The KGeography Handbook

Anne-Marie Mahfouf
Kushal Das

Contents

1 Introduction **5**

2 Quick Start to KGeography **6**

3 Using KGeography **13**

3.1 More KGeography features 13

4 How to make maps **15**

4.1 Helper tool 15

4.2 Description file 15

4.3 Map file 16

4.4 Flags 17

4.5 How to test 17

4.6 Non political maps 17

5 Command Reference **18**

5.1 The main KGeography window 18

5.1.1 The File Menu 18

5.1.2 The View Menu 18

5.1.3 The Settings Menu 18

5.1.4 The Help Menu 19

6 Configuration **20**

7 Credits and License **21**

Abstract

KGeography is a geography learning tool by KDE. Right now it has seven usage modes:

- Browse the maps clicking in a map division to see its name, capital and flag
- The game tells you a map division name and you have to click on it
- The game tells you a capital and you have to guess the division it belongs to
- The game tells you a division and you have to guess its capital
- The game shows you a map division flag and you have to guess its name
- The game tells you a map division name and you have to guess its flag
- The game shows an empty map and you have to place divisions on it one by one

Chapter 1

Introduction

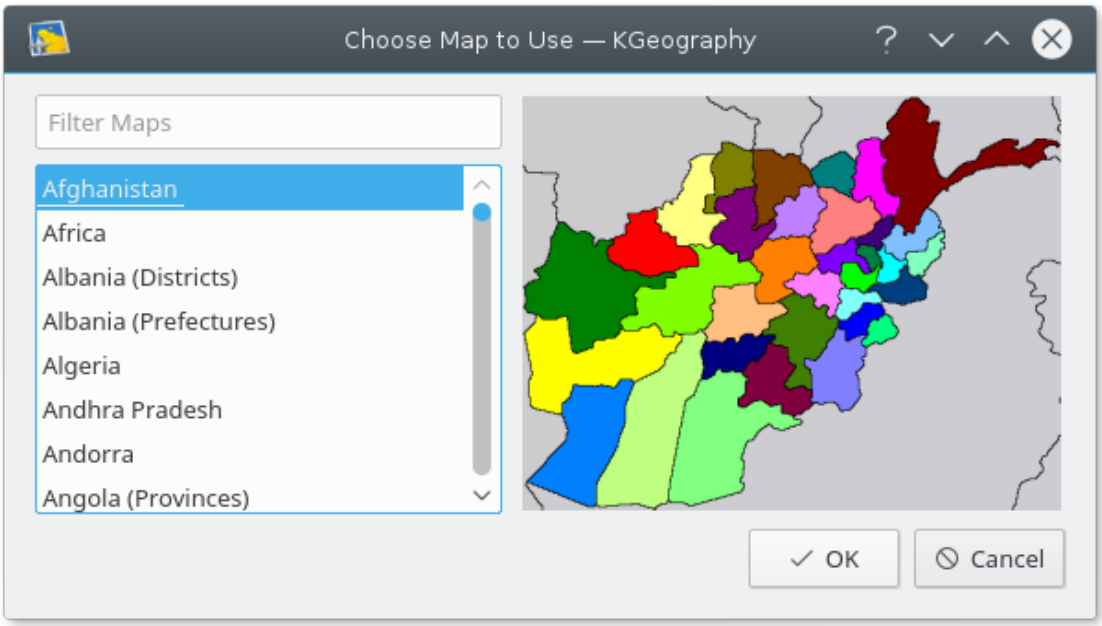
KGeography is a geography learning tool by KDE. It allows you to learn about the political divisions of some countries (divisions, capitals of those divisions and their associated flags if there are some).

Chapter 2

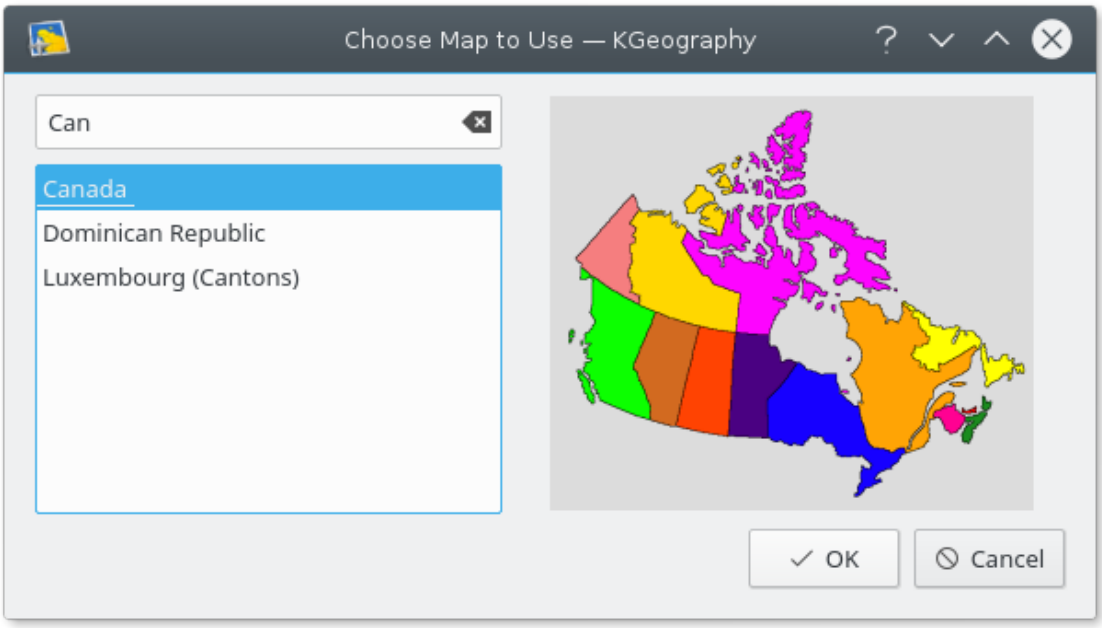
Quick Start to KGeography

When you run KGeography for the first time, it first asks you to choose a map to start with.

> TIP
> You can filter the map list using **Filter Maps** text field. Just enter a few first letters of the map name to narrow down the list to a few matches.

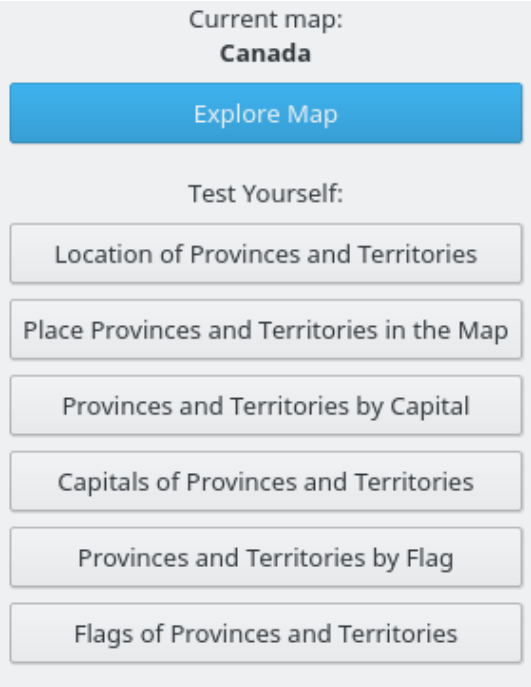


Here we choose Canada



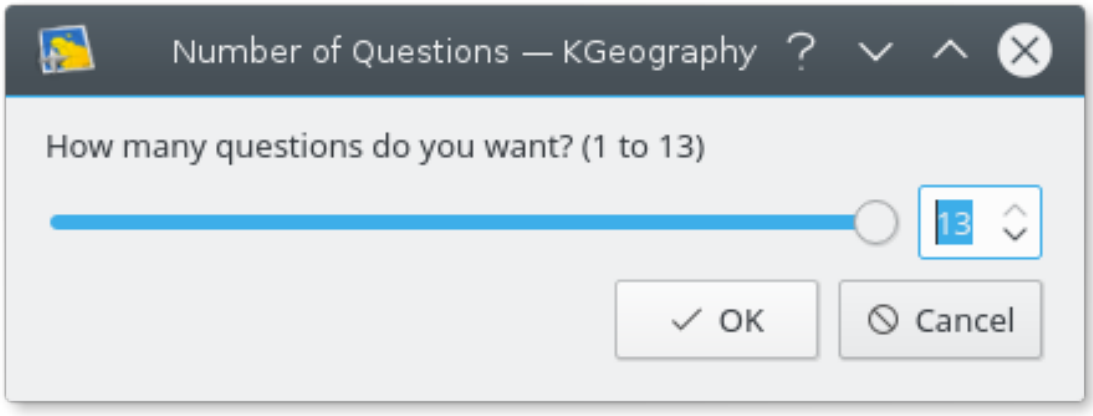
And KGeography main window appears with the map of Canada:

You can then choose what type of learning or testing you want to do by looking at the menu on the left:

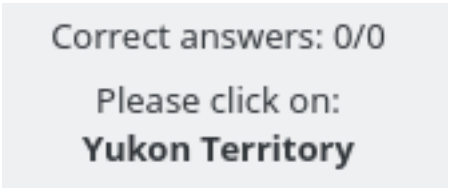


Explore Map: a left mouse button click on an area of the map will display information about that area, if you click on the small **Info** icon on the popmap, it will open the wikipedia page for that division in the system's default browser:

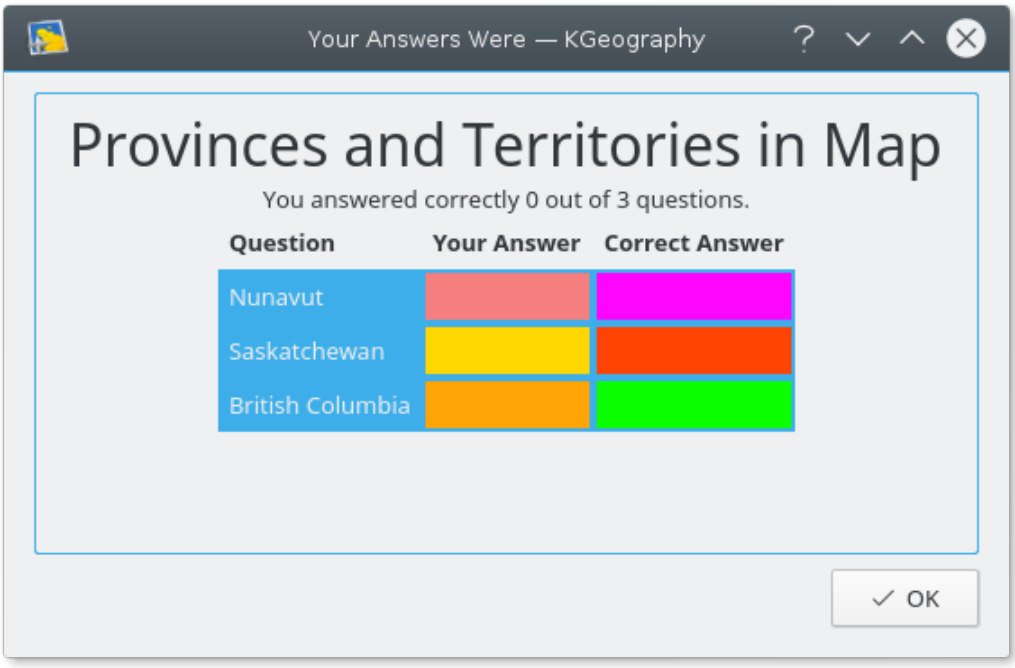
Location of Provinces or Territories: you are first asked how many questions you want.



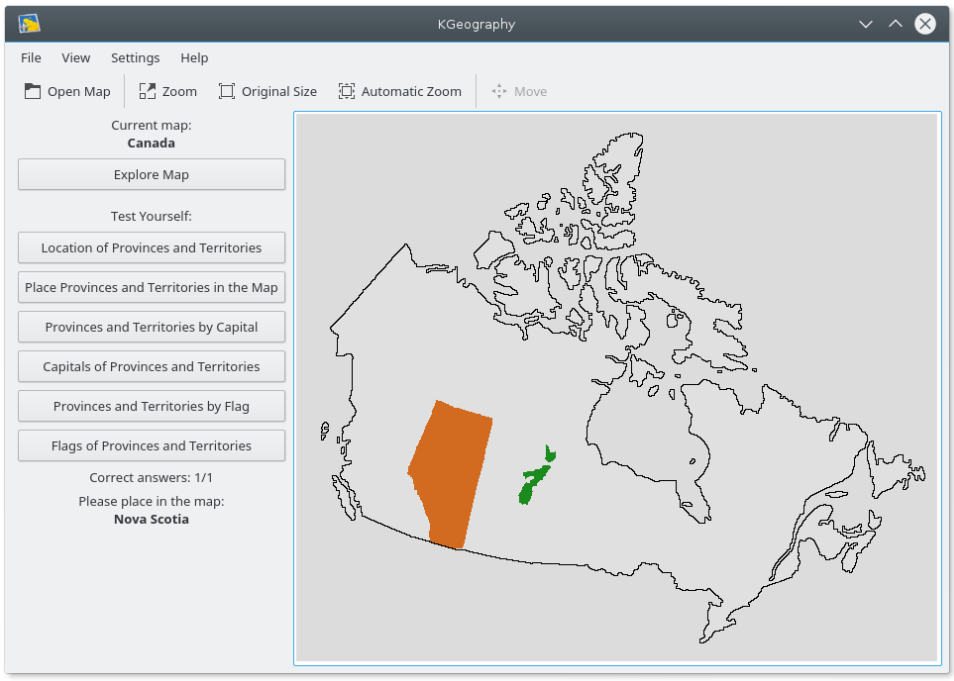
Then you are asked to click on a specific province:



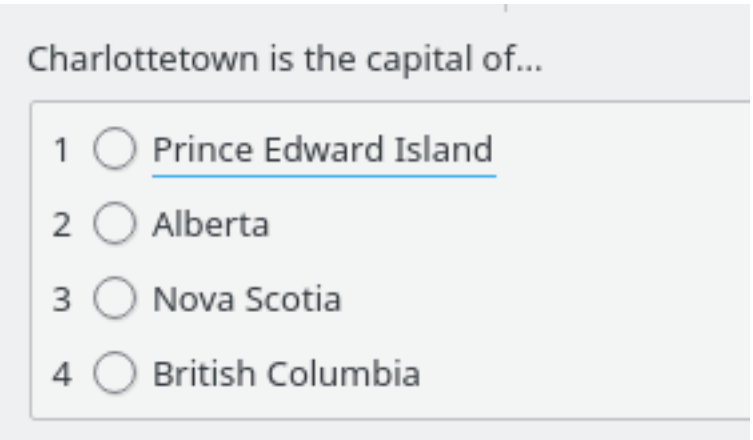
When you finish all the questions, a result dialog is shown with your correct and uncorrect answers:



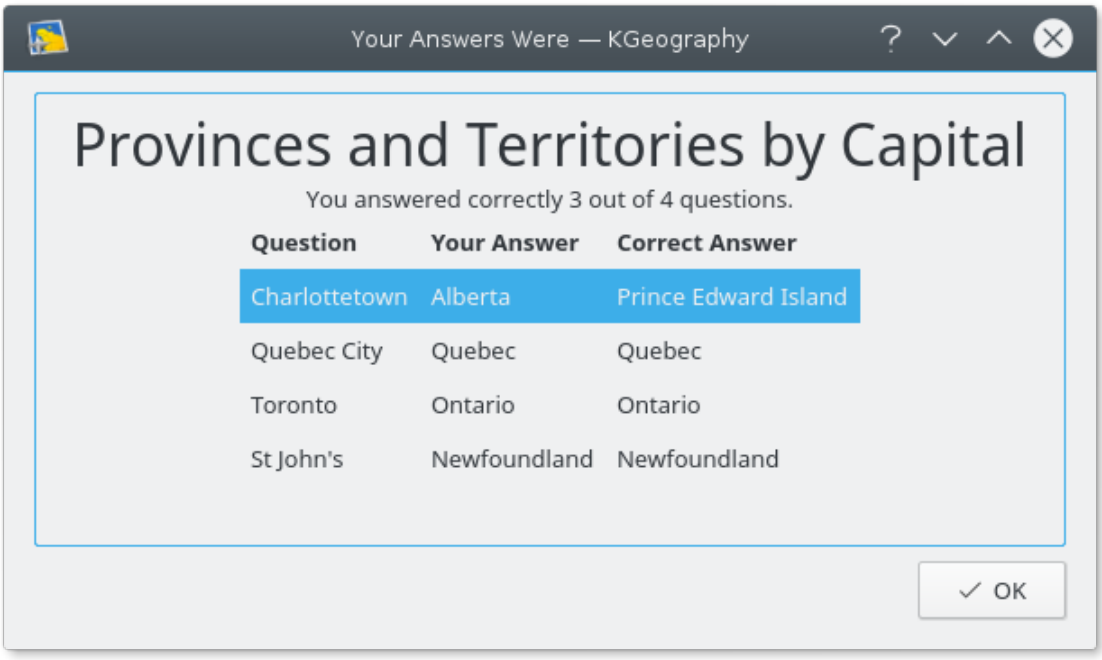
Place Provinces or Territories in the Map: the cursor takes the shape of a province and you have to place it in the map:



Provinces or Territories by Capital: you are asked to find the name of a province among a choice of 4 given its capital:

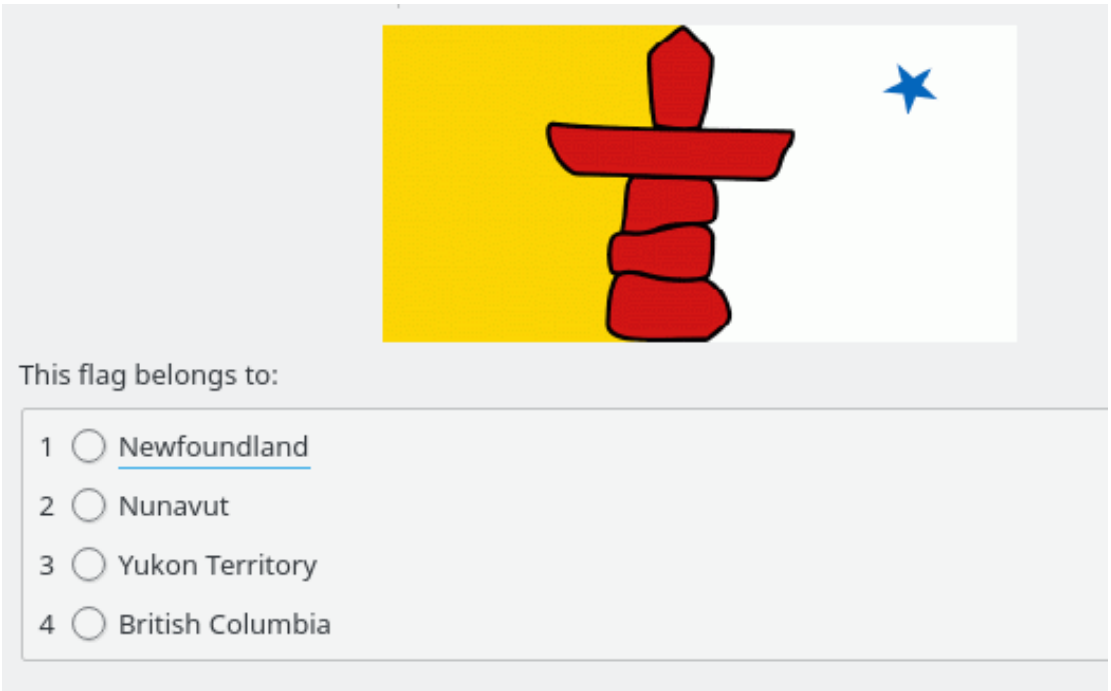


And the results are displayed when the test is finished:



Capitals of Provinces and Territories: you have a capital and four province names and you must choose the correct one. As before, at the end a result dialog is shown.

Provinces or Territories by Flag: a flag is shown and you must find the province it belongs to.



Flags of Provinces and Territories: a province name is given and you must find the correct flag among four.

The flag of Saskatchewan is...
1
2
3
4

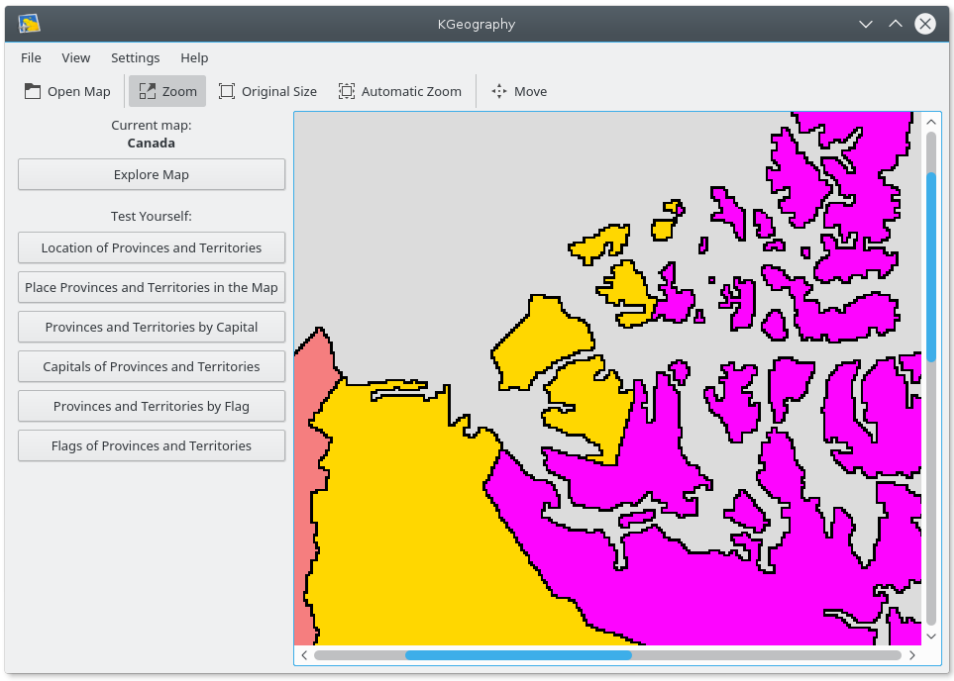
Chapter 3

Using KGeography

KGeography displays information about some countries and tests you about those information.

3.1 More KGeography features

Another feature of KGeography is the possibility of zoom on a map.



You can click the **Zoom** button and then draw a rectangle to zoom in a part of the map. While in zoom mode, you can press right mouse button to go back to the original map size (the **Original Size** action has the same effect). Use the scroll bars, the arrow keys or the mouse wheel to move around the zoomed map or use the **Move** action that will allow you to drag the map using left mouse button. The **Automatic Zoom** feature will make the map as big as possible.

Chapter 4

How to make maps

A map in KGeography is made by two files, one is the image of the map and the other one is its description.

4.1 Helper tool

You can find here a tool (made by Yann Verley) which helped him with the map of France. To find out its usage, simply execute it and read the help message. It basically creates the `.kgm` file from a plain text file and creates a file with the colors it has assigned to each division, so you can fill the map according to them.

There is another tool colorchecker.py written by Albert Astals Cid. You need Python 3 with the `PySide6` and `Pillow` modules to run this. Just run this with the `.kgm` filename as argument (you also need the `.png` file of the map in the same folder). This will tell you if any pixel on the map has a different color which is not defined in the `.kgm` (description) file.

> TIP
> Please read also the tutorial How to add maps on the KGeography website.

4.2 Description file

The description file is needed and its file extension is `.kgm`. It should begin with `<?xml version=˝1.0˝ encoding=˝utf-8˝>`, then `<!DOCTYPE kgeographyMap>`, followed by `<map>` and end with `</map>`.

Inside of those tags there should be:

- `<mapFile>` and `</mapFile>`: the name of the file (without any path) containing the map image, e.g. '`europe.png`'.
- `<name>` and `</name>`: the name of map, e.g. '`Europe`'.
- `<divisionsName>` and `</divisionsName>`: the general name of divisions in this map, that is, Provinces, States, Countries, etc.
- A `<division>` and `</division>` for each division in the map.

Each division has these tags:

- <name> and </name>: the name of the division, e.g. 'Albania'.
- <capital> and </capital>: the name of the capital of the division, e.g. 'Tirana'.
- <ignore> and </ignore>: can be set to **yes**, **allowClickMode**, **allowClickFlagMode** and **no**. If this tag is set to **yes** then the division will be ignored when asking for divisions in that map. It is then as if this division does not exist in KGeography quiz modes. If this tag is set to **allowClickMode** then KGeography will ask for the division in the **Location of ...** mode but not in other quiz modes. If this tag is set to **allowClickFlagMode** then KGeography will ask for the division in the **Location of ...** mode and in the flag related quizes but not in other quiz modes. Setting this tag to **no** means the division will appear in all modes (browse and quizzes). This tag is optional and when there is no <ignore> tag that means as it is set to **no**. For example 'Algeria' has this tag set to **yes** in the 'Europe' map which means that 'Algeria' will not be part of any quiz in the 'Europe' map.
- <flag> and </flag>: the file (without any path) containing the flag of the division, e.g. 'albania.png'. This tag is optional. Not needed for the divisions whose <ignore> tag is set to **yes**.
- <blurredflag> and </blurredflag>: the file (without any path) containing the blurred flag of the division, e.g. 'blurred_albania.png'. This tag is optional. It should be used in situations where the flag has the name of the division to which it belongs written on it. This can cause the flag guessing games to become too easy, and as such submission of the flags with the text blurred out is encouraged.
- <color> and </color>: the color the division has in the map.
- <falseCapital> and </falseCapital>: There can be any number of **falseCapital** pairs, they are used to provide a list of false answers to the capital question instead of choosing the false answers amongst the other divisions capitals.

The color is defined using three tags:

- <red> and </red>: red component of the color. Valid values are between 0 and 255.
- <green> and </green>: green component of the color. Valid values are between 0 and 255.
- <blue> and </blue>: blue component of the color. Valid values are between 0 and 255.

> **TIP**
> It is convenient to create 2 or 3 false divisions like 'Water', 'Frontier' and 'Coast' and set them with the <ignore> tag set to **yes**. Don't forget **not to set** color for any 'Frontier' 0,0,0 in RGB. Please make it something like 1,1,1 so that a border outline comes while placing any division on the map.

> **IMPORTANT**
> All names (capitals and divisions) must be in English.

4.3 Map file

The map file is quite simple but laborious to create. It has to be in PNG format. You can find some maps to transform at Cia Reference Maps. If no map fits your needs you can download the political world map, take a screenshot of it and work from it. Each division in the map should have one and only one color. To achieve this you can use image processing programs like The Gimp and KolourPaint.

4.4 Flags

If you have used the <flag> tag you should provide the flag files. They have to be in PNG format and better if they are 300x200 pixels and you provide a SVG file for it. To obtain SVG flags of almost all countries in the world and some other divisions, you can consult the Sodipodi flags collection.

As noted previously, we encourage you to provide blurred flag files for flags that have the division written on them. The same requirements apply to the blurred flag files as to the regular flag files. While there is no prescribed naming notation for the blurred files, we recommend saving these down with the name of the original flag prefixed with blurred_, e.g. 'blurred_albania.png'

4.5 How to test

Before sending your map to Albert aacid@kde.org, you should test it to see it has no errors. To achieve that, you have to do the following:

- Put the map description and map image file in $XDG_DATA_HOME /share/apps/kgeography/
- Put the flag PNG files (if any) in $XDG_DATA_HOME /share/apps/kgeography/flags/

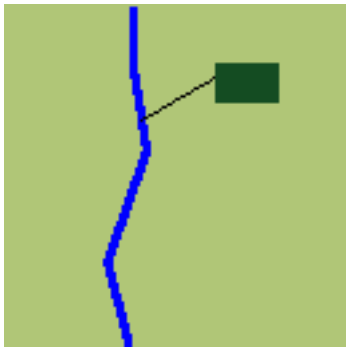
Once that has been done you should be able of opening your map from inside KGeography.

If you don't know which is your $XDG_DATA_HOME, type **qtpaths --paths HomeLocation** in a shell.

> TIP
> Use the colorchecker.py tool from the helper tools to check if any extra color left on the map which is not defined on the .kgm file.

4.6 Non political maps

Is it possible to do non-political maps? Yes, it is!



Of course, the division concept can be extended to a river or a mountain. During the creation of the map, you should keep in mind that most times the river or mountain will be too small that you should provide an additional clicking area. In this example the river would have the maroon area and color <20,76,34> as its identifier.

Chapter 5

Command Reference

5.1 The main KGeography window

5.1.1 The File Menu

File → Open Map... (Ctrl+O)

Open the choose map dialog. If you type quickly enough the first letters of the map you look for will select the first map that matches.

File → Quit (Ctrl+Q)

Quits KGeography.

5.1.2 The View Menu

View → Zoom

Goes in zoom mode, then draw a rectangle to zoom in a part of the map.

View → Original Size

Sets the map back to its original size as defined in the map file. A right mouse button click in zoomed mode performs the same action.

View → Automatic Zoom

Sets the map to automatic zoom using as much space as possible when resizing the KGeography window.

View → Move

Moves the current map. This item is only enabled, if you have zoomed into the map.

5.1.3 The Settings Menu

KGeography has the common KDE **Settings** menu items, for more information read the section about the Settings Menu of the KDE Fundamentals.

5.1.4 The Help Menu

KGeography has a default KDE **Help** menu as described in the KDE Fundamentals with two additional entries:

Help → **Disclaimer**

Displays a disclaimer about the accuracy of maps, flags and translations used by KGeography.

Help → **Map author**

Displays the name of author who created the current map.

Chapter 6

Configuration

Question Alignment

Determines the position of the questions in the window, default is **Top-left**.

Wait for Validation

If enabled the user will have to press **Accept** after choosing an answer.

Focus follows Mouse

If enabled pressing **Space** will trigger the button under the mouse pointer.

Map divisions colors

You can choose if you always want to keep the same colors (default) or if you want to use random colors: with this option random colors are assigned to the divisions in the map. This helps the user to focus and learn the division shapes and not the division colors.

Chapter 7

Credits and License

KGeography

Program copyright 2004-2008 Albert Astals Cid aacid@kde.org

Documentation Copyright (c) 2005 Anne-Marie Mahfouf annma@kde.org 2008 Kushal Das kushaldas@gmail.com

This documentation is licensed under the terms of the GNU Free Documentation License.

This program is licensed under the terms of the GNU General Public License.