

openorienteeering Mapper

Roadmap

Finished parts:

- Support defining all symbol types:
 - Points
 - Lines
 - Areas
 - Text
 - Combined
- Main drawing tools:
 - Points
 - Paths
- Edit tool to move objects and their control points
- Printing, direct PDF and raster image export
- Implement Undo/Redo capability
- Important editing tools:
 - Convert other object types to paths
 - Change an object's symbol
 - Fill a line or add a border to an area
 - Flip side of objects on lines
- Important map operations:
 - Change map scale
 - Scale all symbols
- Symbol browser operations:
 - Scale symbols
- Build ISOM symbol set

Milestone 1:

Make basic map drawing possible using Mapper on the desktop

- Main drawing tools:
 - Circles
 - Ellipses
 - Rectangles
 - Text
- View tools:
 - Center view on map
 - Set custom zoom factor
- Important editing tools:
 - Cut, Copy, Paste

- Add / remove points on paths
- Snapping for editing tools
 - Following existing paths and appending to existing paths with the path draw tool
- Cut objects
- Connect lines
- Cut holes into objects
- Rotate objects
- Close / connect paths
- Measure distances
- Important map operations:
 - Rotate map
 - Import other map
 - Exchange symbol set
- Symbol browser operations:
 - Sort symbols
 - Hiding and protecting symbols
 - Copy, Paste
 - Select unused symbols
- "Problem widget" showing
 - Templates which are not found
 - Objects which do not meet the minimum size determined by their symbol
- Build ISSOM symbol set
- OCAD file import
 - Version 8
 - Version 10
- OCAD file export, version 8

Milestone 2:

Provide an Android version of Mapper with an adapted user interface to support surveying

- Evaluate the Necessitas (Qt on Android) project, determine if it supports everything the application needs and works stable
- Design the mobile user interface
- Implement the mobile user interface
- Implement surveying features
 - Enable rotating the map based on a digital compass sensor and determine if its precision is sufficient
 - Read values from the internal GPS unit
 - Display the current position on the map
 - Center the map on the current position
 - Draw helper lines (e.g. in 10m steps around the current position, a circle displaying the GPS positioning certainty, straight forward line, ...)
 - Read values from an external GPS unit connected via bluetooth
 - Average current position and set point object there
 - Definition and use of template configurations to quickly switch between multiple

- templates
- Implement taking georeferenced photos

Milestone 3:

Add less important features and polishing and release a stable version 1.0

- Fixed angles for editing tools
- Scale and rotate arrows for the move tool
- Color correction (plus, add an option for export to image to include it there or not)
- Layer management
- Object grouping
- Multiple viewport support
- Helper grid
- Hiding all templates
- Make shortcuts adjustable, implement program settings
- GPS window for the desktop version
- Advanced template types
 - Map templates
 - Sketch templates
 - Laserscan templates
- Template grouping
- “Move by hand” for templates
- Numeric transformation window for templates
- Numeric transformation window for objects
- Image template operations: trace lines, make color transparent
- Less important drawing tool:
 - Numeric object creation tool
- Less important editing tools:
 - Change all symbols of one type to another
 - Change layer of objects
 - Round corners of rectangle
 - Grow/Shrink object based on curve normals
 - Union of objects
 - Intersection of objects
 - Difference of objects
 - Distribute object on path
 - Interpolate paths
 - Subdivide path
 - Get GPS coordinates for location
- Less important map operations:
 - Create excerpt
- Make a legend object type to simplify the creation of legends and give a warning for objects where a legend entry is required but does not exist
- Write documentation and create in-application help