PLplot (id: 52)
- C (id: 50)
- Documentation for SR developers (id: 100)
- Develop info run (id: 80)
- Executable (id: 123)
- Archive extractor (id: 112)
- Fortran (id: 120)
- HTML & XHTML (id: 1020)
- Java (id: 122)
- Octave (id: 125)
- Pascal (id: 121)
- php (id: 51)
- Python (id: 115)
- SR Run Editor (id: 20)
- Script Editor (id: 1000)
- Search (id: 124)
- Sh shell (id: 53)
- Enable advanced share permissions (id: 4)
- SR file manager (id: 1)
- My group files folder (id: 2)
- Enable sharing (id: 3)
- Tar.gz archiver (id: 110)
- Zip archiver (id: 111)
- Report (id: 3005)
- Survey (id: 3002)
- Tabulator (id: 3006)
- Web exams (id: 3001)
- Scriptrunner Console (id: 1050)
- Scriptrunner Console 2 (id: 2100)
- Exercise (id: 1130)
- Scriptrunner player (id: 1650)
- Glagolitics (id: 1500)
- HomeWork2 (id: 3004)
- LaTeX (id: 1010)
- M4 & PIC (id: 1600)
- Matlab 7 (id: 1030)

Temporary files

Delete temporary files from temp dir

Register plugins

Register plugins

- Upis i administracija korisnika

Add new user to this group

Show permissions for users in this group

Username:

Password:

First name:

Last name:

E-mail:

Mobile phone:

JMBAG:

JMBG:

Comment:

user

user / group admin

admin

public

Add user

Add and email

Users in this group

	Username	First name	Last name	Password	Last login	User level
<input type="checkbox"/>	OS552	Ardiana	Bajčinovci		16-04-2008 16:59:14	user
<input type="checkbox"/>	OS529	Maja	Bandalo		15-04-2008 12:36:57	user
<input type="checkbox"/>	OS612	Tanja	Benčić		11-04-2008 10:37:47	user
<input checked="" type="checkbox"/>	OS547	Dragana	Bobičić		16-04-2008 11:54:09	user
<input type="checkbox"/>	OS606	Ivan	Bodiš		16-04-2008 09:39:51	user
<input type="checkbox"/>	OS546	Diana	Bošnjak		13-04-2008 19:18:23	user
<input type="checkbox"/>	OS579	Brankica	Bošnjak		16-04-2008 11:53:43	user
<input type="checkbox"/>	OS326	Berislav	Brajković		15-04-2008 11:09:07	user
<input type="checkbox"/>	OS485	Jasmina	Brkić		14-04-2008 17:28:29	user
<input type="checkbox"/>	OS680	Marija	Brnatović		18-03-2008 12:06:17	user
<input type="checkbox"/>	OS539	Ivana	Bubić		16-04-2008 11:02:22	user
<input type="checkbox"/>	OS489	Sanja	Đelatović		14-04-2008 11:49:41	user
<input type="checkbox"/>	OS425	Danijel	Drmić		16-04-2008 04:16:24	user

Add new users from csv file

Browse... Add users

Generate random passwords for new users

Generate usernames for new users

Send login data to each new user by E-mail

All new users are userlevel 'user' (3)

Show report

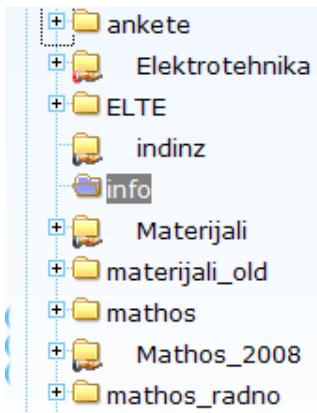
File format:  
Username,Password,First name,Last name,E-mail,Mobile phone,JMBAG,Comment,User type  
(User type: 5=admin, 4=group\_admin, 3=user)

- XCL/CSV unos i obradba većih skupina korisnika

## 5. Modularna nadogradnja jezgre (plug-ins)



The screenshot shows the 'My\_Files / info /' section of the Scriptrunner interface. Below it is a navigation bar with links: SR funkcije, SR polja, Kako napisati plugin, sr\_plugin\_config.php, Statusna linija, run.php, Sigurnost, Instalacija, Changelog, and Bugs. A note below the navigation bar states: 'Ovi podaci tj. kratka dokumentacija je namijenjena developerima dodataka (plugin) za Scriptrunner.'



- Modul **info** – kako načiniti vlastiti plugin (u PHPu), uskoro i u Pythonu
- Plug-ins se umeću 'u radu' – nema potrebe za gašenjem stroja
- Jednostavno dodavanje novog plug-in-a bilo kojem korisniku
- Više od 15000 linija kôda

- 100-tinjak glavih funkcija

SR funkcije | SR polja | Kako napisati plugin | sr\_plugin\_config.php | Statusna linija | run.php | Sigurnost | Instalacija

Ovo je popis funkcija iz functions.php. Bojom su označene one koje su važnije za pisanje plugin-a. Ispod imena funkcije je opis funkcije.

```
sr_set_status_line($text,$is_OK)
$sr_GLOBAL_status_line_text_arr = array();
$sr_GLOBAL_status_line_isok_arr = array();

// funkcija koja puni globalne variable pomocu kojih se ispisuje text u statusnoj liniji
// ukoliko se želi nešto ispisati u statusnoj liniji iz koda koji se include
// potrebno je samo pozvati:
// sr_set_status_line($text,'ok') ili
// sr_set_status_line($text,'notok')
// a ukoliko se želi ispisati poruka bez da se statusna linija refresh-a, ur
// ispisuje poruka i poziva ova funkcija obично na kraju bi trebalo include-
// napr: include ("$sr_config['sr_base_dir']."/status_line_message.php");

sr_create_folder($parent_id,$new_folder_name,$new_folder_type)

// kreira folder
// vraca:
// 0 - greska, user nema dozvolu za kreiranje ili možda folder s tim imenom
// tada treba biti postavljen i $sr_FOLDER_OWNER_USERNAME

sr_create_folder_database($new_folder_name,$parent_id,$owner,$new_folder_type,$resources_folder
    // ovo je funkcija (pomočna) koja kreira folder samo u bazi

sr_rename_folder($folder_id,$folder_new_name)
    // preimenuje folder

sr_delete_folder_database($folder_id,$include_current_folder,$arr_ids_not_delete)
    // briše rekursivno foldere u bazi (pomočna funkcija za sr_delete_folder())
```

- *Sigurnost sustava* – najteža i najbolja stvar

Sr\_wrap program se nalazi u defaultnom cgi-bin (Debian: /

- pokretanje php-a kao CGI (pod uid-om 7000 + sr\_user\_id)
- pokretanje naredbi i programa kroz shell (pod uid-or)
- postavljanje vlasništva (www-data:7000 + sr\_user\_id)
- postavljanje vlasništva (www-data:7000 + sr\_user\_id)
- otvaranje nove grupe procesa
- čišćenje i postavljanje environment vrijednosti
- provjera korisnika koji pokreće program (mora biti w)
- logiranje pgid-a procesa koje pokreće, Scriptrunner
- logiranje grešaka u syslog
- mijenjanje prioriteta procesa (default nice = 15)
- postavljanje umask na 0006

- Pokretanje programa na daljinu:

SR funkcije | SR polja | Kako napisati plugin | sr\_plugin\_config.php | Statusna linija | run.php | Sigurnost | Instalacija | Changelog | Bugs

Ovo je objašnjenje kako Scriptrunner pokreće programe.

Skripta koja pokreće sve programe koje napišu korisnici (osim php skripti koje pokreće web server kao cgi pod uidom korisnika) je run.php i nalazi se u scriptrunner/run folderu.

Podaci za izvršavanje programskog koda run.php može dobiti na više načina:

1. postom vrijednosti iz html forme
2. getom preko url-a napr. http://server\_name/scriptrunner3/run/run.php?sr\_run\_file\_id=627
3. iz baze tj. dostupni su svih podaci pothranjeni s fileovima u sr-u napr. sadržaj, komandna linija i sl.
4. kombinacijom prva tri načina

Podaci o fileu koji se izvršava tj. imena varijabli koje run.php uzima getom ili postom su:

- sr\_run\_file\_id - id filea koji
- sr\_run\_contents - sadržaj filea
- sr\_run\_commline - komandna linija
- sr\_run\_as - izvrši kao tj. id plugin-a s kojim se izvršava
- sr\_run\_folder\_id - folder u kojem se izvršava ako je moguće s obzirom na permisije korisnika koji pokreće file
- sr\_run\_exe - je li exe file tj. rezultat kompajliranja (mora biti podržano u pluginu s kojim se izvršava)
- sr\_run\_save\_exe - dali da snimi exe file tj. rezultat kompajliranja (mora biti podržano u pluginu s kojim se izvršava)
- sr\_run\_content\_type - vrijednost 'content type' html headera prilikom ispisu rezultata izvršavanja. Napr 'text/html' (mora biti podržano u pluginu s kojim se izvršava)

Post ima prednost nad getom. Napr ako se kroz submit html forme skripti run.php?sr\_run\_file\_id=1 pošalje isto neka vrijednost sr\_run\_file\_id (napr. <input name="sr\_run\_file\_id" type="hidden" value="2" />) uzeti će se ta vrijednost iz forme, a ne iz url-a (2 u ovom slučaju).

## 6. Vremenska aktivacija

- Modul (plug-ins) ili neki njegov dio, može se aktivirati po želji i biti aktivan unutar nekog vremenskog perioda
- Tipičan primjer: aktivacija ispita/zadaće

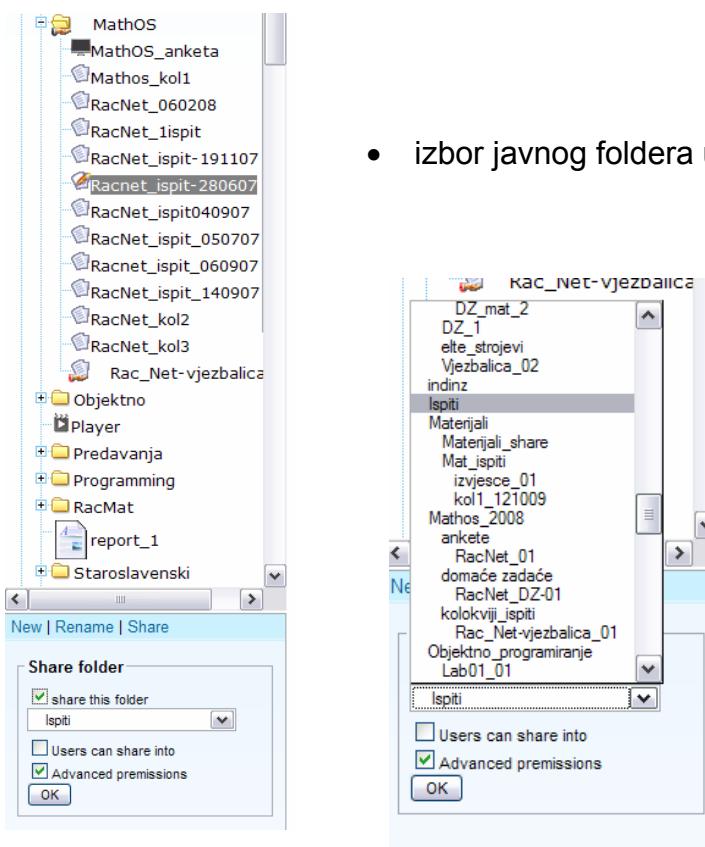
The screenshot shows two windows side-by-side. The left window displays a file tree under 'My\_Files / MathOS / Racnet\_ispit-280607 /' with various exam files like 'RacNet\_1ispit'. Below the tree is a list of actions: 'Show exam', 'Edit exam data', 'Exam activation', 'Show exam statistics', and 'Report!'. The text 'Exam name: RacNet\_1ispit' is highlighted in red. The right window shows a 'New examining session' dialog with fields for 'Session date' (5.7.2008), 'Start time' (9:00), and 'End time' (10:00). A 'Session date:' dropdown is also visible. At the bottom, there's a table with columns 'Session date:', 'Start time:', and 'End time:', showing a single row with values 2008-07-09, 13:00:00, and 15:00:00 respectively.

- Može se zadati više sekcija, pa će modul biti aktiviran u njima

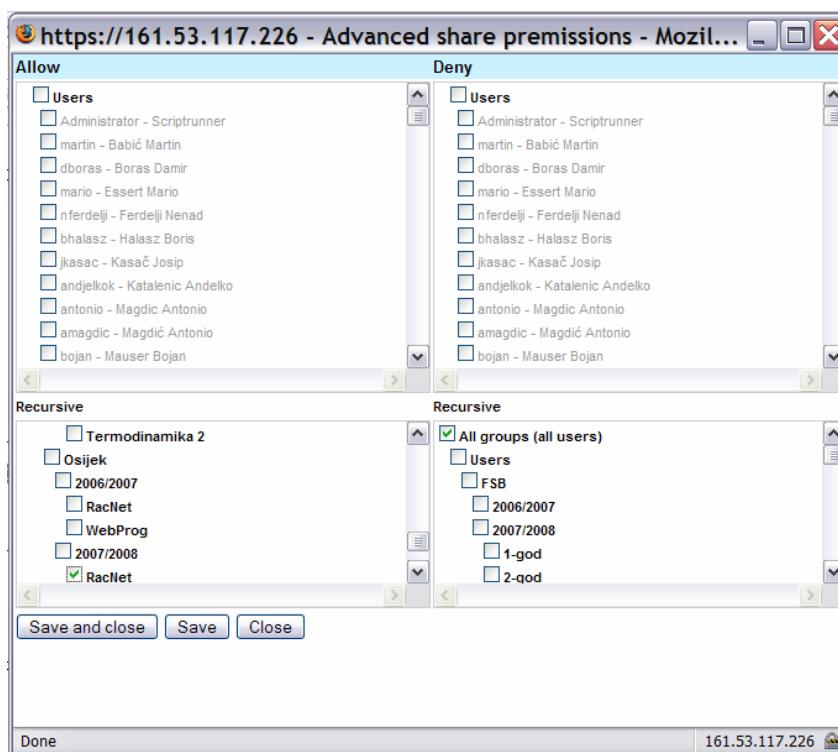
- aktivacija pojedinačnih vizualnih objekata od 0.25 sek naviše

The screenshot shows an experiment setup interface. On the left, 'Postavke eksperimenta' includes fields for 'eksperiment' (set to 'eksperiment 1 (slovo i naziv)'), 'ekspozicija' (set to '0.50 s'), and a 'pošalji' button. Below these are sections for 'Redoslijed učenja' (listing glagoljica shapes A-E with 0% learning and 0% accuracy) and 'Statistika' (showing experiment: 1, exposition: 1.00s, statistics: A:csv; B:csv; C:csv; D:csv; E:csv). On the right, 'Ispitanici' section lists participants: Mario Essert [mario] (A: 0/0; B: 0/0; C: 0/0; D: 0/0; E: 0/0) and Antonio Magdić [amagdic] (A: 0/1; [csv] B: 0/0; C: 0/0; D: 0/0; E: 0/0). There are also large stylized letters 'T' and 'r' displayed.

## 7. Selektivno objavljivanje (share grupa-e i/ili korisnika)



- izbor javnog foldera u kojem se objavljuje (share)



- nakon izbora i 'Save and close' ili 'Save' ne zaboraviti 'OK' na 'Share folder'.

## **8. Dokumenti s interaktivnim formama**

- Radio button, checkbox, push button, input text, text area, ...

XHTML

**Primjer html dokumenta iz kojeg se pozivaju scriptrunner programi**

### Primjer 1:

## c programski kod:

```
#include <stdio.h>

int main(int argc, char *argv[])
{
    int rez;
    printf("prvi broj je: %s\n", argv[1]);
    printf("drugi broj je: %s\n\n", argv[2]);

    rez = strtol(argv[1],NULL,10) +
strtol(argv[2],NULL,10);
    printf("zbroj je: %d", rez);
}
```

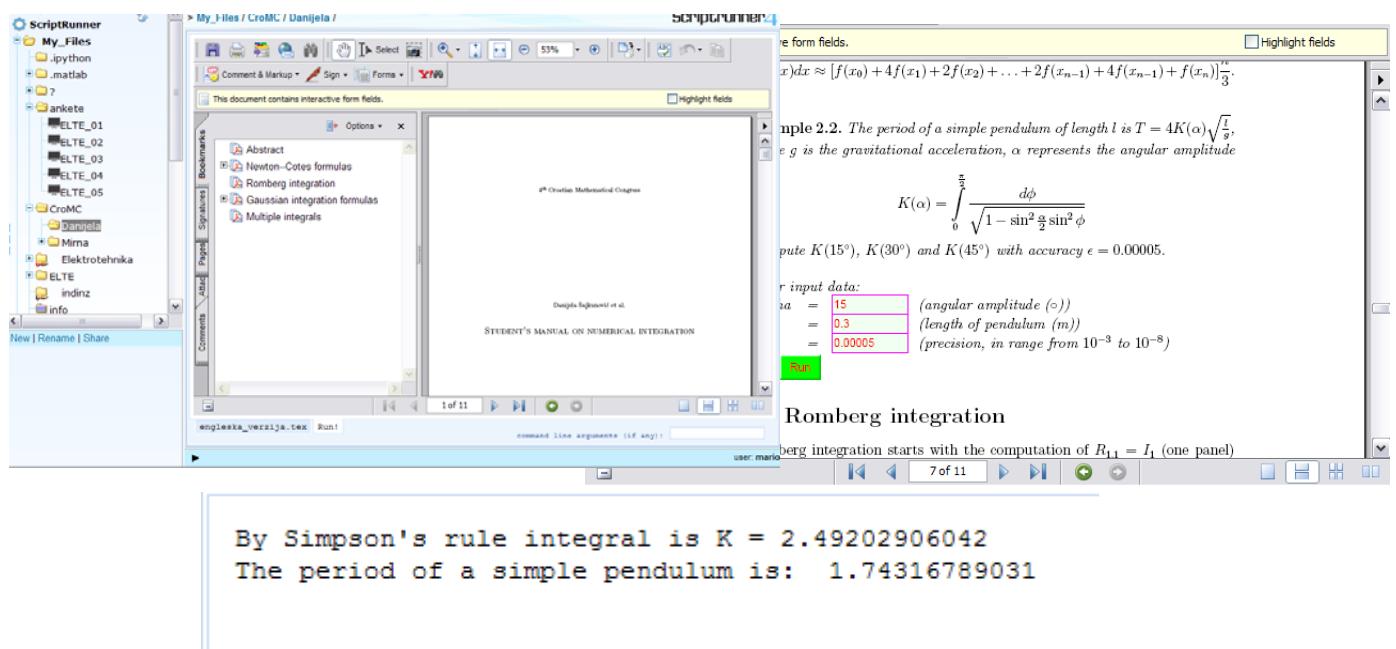
## komandna linija

## Primjer 2:

Pokreni pokreni c program koji ispisuje prim brojeve do 100

PDF

- Generiranje iz LaTex -> PDF



## 9. SR, LaTeX i FCK (Word like) editori

Change password  
Old: [ ]  
New: [ ]  
New again: [ ]

Default file editor  
[Script Editor] [SR Run Editor] [Script Editor]

User data  
First name: Mario  
Last name: Essert  
E-mail: mario.essert@fsb.hr  
Mobile phone: 091 5741337  
JMBAG:  
JMBG:

Script Editor  
Icons Style  
[ScriptEditor]  
Display Line Numbers [ ]

Save settings

- *SR editor* – najjednostavniji

- *Scripteditor* – s menu-ima

File name: **nltk1.py** Last saved at: 24-10-2008 10:23:09

Show file description [ ]

**File description**  
Ovo je primjer otvaranja doteteke u SR editoru

Undo | Redo | Select all H: [ ] | Save size

**File content**

```
import nltk
nltk.stem.porter.demo()
nltk.stem.lancaster.demo()
nltk.probability.demo()
nltk.chunk.regexp.demo()
nltk.parse.chart.demo()
nltk.sem.evaluate.demo()
nltk.sem.logic.demo()
```

Undo | Redo | Select all H: [ ] | W: [ ] | Save size

Run as: Python [ ] Save [ ] Run! [ ]

Show more options [ ]

**More options**  
Command line arguments (if any): [ ]  
Save executable as (if created): [ ] (existing file will be replaced)

> My\_Files /

File Edit View Run As Document Math Symbols References Sectioning Environment Font Styles Spacing Forms

1 \documentclass{beamer}  
2 \usepackage{pdftex,navibar}[web]  
3 \usepackage{op1250}[inputenc]  
4 \usepackage{color}  
5 \usepackage{fancy}  
6 \usepackage{mathrsfs}  
7 \usepackage{Frankfurt}  
8 \usecolortheme{seahorse}  
9 \usecolortheme{rose}  
10 \renewcommand{\baselinestretch}{1.5}  
11  
12  
13 \begin{document}  
14  
15 \begin{frame}  
16 \frametitle{Primjer interaktivnog Matlaba}  
17 Upoznajmo hidromehanički problem iz dokumenta \textbf{#hidromehanika\\_16} za koji vrijedi:\  
18  
19 \begin{Form}  
20 Izračunajmo hidromehanički problem iz dokumenta \textbf{#hidromehanika\\_16} za koji vrijedi:\  
21 \\$rho=6 inputTextField("row")[] (između 20 i 2000) \\  
22 \\$rho=6 inputTextField("row")[] (između 20 i 1000) \\  
23 \\$h=10 inputTextField("h")[] (između 10 i 50) \\  
24 \documentEnd{Form}  
25 \inputSubmit{JavaScript}{Izvrši}{  
26 var SubmitField = new Array("row", "rho", "h"); /\* polja koja se salju SR-u \*/  
27 SubmitFields(SubmitField, "http://scriptrunner.fsb.hr/scriptrunner3/run/run.php?sr\_run\_file\_id=28");  
28 }  
29 \end{Form}  
30  
31 \end{frame}  
32  
33 \end{document};

primjer\_octave.tex | Run!

▶ Settings saved. (12:14:45)

- *FCK (Word like) editor* – u nastavnim plug-inovima

- Proširenja editorskih mogućnosti: ## za ulazne, \$\$ za izlazne višestruke podatke
- Nevidljiva polja (u exercises): <?input> ... </?input>, <?text> ... </?text>

```
\documentclass[a4paper,10pt]{article}

\begin{document}
\begin{equation}
\int_0^{\infty} t^x e^{-t} \quad = \frac{1}{x} \prod_{k=1}^{\infty} \frac{1}{k^x}

```

points: 4

## 10. Grafički i multimedijski alati

File name | Size | Type | Date

yinyang.m4	0.3 KB	.m4	05-12-2007 12:48:58
arcto.m4	0.25 KB	.m4	11-06-2007 18:45:52
csc.m4	2.25 KB	.m4	05-12-2007 12:48:58
diamond.m4	0.58 KB	.m4	05-12-2007 12:48:58
Escher.m4	2.61 KB	.m4	
ext0.m4	0.42 KB	.m4	
graysurf.m4	0.91 KB	.m4	
Incleps.m4	0.73 KB	.m4	
recycle.m4	1.68 KB	.m4	
rose.m4	4.76 KB	.m4	
Sierpinski.m4	0.59 KB	.m4	
snake.m4	0.37 KB	.m4	
worm.m4	1.34 KB	.m4	
a.m4	0.02 KB	.m4	

select all | deselect all | New file

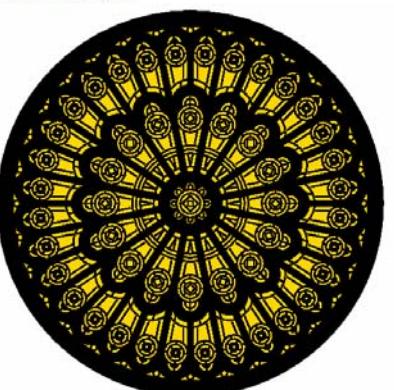
- PIC/M4, TikZ/PGF
- Izlazi u svim grafičkim formatima

> My\_Files / Programming / M4 / figure /

File Edit View Run As

Picture	Locations	Orientation	Objects	Size	Style	Decorations	Positions	Functions	Program
1 % rose.m4	2 divert(-)	3	4 define("rose", point_(`\$2`); CC: (vec_(`\$1`		boxht				
5 move to CC	6 tmp = rrad-stripwid	7 (circle shaded "gold" rad rrad-sthick at	8 (circle shaded "gold" rad tmp-sthick at C		boxwid				
9 [line to rvec_(rrad,0) chop tmp chop 0 ]	10 [line to rvec_(rrad,0) chop tmp chop 0 ]	11 [line to rvec_(0,rrad) chop tmp chop 0 ]	12 [line to rvec_(0,rrad) chop tmp chop 0 ]		lineht	3'			
13 [line from rvec_(-tmp/sqrt(2),-tmp/sqrt(2	14 [line from rvec_(-tmp/sqrt(2),tmp/sqrt(2)	15 (circle shaded "gold" rad tmp-stripwid-at	16 tmp = last circle.rad/sqrt(2)		linewid				
17 rgbfill(gold, line thick striphick from	18 then to rvec_(tmp,0) then to rvec_(0,tmp	19 ')	20 )		arcrad				
21 define("apt_",'72.27')	22 define("gold_",'1,0.84,0')	23	24 divert(0,dnl		circrad				
25 ifelse(ifpostricks(T)`ifpost(T)`'ifpostscr	26 'This diagram must be produced as PSTricks,	27 '.PS	28 scale = 1.2		ellipeht				
29 scale = 1.2	30 [ lsk = 1.2	31 sector = 360*dtor_/_16	32		ellipewid				
			33 )		moveht				
			34 )		movewid	'sqrt(2),tmp/sqrt(2))			
			35 )		textht	sqrt(2),-tmp/sqrt(2))			
			36 )		textwid				
			37 )		arrowht	o rvec_(0,-tmp) \			
			38 )		arrowwid	-(tmp,0))			
			39 )		arrowhead				
			40 )		dashwid				
			41 )		maxswid				
			42 )		maxswht				
			43 )		scale	'			
			44 )		scale (cm)	MetaPost output',			
			45 )		scale (mm)				
			46 )		fillval				

GIF [Graphics Interchange Format]



Output Formats

I DVI [Device Independent]  
PDF [Portable Document Format]  
PS [Postscript]

II EPS [Embedded Postscript]  
MPS [MetaPost]  
PSTricks [TeX\LaTeX]  
TikZ-PGF [TeX\LaTeX]

III GIF [Graphics Interchange Format]  
PNG [Portable Network Graphics]

To save file: Right Click "Save Target As/Save Link As"

Output Formats

I DVI [Device Independent]  
PDF [Portable Document Format]  
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II EPS [Embedded Postscript]  
MPS [MetaPost]  
PSTricks [TeX\LaTeX]  
TikZ-PGF [TeX\LaTeX]

III GIF [Graphics Interchange Format]  
PNG [Portable Network Graphics]

To save file: Right Click "Save Target As/Save Link As"

Diagram I: A circuit diagram showing an RLC series circuit. The circuit consists of a resistor (R), an inductor (L), and a capacitor (C) connected in series. A voltage source (V<sup>o</sup>) is connected across the circuit. The current flowing through the circuit is labeled i. The voltage across the capacitor is labeled v.

Diagram II: A digital logic circuit diagram. It features several inputs (A2, A1, A0, D, E, C) and a complex network of logic gates (AND, OR, NOT) and flip-flops. The outputs of the circuit are labeled h(v).

- FLV, MP3 on-line player

- Messenger



The screenshot shows a web-based email application interface. On the left, there's a sidebar with icons for 'Search', 'Messenger' (with 'chat' and 'inbox' sub-options), and 'write'. The main area has two panes. The top pane displays an inbox titled '/ Elektrotehnika / elite\_strojevi /' containing 15 messages from various senders, mostly from December 2007. The bottom pane shows a compose window for a new message to 'racinz-1' with a subject field. The compose window includes a rich text editor toolbar with bold, italic, underline, and link buttons, and a preview of the message body which says 'ovo je primjer pošte :P'. Below the toolbar is a list of suggested recipients.

Sender	Date
Denis Kralj	09.01.2008. 19:16:05
Denis Kralj	25.12.2007. 16:06:03
Jure Urem	20.12.2007. 12:48:16
Jure Urem	01.12.2007. 22:09:07
Filip Arslica	01.12.2007. 19:51:27
Ivanislav Novak	28.11.2007. 19:37:33
Tomislav Novak	15.11.2007. 00:09:57
Tomislav Novak	14.11.2007. 00:14:44
Antonio Maglic	06.11.2007. 20:04:18
Mladen Kuric	24.10.2007. 19:49:01
Danijel Jantol	23.10.2007. 01:31:21

# 11. Studentski karton

- domaće zadaće
- vježbalice
- kolokviji/ispiti
- lab. vježbe
- ankete
- izvješća
  
- pristup svakom studentskom uzorku

<http://scriptrunner.fsb.hr> - New Page 1 - Mozilla Firefox

Kolegij: **Elektrotehnika**

Ime zadaće: **3. domaća zadaća**

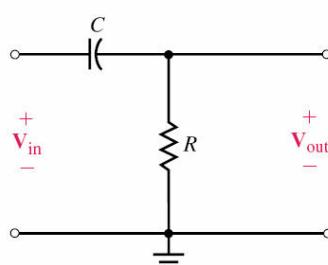
Naslov: **FILTRI**

Pokušaj 3 od maksimalno 20

Zadaća je dostupna do uključivo: 02.12.2007.

3.3. Projektirajte visokopropusni CR filter zadan slikom, kojemu će granična frekvencija biti

$$f_c = 45 \text{ kHz}, \text{ uz } C = 4 \text{ nF}.$$



Odredite otpor  $R = 0.88 \text{ k}\Omega$

Student: Tomislav Baćek						
Kolegij	Ime zadaće	Naslov	Broj pokušaja	% riješio	Last attempt	
Elektrotehnika	5. domaća zadaća	Načelo rada elektročišnih strojeva	1	100	05.02.2008. 10:19:22	<a href="#">See</a>
Elektrotehnika	5. domaća zadaća	Digitalni sklopovi	1	100	19.01.2008. 22:29:42	<a href="#">See</a>
Elektrotehnika	5. domaća zadaća	Operacijsko pojačalo	4	100	23.01.2008. 17:20:48	<a href="#">See</a>
Elektrotehnika	4. domaća zadaća	BJT	15	100	08.01.2008. 20:02:42	<a href="#">See</a>
Elektrotehnika	4. domaća zadaća	FET	3	100	03.01.2008. 19:47:25	<a href="#">See</a>
Elektrotehnika	4. domaća zadaća	Dioda	18	100	30.12.2007. 23:51:57	<a href="#">See</a>
Elektrotehnika	3. domaća zadaća	FILTRI	3	100	20.11.2007. 20:25:12	<a href="#">See</a>
Elektrotehnika	3. domaća zadaća	Laplace-ova transformacija	4	100	21.11.2007. 15:36:48	<a href="#">See</a>
Elektrotehnika	3. domaća zadaća	Prijelazne pojave	14	100	22.11.2007. 10:51:59	<a href="#">See</a>
		Mješoviti izmjenični			11.11.2007. 11:11:11	

71	Tomislav Šimunić	0035165134	mehro-1	1,64	13	28.11.2007. 18:02:42	<a href="#">See</a>	X
72	Hrvoje Žarko	0035165176	induz-2	1,46	2	28.11.2007. 18:02:42	<a href="#">See</a>	X
73	Dinko Žarković	0035159749	induz-2	1,82	6	30.11.2007. 00:00:44	<a href="#">See</a>	X
74	Željko Žanbosić	0035157770	induz-2	1,107	6	30.11.2007. 00:00:44	<a href="#">See</a>	X

ili zadaća s netočnim odgovorima:

Odredite otpor  $R = 2.27 \text{ k}\Omega$

U slučaju tako projektiranog filtra:

a) Za  $\omega = 0.40 \omega_c$  odredite naponsko pojačanje  $A_v = 8.63 \text{ dB}$  i fazni pomak  $\theta = 67.31^\circ$

b) Za frekvencije  $\omega \gg \omega_c$  (tj. frekvencije puno veće od granične) naponsko pojačanje bit će 0. Za frekvencije  $\omega \gg \omega_c$  (tj. frekvencije puno veće od granične) naponsko pojačanje bit će jednako 0 dB, a fazni pomak bit će jednak 0.

[Close](#)

U slučaju tako projektiranog filtra:

a) Za  $\omega = 0.40 \omega_c$  odredite naponsko pojačanje  $A_v = 0.371 \text{ dB}$  i fazni pomak  $\theta = 13^\circ$

b) Za frekvencije  $\omega \gg \omega_c$  (tj. frekvencije puno veće od granične) naponsko pojačanje bit će 0. Za frekvencije  $\omega \gg \omega_c$  (tj. frekvencije puno veće od granične) naponsko pojačanje bit će jednako 0 dB, a fazni pomak bit će jednak 0.

[Close](#)

- trenutačni rezultati kolokvija/ispita

Vježbalica\_01

Vježbalica\_02

+ Exercise

Industry

Ispiti

MathOS

MathOS\_anketa

Mathos\_kol1

RacNet-2008\_2.kolokvij

RacNet-2008\_kolokvij

RacNet-060208

RacNet\_1Dio\_270608

RacNet\_iispit

RacNet\_2Dio\_270608

> My\_Files / MathOS / RacNet-2008\_kolokvij1 /

Exam name: RacNet-2008\_kolokvij1

Choose a task...

Show exam

Edit exam data

Exam activation

Show exam statistics

Report!

Web exams ver. 1.2 (August 2007.) :)

Max. attainable points: 113

Student	No. of points	Grade
Pein Boris	97	5
Stubičar Ana	92	4
Lulić Emilia	89	4
Drmic Danijel	81	3
Džanak Davor	81	3
Dukić Dunja	81	3
Galambos Ivan	81	3
Ivanković Iva	81	3
Rohtek Martina	81	3

## 12. ... a sve ostalo će vam se nadodati

- *Scriptrunner* nije open-source, makar je iz njega nastao
- *Scriptrunner* je otvorena ponuda za dobru suradnju
- Razvija se u grupi J&C već 7 godina
- S člancima na konferencijama proveli divne dane u Luganu, Barceloni, 2 x Beču, Budimpešti, a sad se nadamo i Pragu :)

Sto se tice popularizacije *Scriptrunner*-a, imam dobre kontakte tu u nekoliko sveucilista (Oxford, Southampton, Birmingham, ...) pa kad vec budete spremni s nekim materijalom koji se moze poslati, svakako cu Vas povezati s tim kolegama.

- Osim u nastavi, *Scriptrunner* se širi na industrijsko (Strategic research group Rolls – Royce u London/Derby) i humanističko područje (Staroslavenski institut, Psihologija FFZG, Nac. baština Zadar i sl.)



Lijevo:

- Anđelko Katalenić, student (FER)
- Bojan Mauser, dipl. inž. strojarstva (CARNet)
- Antonio Magdić, dipl. inž. strojarstva (Staroslavenski institut)

Desno:

- Teodor Tomić, student (FSB)
- Doc.dr.sc. Ivica Nakić (PMF)
- Tihomir Žilić (FSB)

