**Technical Documentation**

**OSCE Hate Monitor Application**

**Application overview**

The Hate Monitor is a monthly visualization of the Mission’s hate crimes monitoring data, which is developed as an MVC web application using Ruby on Rails framework.  The application allows upload of hate crimes data in CSV comma-delimited format on a monthly basis. Data is stored to the PostgreSQL database and can be filtered and displayed to the end users in PNG format of a visual. Visual is available in both English and Bosnian language.

**Application location**

Application can be accessed using the following link:

<http://infograph-osce.rhcloud.com/>

***Security Credentials***

Username: osceadmin

Password: osce2013

**Source code location**

Application source code is available on the GitHub repository, and can be downloaded from the following link:

<https://github.com/epjani/osceinfographics/>

**Source code structure**

The application is written using MVC pattern.

***Models***

There is only one model ‘CsvData’, which has two main methods: ‘save’ and ‘parse’.

‘save’ method is used after input csv file has been uploaded. It parses fields that describe month/year of data described in csv. It writes the input csv file in the database for a specific month of a year so no duplicates are allowed. Also uploaded file is renamed by year/month (example : 2013-9.csv).  If you upload the file that has the same (already uploaded) month + year, it will overwrite the existing one.

‘parse’ method is used when you hit "Preview" button in the application. It parses all data in csv and passes it to the views (specifically: ‘views/parser/parse.html.erb’)

***Controllers***

‘CsvController’ is used for dashboard preview, authentication and file uploading.

‘ParserController’ is used to serve data that ‘CsvData::parse’ method provided (i.e. to view).

***Additional code***

Translations are located in config/locales/bs.yml (Bosnian) and config/locales/en.yml (English)

All CSS is located in public/stylesheets/main.css.

CSS specific for Bosnian is in public/stylesheets/main\_bs.css and coordinates of cities drawn on the map are in public/stylesheets/cities.css file.

**Input CSV file**

Input CSV is set to use UTF8 encoding to support affricates, and is comma-delimited. In order to obtain CSV data for the upload, it is necessary to use sample Excel spreadsheet and update it in Google docs only.

More details in the following short user guide:

<http://infograph-osce.rhcloud.com/InfographUsageCSV-Openshift.docx>

**Application hosting**

The application is hosted on a free public cloud PaaS provider, OpenShift. It provides free 512 MB RAM, 1GB storage per MySQL or PostgreSQL instance, 100 requests per second as well as Community-based support.

More information: <https://www.openshift.com/>

**Application hosting access**

Register on <https://www.openshift.com/> and provide us your username so DOIT can add you as a project collaborator.

***Development requirements***

* Ruby 1.9.2 - <http://rubyinstaller.org/>
* Git - <http://msysgit.github.io/>
* rhc - after met requirements listed above run ‘gem install rhc’ in your terminal

If you have all requirements listed above, run the following commands/steps from Ruby command line:

1. ‘git clone ssh://528bdab8e0b8cda60d000174@[infograph-osce.rhcloud.com/~/git/infograph.git/](http://infograph-osce.rhcloud.com/~/git/infograph.git/)‘ to clone existing production repository locally on your machine.
2. Change directory to cloned directory (e.g. ‘cd infograph’)
3. Edit code
4. Add changes you made ‘git add .’ to future commit
5. Create commit ‘git commit -m "message describing what changes you made" ‘
6. Push your changes to production server ‘git push’