

# User Manual for Demo Application 2

## 1. Introduction

The second demo application is implemented to show image-based path finding features of EgeNav. To run the demo application, just compile and run the *tr.edu.ege.cs.egenav.demo2.DemoApplication2\_V1\_1* class.

The demo application comes with 3 map images which are placed under *./images/* directory. If you want to try this application with another map image, just place the image under *./images/* directory which is on the local path. In the map image, the pathways should be in white and non-pathways (borders) should be in black.

## 2. Demo Application

In this section, the usage of the demo application will be described. A screen capture of the application at start-up is shown in Fig. 1.

The demo application supports

- path finding in maps represented as raster images,
- getting textual and visual direction instructions for travelling from one location to a destination location,
- listing junction points and the available directions (in degree angles) relative to the heading direction in each junction point on the path,
- listing turning points and the turning angle (in degrees) relative to the heading direction in each turning point on the path.

The application considers white colored area as pathways and black colored area as non-pathways (borders) on the image. The *Info* panel at the left is for read-only purposes. Map image can be selected from the combo box above the map. This combo box lists all of the image files under *./images/*. If you want to try this application with another map image, just place the image under *./images/* directory.

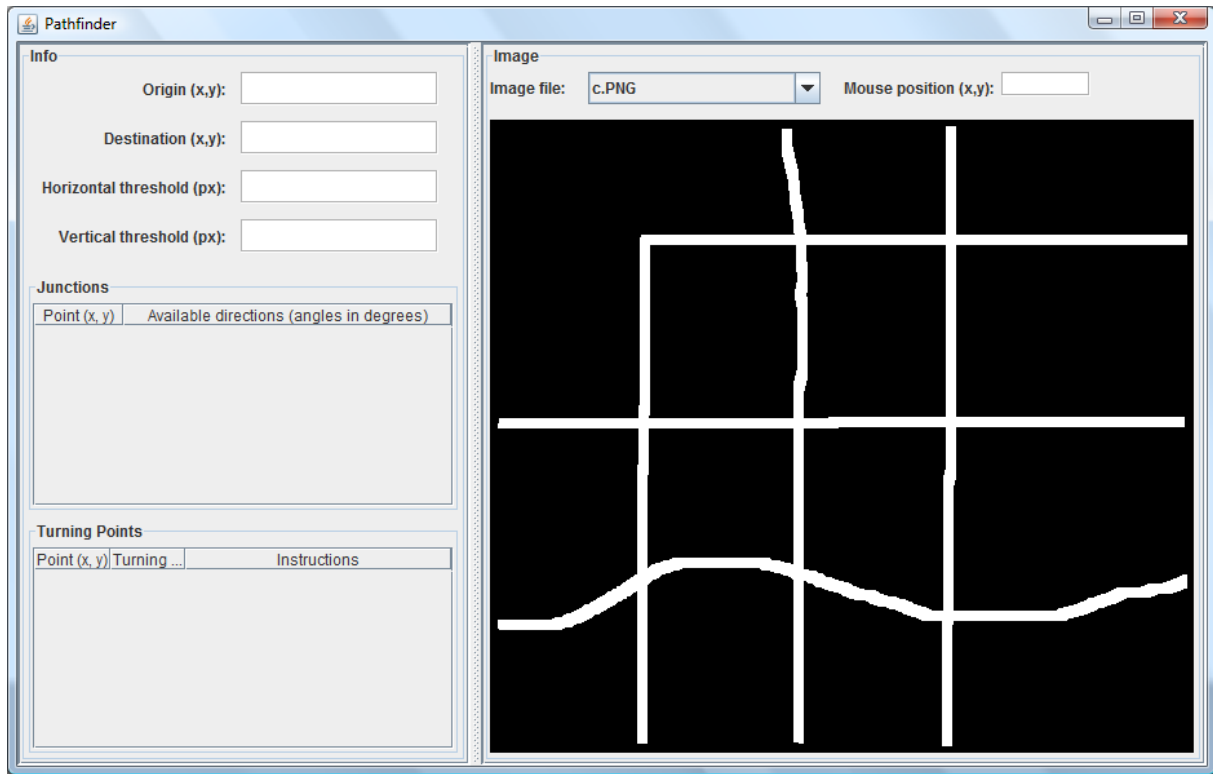


Fig. 1. Screen capture of the application at start-up

If you select 2 points (origin and destination) by clicking on the white area in the image, then the application finds a route. This route is shown to the user in red color as shown in Fig. 2. In the *Info* panel origin and destination coordinates and the detected horizontal and vertical thresholds are shown to the user in the related text boxes. The EgeNav framework allows usage of user determined threshold values. However in this application, routes are found by using auto-detected horizontal and vertical thresholds. Junctions and turning points are listed in tables to the user. In *Junctions* table, coordinates of the junction points and the available directions (in degree angles) relative to the heading direction in each junction point on the path are listed to the user. In *Turning Points* table, coordinates of the turning points and the turning angle (in degrees) relative to the heading direction in each turning point on the path and textual instruction for this point are listed to the user. If you click on a row of the each table, that point is highlighted on the image by drawing a colored circle as shown in Fig. 2. Junction points are highlighted in blue, where as the turning points are highlighted in green.

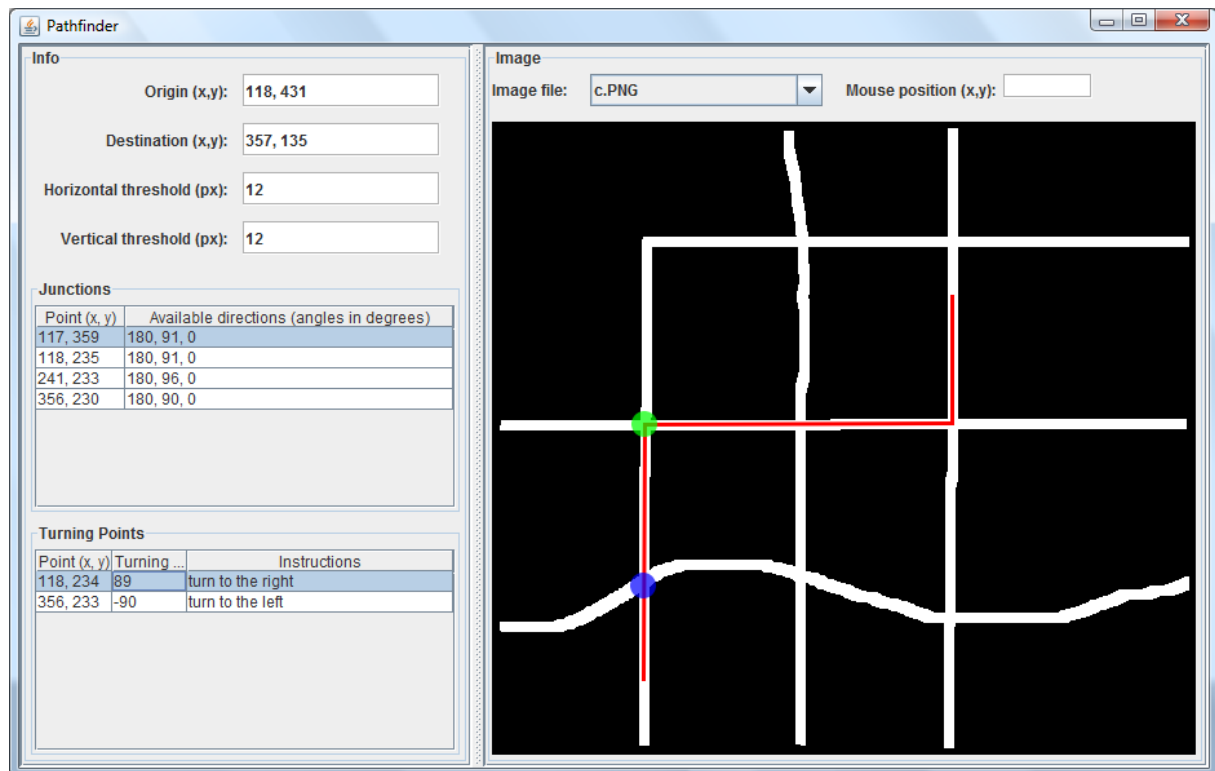


Fig. 2. Screen capture of the application after selecting 2 points