

Foreword

hei

Description of the program

LCFGvisualizer is a program..

The program is divided into two separate parts: dataImporter and dataVisualizer (figure ..) image

1. dataImporter This is the part used to parse the XML-profiles, extract the wanted information and export it to a mySQL database.
2. dataVisualizer This part connects to the database and generates a visualisation based on which criterias and techniques the user sets.

Contents

1	System reference	3
1.1	DAL	4
1.2	DataImporter	4
1.3	DataVisualizer	4
1.3.1	heatMapVisulizer	4
1.3.2	GroupVisulizer	4
1.3.3	NodeVisulizer	4
1.3.4	PyramidVisulizer	4
1.3.5	VRML_Generator	5
1.4	GUI	5

Chapter 1

System reference

This part of the document will contain documentation needed by developers for maintenance and expansion of the system

1.1 DAL

1.2 DataImporter

Here be dragons

1.3 DataVisualizer

The visualizer modules depend on the following modules:

- DAL.pm
- vrmlGenerator.pm

1.3.1 heatMapVisulizer

1.3.2 GroupVisulizer

1.3.3 NodeVisulizer

1.3.4 PyramidVisulizer

This module generates the vrml for the pyramid visualization.

Method descriptions

blabalba

new() This method is a constructor generating a new PyramidVisualizer object. Six parameters are required. The first three represent the table name, field name and field value for the first criteria query, while the last three represent the same values for the second criteria.

generateWorld() This method is responsible for generating the VRML-file for the visualization. First the data is retrieved, then the size of the steps are calculated before the string for the vrml file is built.

hashValueAscendingNum helping method, sorts a hash by its values in ascending order. Uses the global hash `%steps`

hashValueDescendingNum helping method, sorts a hash by its values in descending order. Uses the global hash **%steps**

1.3.5 VRML_Generator

Here be more dragons

1.4 GUI

SRS System Requirement Specification

Structure

Bilde / visualisering av komponenter og underprogrammer

Hardware requirements

Any newer computer (X86-compatible).

Software requirements

Perl >= 5.10 with XML::LibXML::XPathContext; For windows, the following packages are required to parse the XML files:

- XML::LibXML
- XML-LibXML-Common
- XML-Namespacesupport
- XML::SAX

These packages can be retrieved from <http://cpan.uwinnipeg.ca/PPMPackages/10xx/>
mysql >= 5.0.45 apache webserver

The client: A modern web browser – tested in IE6, Mozilla Firefox, Opera, Safari .. bla VRML browser: recommended Octaga Player

Database

Installation

Installation on Windows:

You need to install the following third-party software:

Apache, Perl, mySQL

We recommend installing activestate Perl – link ,..

Install it to a folder, we will use C:\perl

And then install WAMP server – -link

Unzip lcfgVisualizer.zip to a desired path, in our example we will use C:/lcfgVisualiser/

go to the folder and edit the .cgi files — change the first line to reflect the location of your perl.exe file.

In this example, we will use #!C:\perl\bin\perl.exe -w

To open for cgi execution in apache, you need the following lines in httpd.conf:

In the loadModule section, make sure these lines are not commented:

```
LoadModule alias_module modules/mod_alias.so
```

```
LoadModule cgi_module modules/mod_cgi.so"
```

in the section <IfModule alias_module>

```
ScriptAlias /cgi-bin/ "C:/lcfgVisualizer/cgi/"
```

```
<Directory "C:/lcfgVisualizer/cgi/">
```

```
    AllowOverride None
```

```
    Options +ExecCGI Indexes
```

```
    Order allow,deny
```

```
    Allow from all
```

```
AddHandler cgi-script .cgi .pl
```

```
</Directory>
```

In the root directory of your apache server root (default), make a new folder named output

in cgifunctions.pm set

```
\$FILEPATH = "E:\\www\\output\\";
```

Bugs & known issues

BUG: Web browser freezes / crashes GUI: On some systems, the octaga web browser plugin does not work. Web browser: Internet Explorer 7.0.5730.11

Solution: Change browser – use firefox. Platform: Systems running Windows XP SP2, Internet Explorer 7.0.5730.11, Octaga player 2.2.0.12

Error hos meg: Embedded VRML worlds does not show up in firefox
Solved — feil i stien til embeddinga, m ta med .. foran \$vrmlFile

BUG: Embedded VRML is not updated Firefox bruker cache selv om den ikke skal det, funker ikke force reload. M restarte browser for f vist en ny visualisering. Forelpig lsning: ikke printe ut embeddinga, bare link, dette hjelper ogs mot at internet explorer henger hvis man prver det i IE.

BUG: Some links inside the VRML world does not work All links point to the same viewpoint. This is a anchor issue with name conventions.. - Viewer: Cortona 3D viewer Platform: All -Visualisations affected: groupVisualizer,...