

Project Progress Report

Map widget

Group 3-5 Intercom

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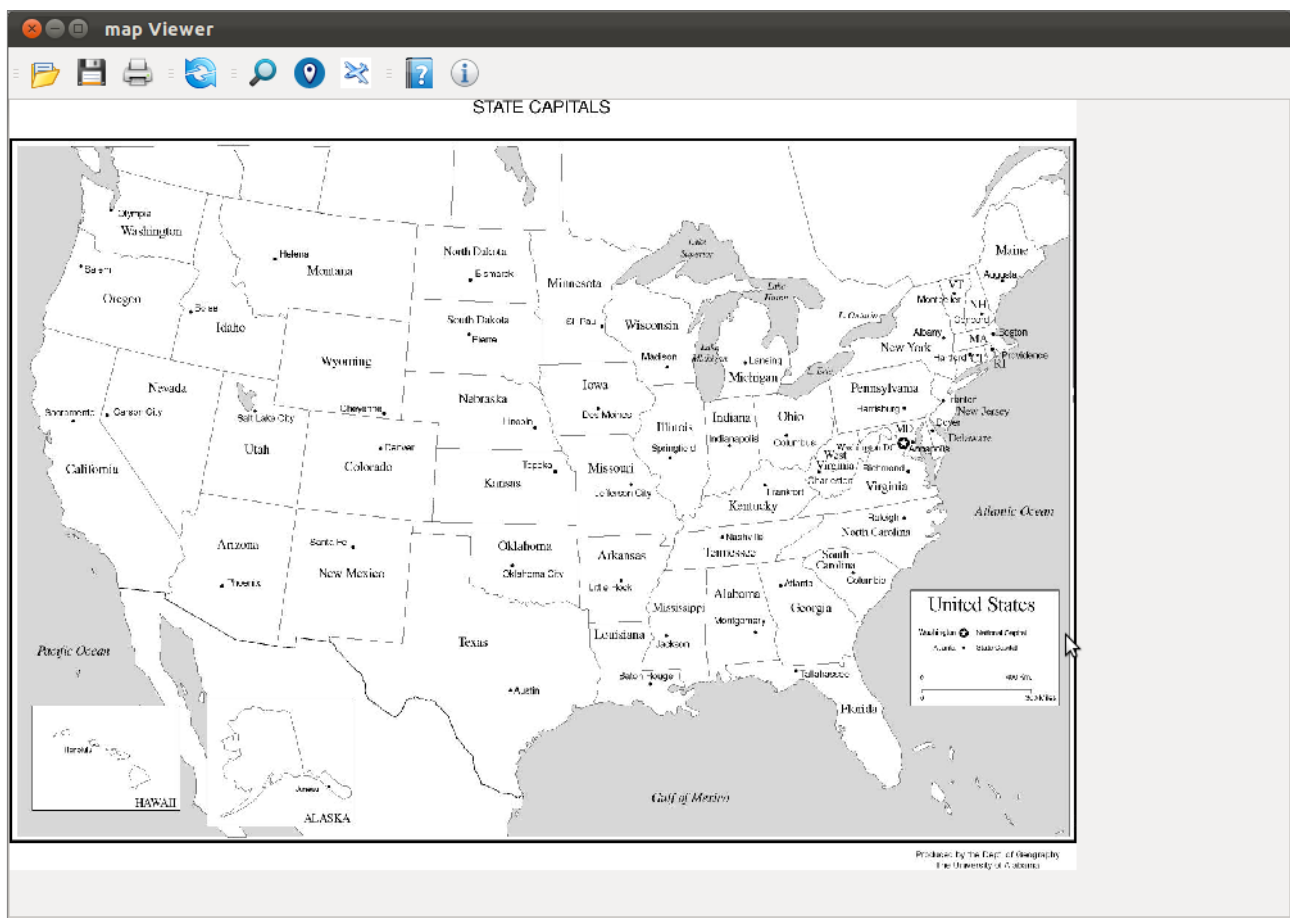
Objective

The purpose of this project is going to build up a flight search program which will include the following functions.

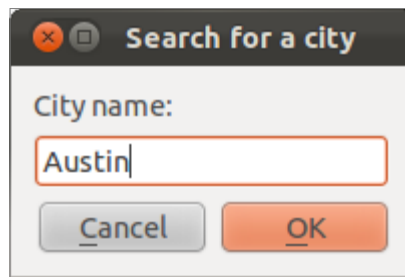
1. Open a map
2. Save changes on a map
3. Print a map
4. Reset the map view (to fit in the window; clear the changes and marks on the map)
5. Search a city by name
6. Locate a city according to longitude and latitude
7. Search flight between two cities: Specify two cities, program can show out all the flight between these two cities, including direct and indirect flight. Users can click on the flight and find out more information.
8. Animation of the flight route: After clicking on the specific flight path, the program will show a little animation. A small airplane will move along the path. The states on the route the plane passes by will be colored.
9. Display of flight information: After clicking on the specific flight path, the program will display flight information on the side of the window.

Current Status

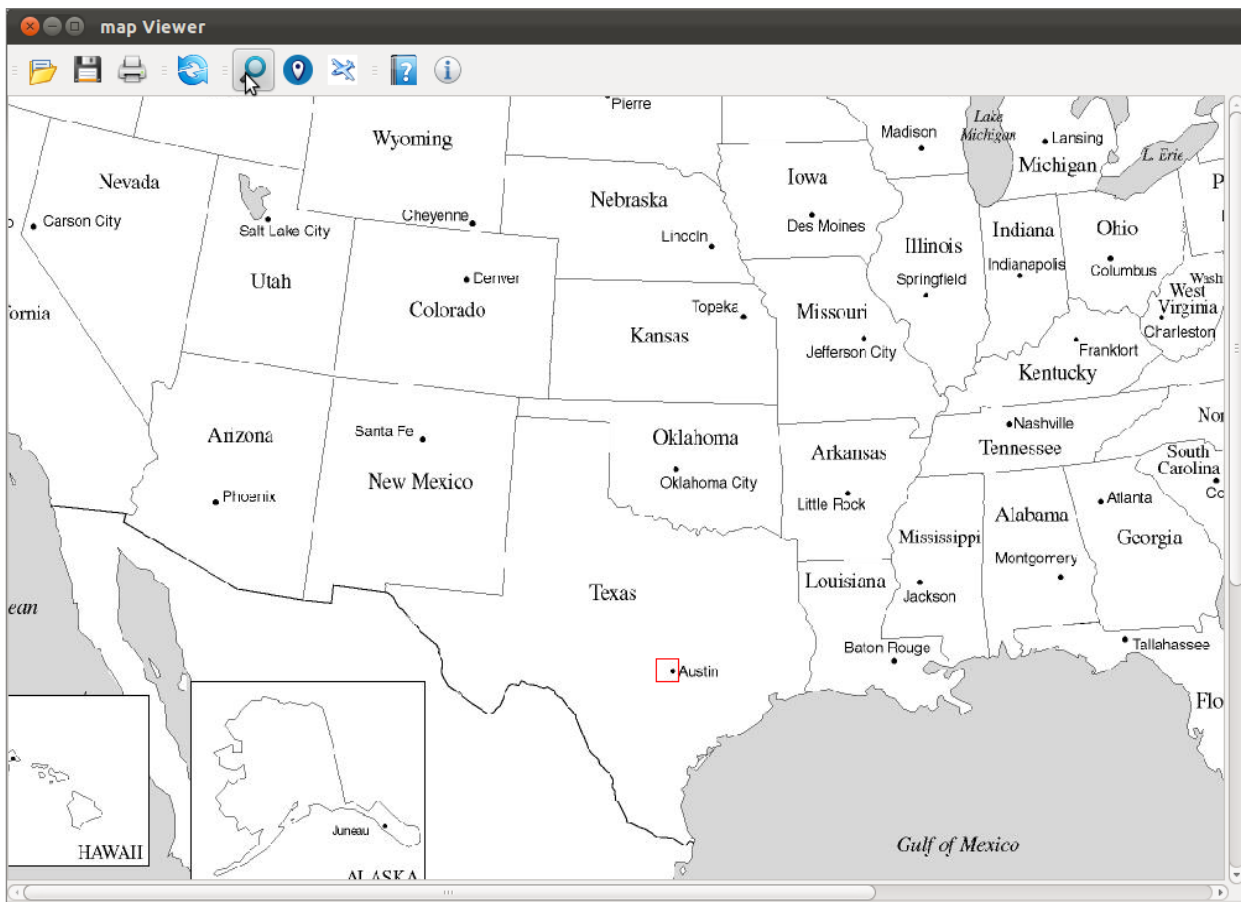
The current program supports the basic functions of an image viewer, such as opening a map, zooming and panning the map. Below is the main screen after opening a US map,



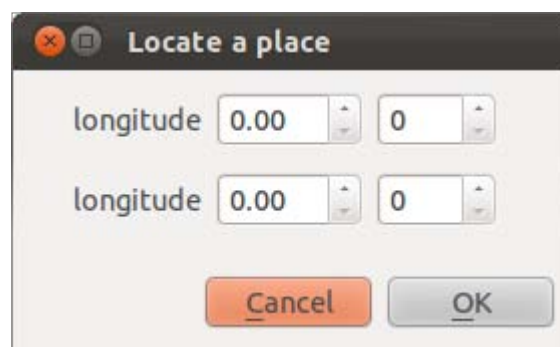
We have also implemented the user interface of searching a city by name. After user click the search icon, an input window will pop up to ask the user enter city name,



If the user enters the city name “Austin”, the click “OK”, the city will be marked in the map as below (this is the window after zooming in and panning),



We also implemented the pop up window after user chooses to locate a place. It allows the user to enter the longitude and latitude of the place. We want the program to mark the place in the map as well as the nearest city around the place, but this is still under implementation.



Tasks in progress

1. Locating a place according to longitude and latitude, as well as the nearest city
2. Search flights between two cities
3. Showing flight information
4. Animation of the flight routes
5. Save the marked map
6. Print the current map

Problems encountered and solutions

1. We initially would like the search and other functions to be placed in the right column of the window but we are not very sure how to implement this.
2. We used Qt Designer to design the pop up window, but we are currently facing some problems when we want to retrieve the user input from those windows.
3. We want to have animation when user clicks on certain flight route. There will be a small plane moving from the origin to the destination, and the states passing by will be colored. The origin, destination, and transfer city if exists, will be marked in different colors.

As for the approaches, we will do more researches online and use Qt Assist to find the methods to solve the problems. We would also want a consultation session to discuss what we have done and how we can improve.