

## 1 Description

In this project you will develop a program, which loads earthquake data from files and allows a user to query for earthquakes by specifying certain search criterias.

Earthquake data files can be downloaded from <http://hitseddb.ethz.ch:8080/ecos09/5316502c178d1b272a212751224c397233326d0a.continue> (<http://www.seismo.ethz.ch>). The program should at least load the CSV file 2001-2008, optionally more than this file at the same time.

The program should allow the user to query for the “strongest” earthquakes, for earthquakes at a specific place and for earthquakes on y specific date.

## 2 Work plan

The work consists of the following units:

- ✓ A console based application that allows to load earthquake CSV files and provides a simple console-based query interface to the user.
- ✓ Allow the user to get a list of the strongest earthquake and display details about this earthquake
- ✓ Allow the user to query for earthquakes at a specific place and show details about these earthquakes.
- ✓ Allow the user to query for earthquakes on a specific date and show details about these earthquakes.
- ◇ Improve the search functionality and allow the user to combine search criterias, for example place and date
- ◇ Allow the program to load all earthquake files, which are located under the same subdirectory (for example you download all earthquake files into a directory `earthquakefiles/` and the program loads all files from there).
- ◇ Develop a small GUI and show the earthquakes on the Swiss map

## 3 Scope

The project counts as completed if the system can be demonstrated implementing the functionality of all ✓-items. The ◇-items are optional items for extra points.