

Exploratory Testing

EyeTal Map Editor

The purpose of this test is to evaluate the EyeTal Map Editor UI.

The test takes around 60 minutes and comprises of multiple tasks. Tasks are given one-by-one on an A4 page. Each page starts with some instructions and hints about the mapping application.

For each task:

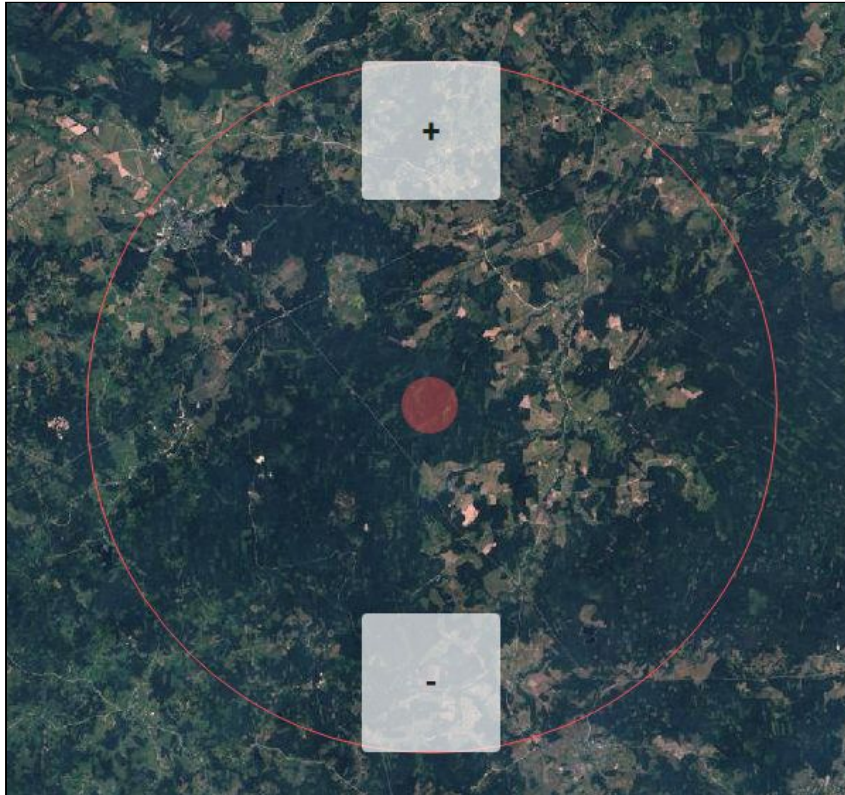
- Read through the instructions and try to memorize the task. The paper will be available during the test, but use it as a last resort.
- If you are ready, say “**Start!**” and start!
- **Think-aloud (!)** : During the task, describe what are you doing and thinking.
- When you are done, say “**Done!**”

Navigation

You can **pan** the map by looking at its edges.

You can **zoom** the map:

1. Look at point on a map where you wish to zoom - buttons will appear
2. Use “+” and “-” buttons to zoom in and and out



Task 1

Say “**Start!**”

- Select name **Mati** from the list of users and close the modal.
- Navigate to **Tallinn - Raekoja plats**.

Say “**Done!**”

Adding a point

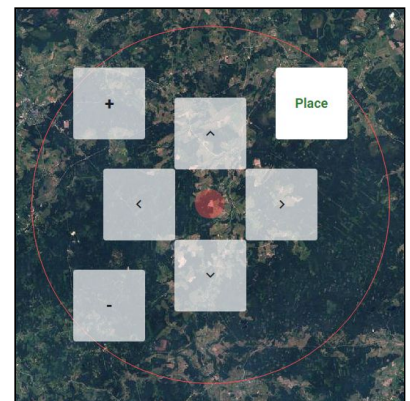
Adding a point is a two step process. First you have place the point marker on the map, and then add some textual information to it - metadata.

To add a point:

- Select “**Points**” layer from the Layer menu
- Choose “**Add Point**” tool from the Tool menu.

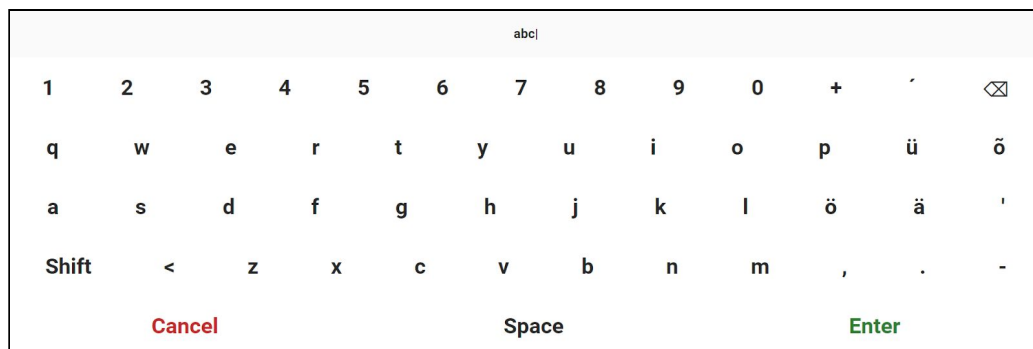


- Look at a location where you wish to place the point - Menu with buttons will appear
- Adjust the location using arrow buttons
- Place the point using “Place” button
If the point is placed in a wrong position, it can be simply replaced by using the “Place” button again.
- Look at “Save” on the header - A metadata modal will appear.



To add metadata

- Look at a metadata field you wish to modify - keyboard will appear
- Use keyboard to type
- When complete look at “Enter” and “Save”



Task 2

Say “Start!”

- Navigate to **Tallinn Airport**.
- Place a point marker on one of the parking aeroplanes, on layer “**Points**”.
- **Save** - Metadata form will appear.
- Type “**Plane 1**” into metadata field “Type”
- **Save**

Say “Done!”

Editing an existing feature

Before you can edit an existing feature, it has to be selected. You can select an existing feature with “**Select Feature**” tool from the Tool menu. With the tool selected, look at your object and when a menu appears on it, hit “Select”.

After you have selected the feature you can move it on the map with the “Move point” tool and also edit its metadata.

To move a point with the “Move Point” tool, select it from Tool menu and then look at your point and use the arrow keys to nudge it.

To edit metadata of a feature:

- Ensure your feature is selected - metadata menu will be available on the right
- Look at “**Edit**” in metadata menu
- Look at a metadata field you wish to modify - keyboard will appear
- Use keyboard to modify the value

Task 3

Say “Start!”

- Select the point on the aeroplane you marked in Task 2
- Move the point onto another aeroplane
- Edit metadata field “Type” to “**Plane 2**”
- **Save**

Say “Done!”

Adding a line feature

To add a line feature:

- Choose “**Lines**” layer
- From tools menu select “**Add Line**”
- Place points on the map by looking at the locations and confirming by looking at “Place” button
- **Save**

Task 4

Say “Start!”

- Select Layer “**Lines**”
- Add a path from plane’s current position to eastern end of the runway.
Use the most direct route but do avoid crossing the grass.
- Write “**Path**” into the metadata field “Type”
- **Save**

Say “Done!”

Adding a polygon feature

To add a polygon feature:

- Choose “**Polygons**” layer
- From tools menu select “**Add Polygon**”
- Place points on the map by looking at the locations and confirming by looking at “Place” button”

Task 5

Say “Start!”

- Digitize **Tallinn airport building** by adding a polygon feature on layer “**Polygons**”.
- Set metadata field “Maakasutus” to “**Airport**”
- Save

Say “Done!”

Removing points from a feature

To remove point from a feature:

- Select the feature you wish to modify using “**Select Tool**” - ensure you have the right layer active.
 - Choose “**Remove Point**” tool
 - Look at point you wish to remove
 - When the menu appears confirm the removal by looking at button “Remove”
 - **Save**
-

Task 6

Say “Start!”

- Remove two northernmost points from the polygon geometry you just created. (Tallinn Airport)
- Save the result.

Say “Done!”

Removing features

To remove a feature:

- Select the feature you wish to modify with “**Select Feature**” tool - ensure you have the right layer active.
 - Choose “**Remove Feature**” tool
 - Look at feature you wish to remove
 - When the menu appears confirm the removal by looking at button “Remove Feature”
-

Task 7

Say “Start!”

- Remove all features that were created - the polygon, the road and the point.

Say “Done!”

This page is for Experimenter only.

This page contains a step-by-step instructions for conducting the user study

Preparation for session

- Start SignalR
- Stop Kaspersky
- Start EyeTal Map Editor, minimize
- Start screen recorder

Introduction on participant arrival

- Tell about the purpose of testing
- Tell about recording of screen and camera
- Start recording
- Fill out form part 1
- Tell about the capabilities of the eye tracker.
- Calibrate the tracker
- Play the game - help, answer questions etc.

Test

- Present the introductory paper (page No.1) to the participant and go through the main points.
- Present Task 1
 - Ask was there anything that was difficult? - explain
 - Ask was there anything that was easy to do? - explain
- ...
- Present Task 2, Task 3, etc..
- ...
- Thank you! :)

End