

Discovery Trail

USER MANUAL

Discovery Trail is browser based educational map application for creating trails and showing user-oriented interactive content in pre-defined geographical location in various playful ways.



Discovery Trail
Systematic use of digital
outdoor learning tool

Co-funded by the
Erasmus+ Programme
of the European Union



UNIVERSITY OF HELSINKI

Natur Erlebnis Park
SCIENCE EDUCATION CENTER



TALLINN UNIVERSITY



ELLINOGERMANIKI
AGOGI

- The **Discovery Trail (Avastusrada)** is a browser-based application that helps you create interactive outdoor trails www.avastusrada.ee, where players can follow marked interactive trails, answer questions, get information, do exercises, study surroundings.
- The **Discovery Trail (Avastusrada)** was developed in 2013 for **Environmental Board** with focus on teaching environmental and sustainability issues in **centres of environmental education**.
- In 2019 we got it back for **Tallinn University** for further development.
- Currently in use in **Erasmus+ KA2 project** and in base research of TLU **research group SEEMIK**.
- Created for **centres of environmental education**, now also used by **schools** and some **private companies** (e.g. for language learning or tourism purpose).



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnis Park
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



- Educators can create trails **for everyone** (topics, age, surroundings, language etc) and everyone who has **smartphone or tablet** with **any operation system**, **GPS** and **mobile data** (at least 3G) can follow it.
- The **trailpoint** can be information board, multiple choice test, open text responses or picture.
- The application allows to **integrate the subjects** of natural sciences and humanities through practical activities and inquiry learning and to enhance general competencies.
- The **player** has to **find** the way from one **trailpoint** to an other, interactive map showing players **location in realtime**. The task opens **only** if the player is in **predefined radius** from trailpoint.
- The players are encouraged to use **other applications** or **information sources** for solving the tasks (IT competences).



- Applications like the Discovery Trail are **cheaper** and **flexible** alternatives for physical information boards of outdoor learning trails.
- As the digital devices are part of everyday life of the younger generation therefore they are **more motivated** to learn outside using applications like Discovery Trail.
- Creating Discovery Trails is easy and it gives opportunity to **consider** the current **characteristics** of surroundings and players.
- With specific design of tasks it is possible to **evaluate** the player **development** and **effectiveness** of the trail.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnis Park
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



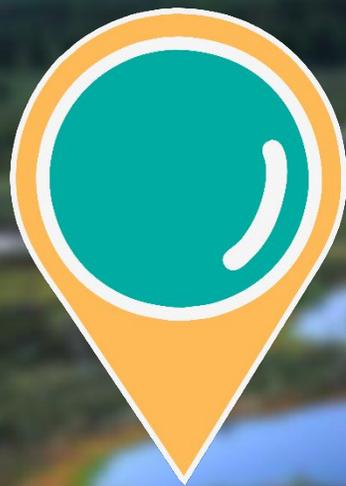
ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



- **The educator** can create the trail either in office or directly on the landscape.
- The educator has **real-time overview** of “explorers” progress (safety).
- The educator get **responses in real-time**, semiautomatic control - depending on the task type it may be already marked as correct/incorrect.
- **Pictures, photos, music files or videos** can be used as a question or information.
- The **player** has to **find** the way from one **trailpoint** to an other, interactive map showing players **location in realtime**. The task opens **only** if the player is in **predefined radius** from trailpoint.
- The players are encouraged to use **other applications** or **information sources** for solving the tasks (IT competences).





How to play Discovery Trail?

Discovery Trail

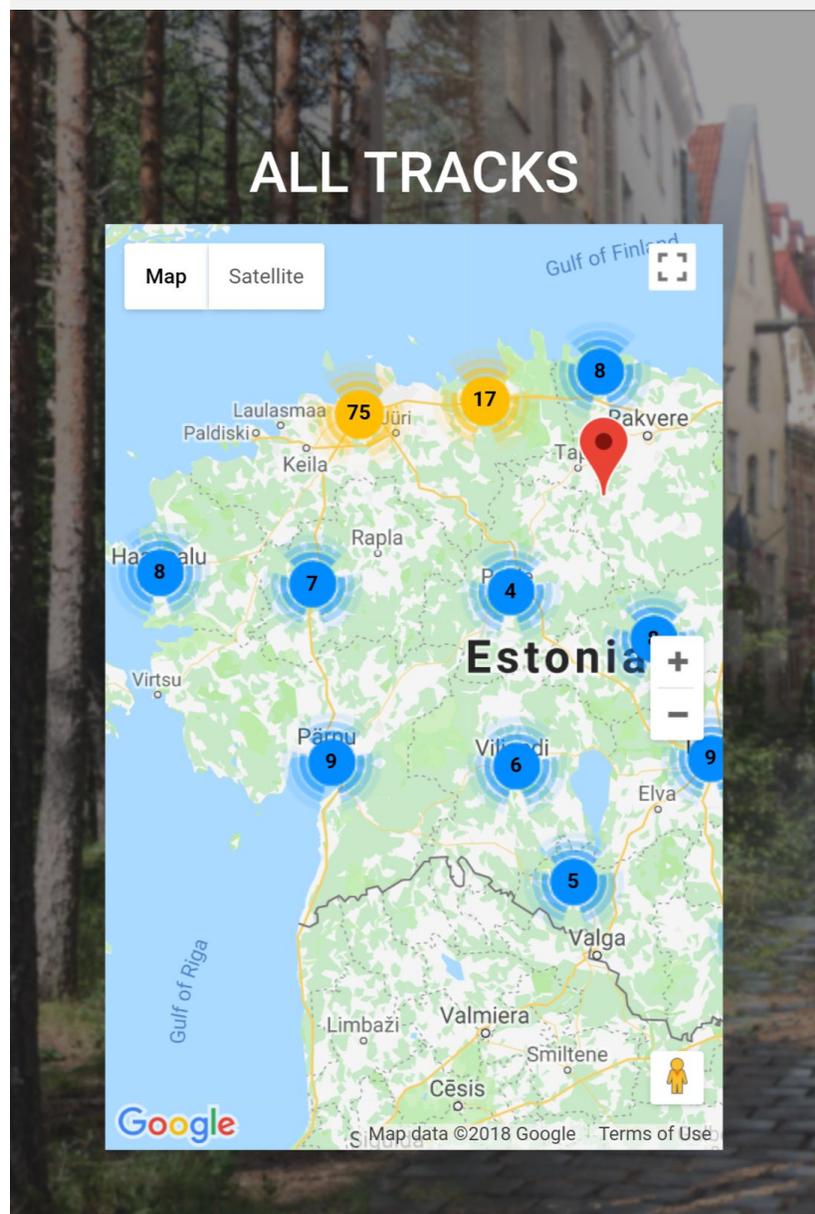
Smart trails for everyone



TALLINNA ÜLIKOOL



On the opening page of avastusrada.ee, there is a short description, a map with available tracks, and links to the FAQ section (currently outdated version).



BY CATEGORIES

Environmental education



Trails for visitors of Environmental Centers.

School education



Trails for schools.

Recreation



Trails for adventure and edutainment.

You can choose between three possibilities: trails for Environmental education, School education, or Recreational purposes.

Players can choose the nearest trail from the map or from the list.



ELLINOGERMANIKI
AGOGI



UNIVERSITY OF HELSINKI

Natur ErlebnisPark
SCIENCE EDUCATION CENTER

Co-funded by the
Erasmus+ Programme
of the European Union



Discovery Trail
Systematic use of digital
outdoor learning tool

-1° 4G 74% 15:04:17

<https://kool.avastusrada.ee/en>

AVASTUSRADA

Environmental education Recreation

School education

Locations

Map Satellite

Gulf of Finland

42 Jüri 15 Rakvere

Paldiskio Keila Tapa

Haapsalu Rapla Paide

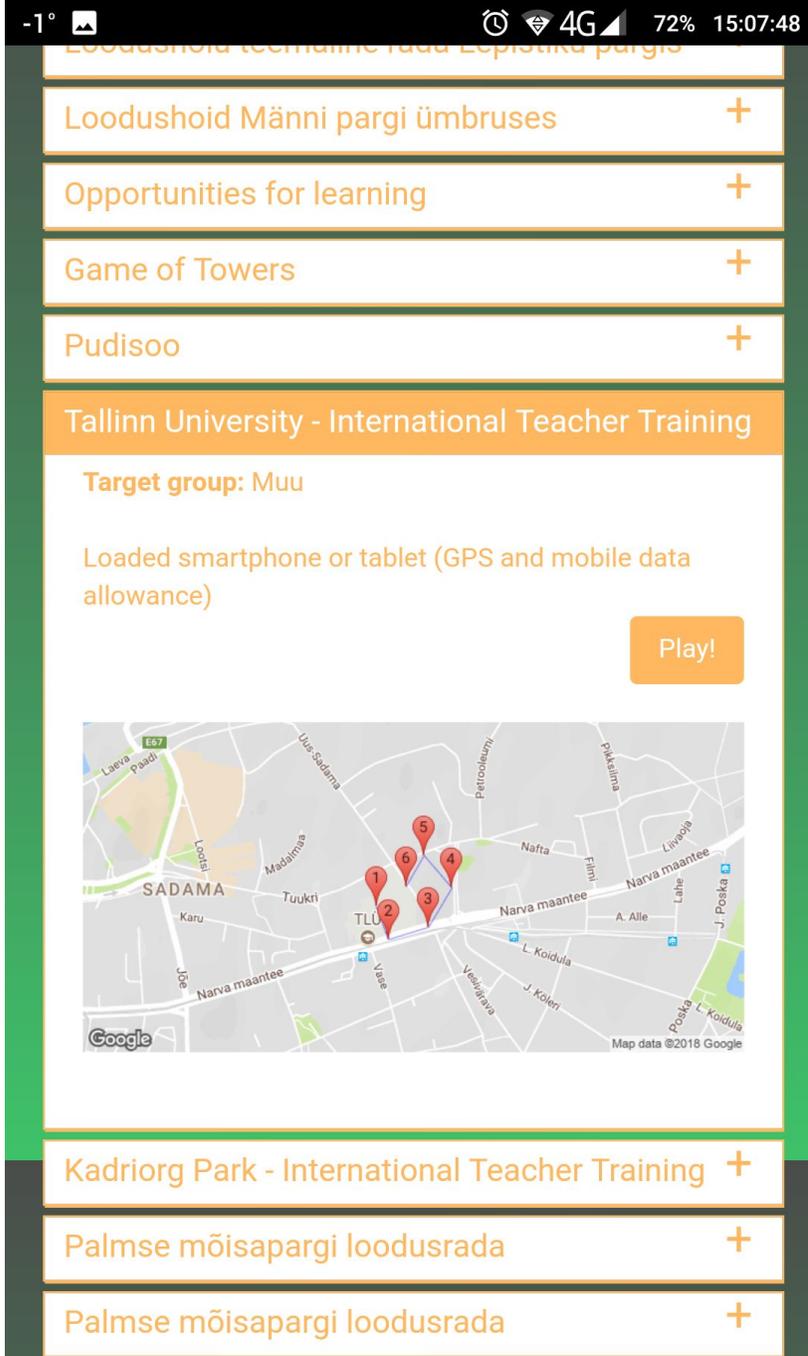
4

5

Estonia

Virtsu Pärnu Viljandi Tartu

Elva Võru

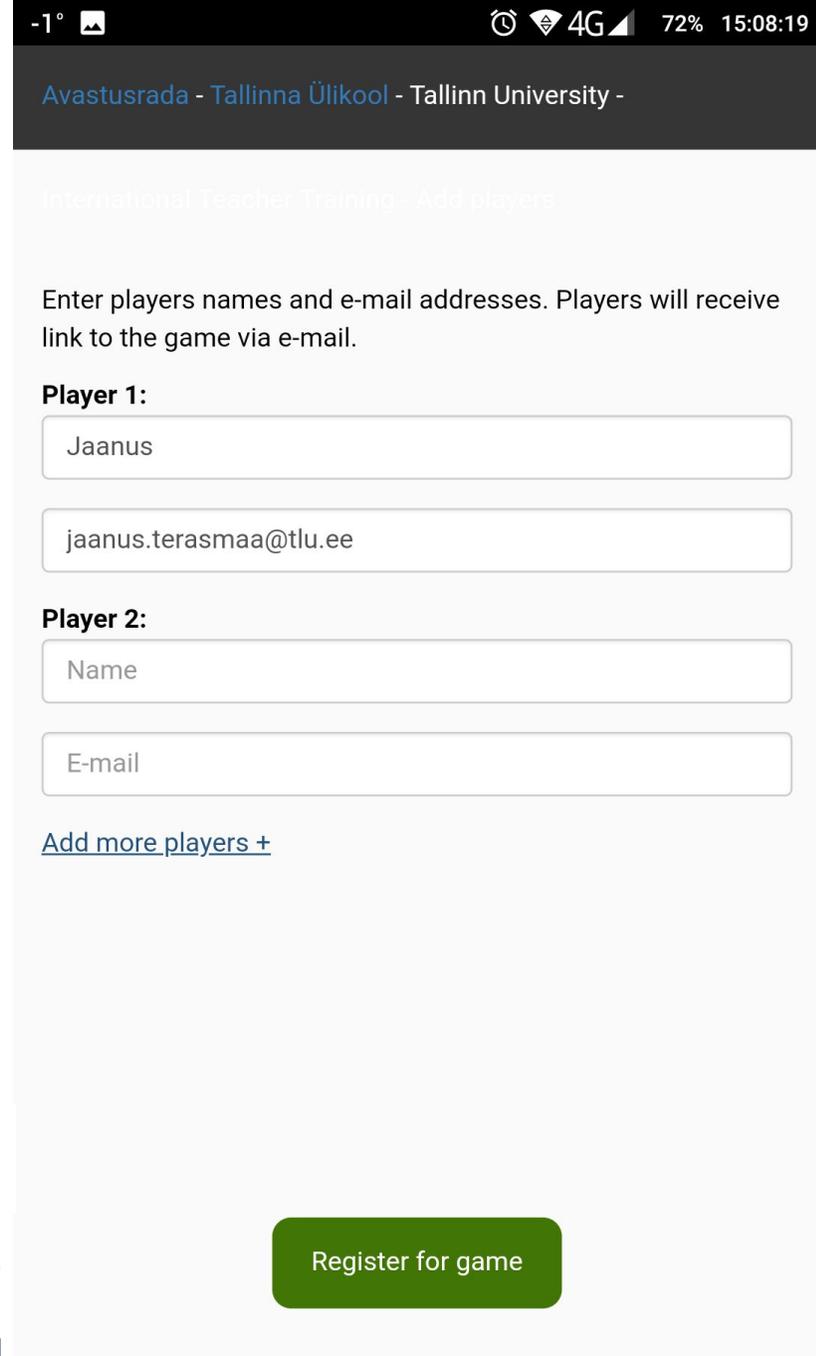


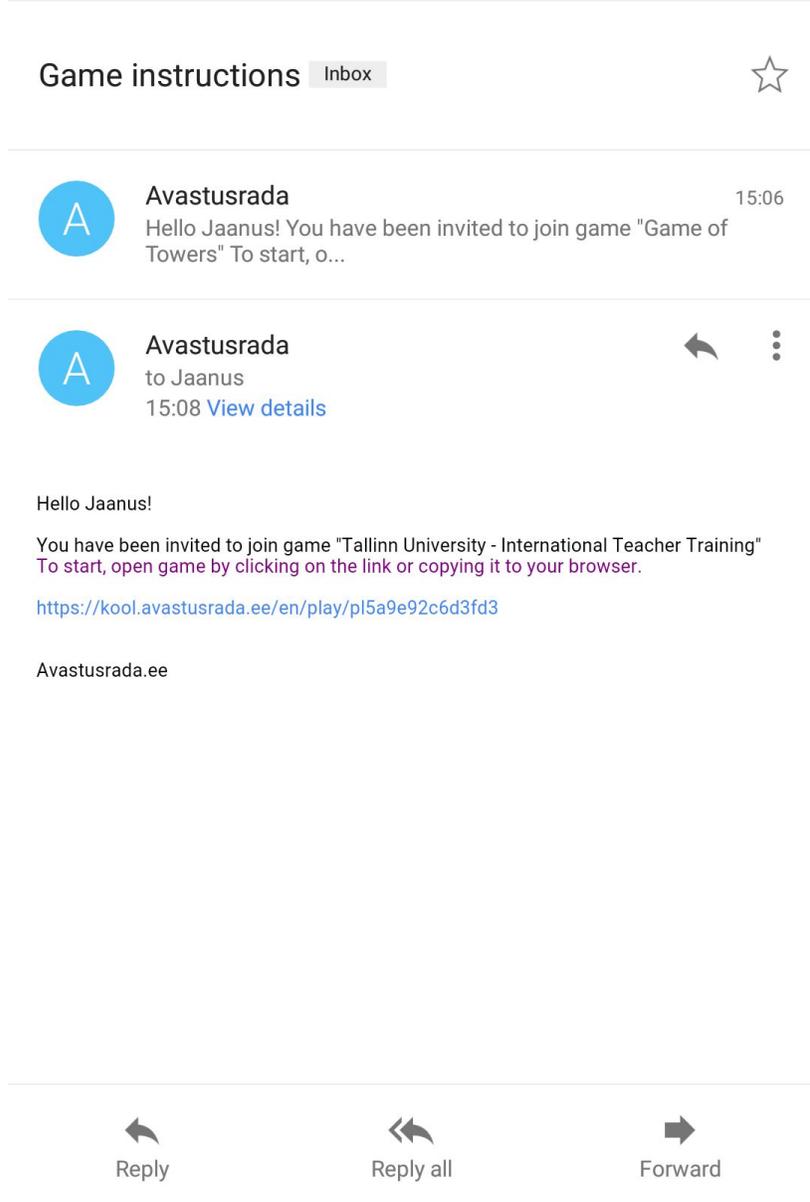
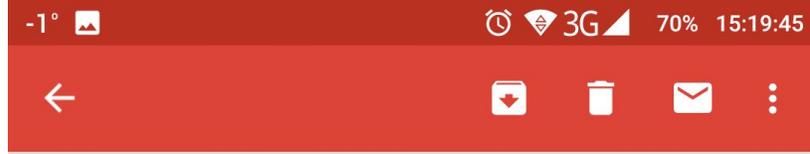
On the trail information screen, players see the locations of the trail points.

On the player registration screen, an unlimited number of players can join the game. Names and emails are needed.

All these steps, including the previous ones, can also be done from home using a desktop computer or laptop.

After pressing "Register for game", an email will be sent.

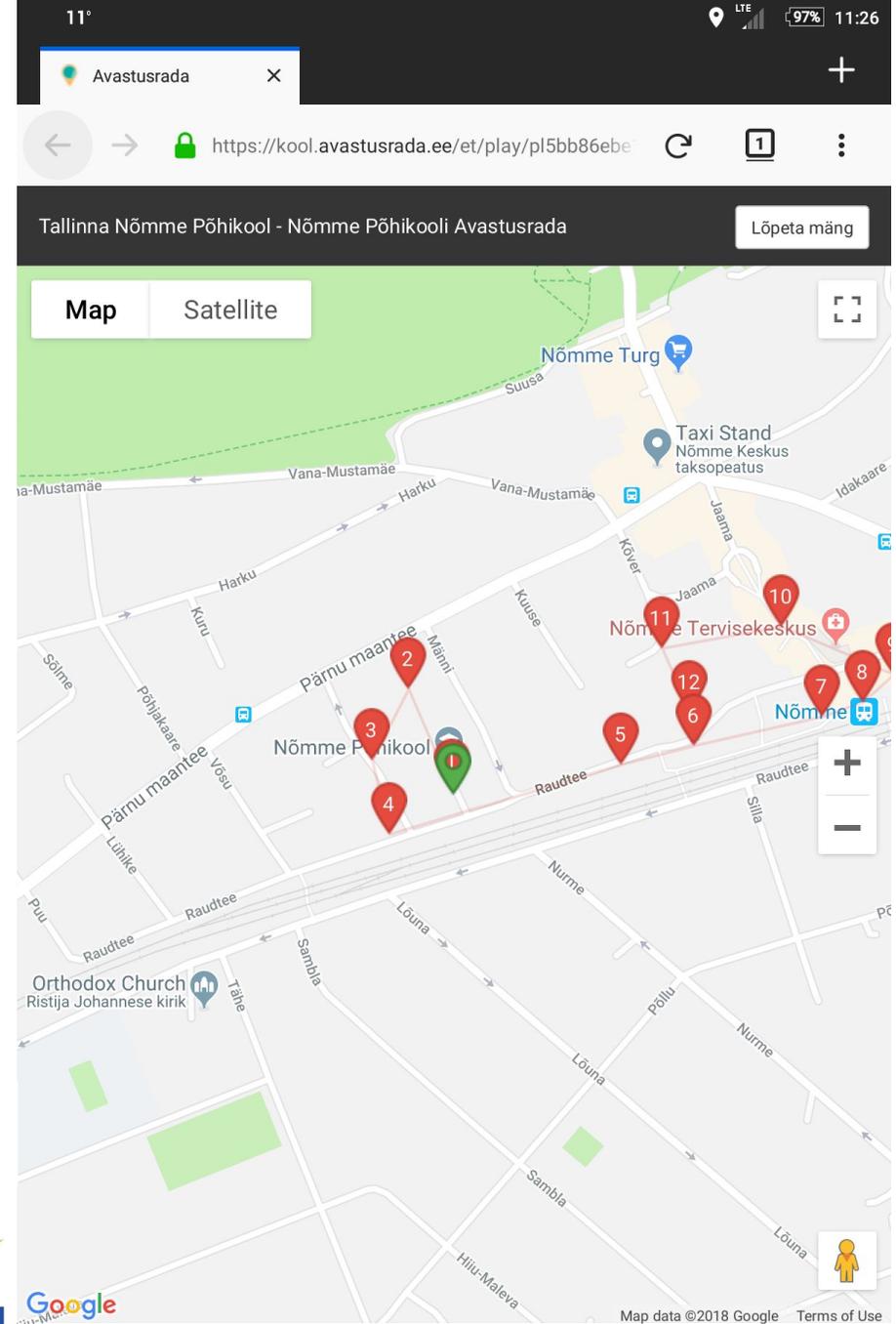


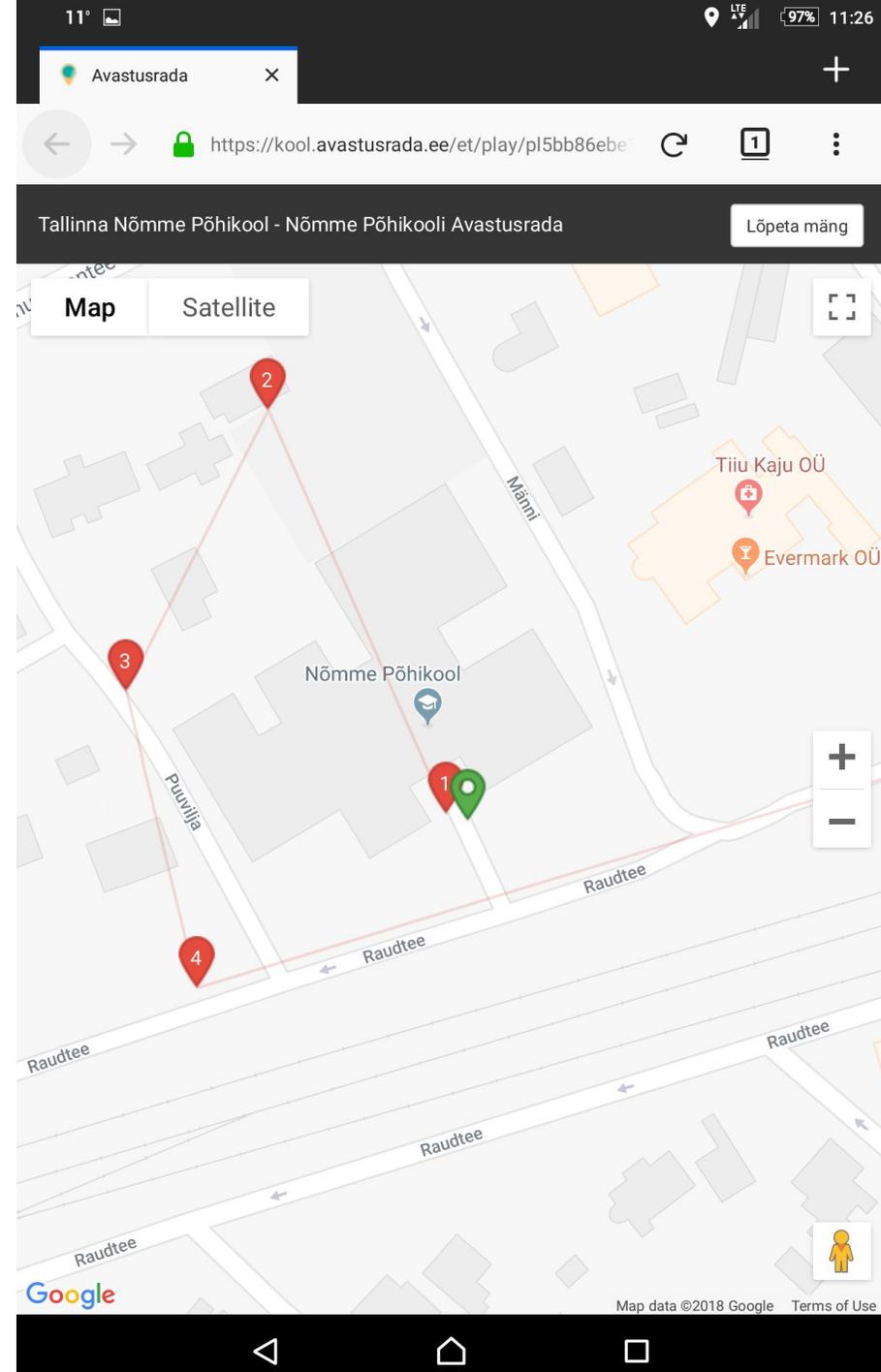


After clicking the link, a new browser window will open where the player can see all trail points.

Red pins represent trail points, while a green pin represents the player.

Questions will open when the player is within the predefined range (which can be changed in the game settings).

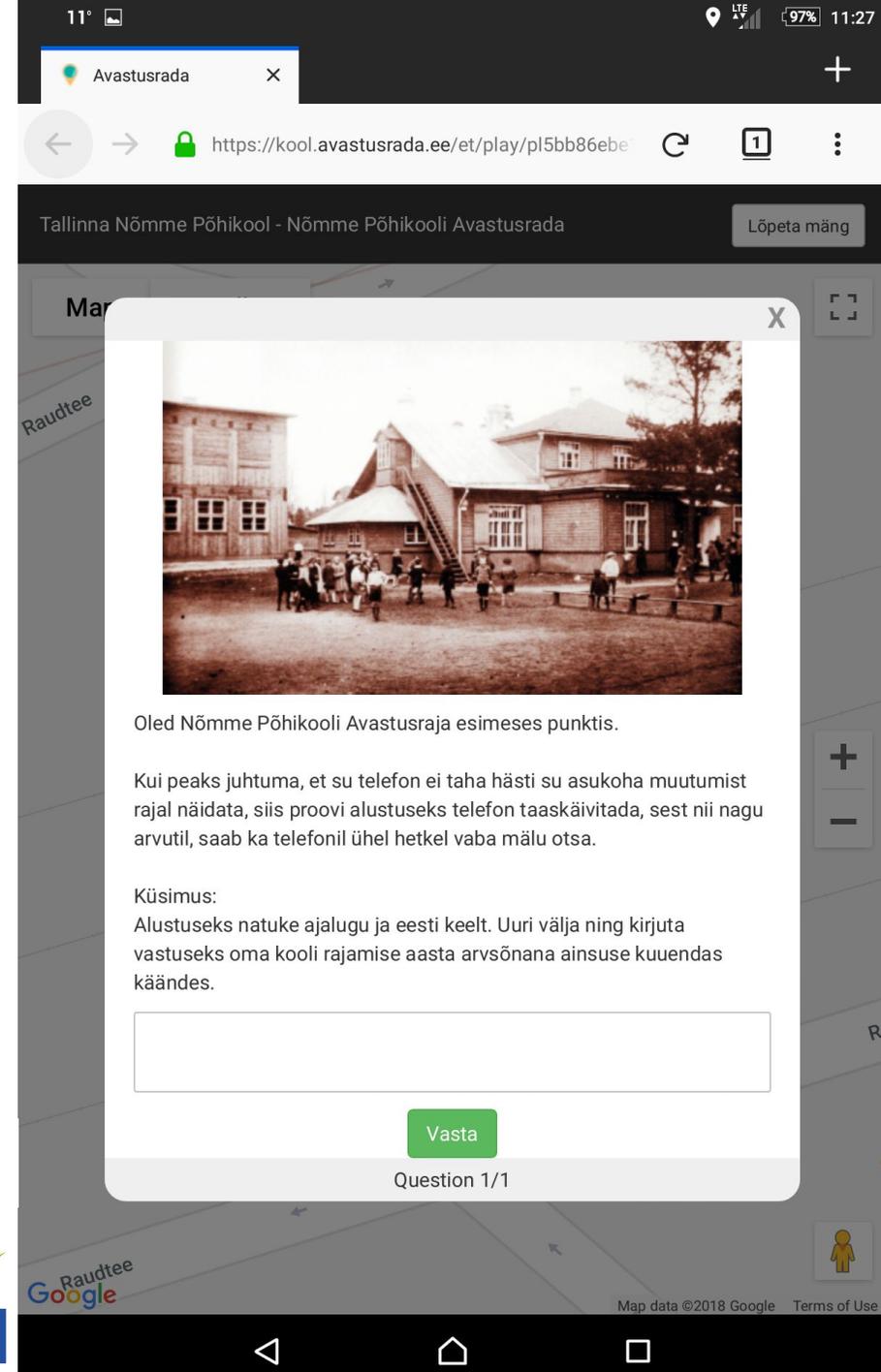




On the map, players can zoom in and out, use satellite imagery, or even street view (if available) to find the exact location of the trail points.

Avastusrada is not a navigation device; it doesn't provide directions or voice commands. It operates as a map on which players must find their way.

This way, players will learn how to use more classical navigation methods and must be able to read the map in order to orientate themselves in the landscape.



Avastusrada

https://kool.avastusrada.ee/et/play/pl5bb86ebe

Tallinna Nõmme Põhikool - Nõmme Põhikooli Avastusrada

Lõpeta mäng

Nüüd oled Puuvilja tänaval.

See tänav on oma nime saanud siin olnud suure õunaaia järgi.

Õunapuu on põhjapoolkera parasvöötme kõige vähenõudlikum, laiema levikuga ja enim kasvatatud viljapuu. Meie looduslik liik mets-õunapuu on siin kasvanud vähemalt viis tuhat aastat, kultuurtaime aed-õunapuu ajalugu Eestis ulatub 800 aastani. Esimesed õunaaiad asusid Eestis kloostrite juures, näiteks Tallinna Mihkli tsistertslaste kloostri juures 13. sajandi lõpul. Alates 16. sajandist on õunaaedu Eestis rohkem.

Küsimus: Milline järgnevast pole õunasort?

- Tellissaare
- Rumba
- Kuku
- Polli kaunitar

Vasta

Question 1/1

Orthodox Church
Ristija Johannese kirik

Map data ©2018 Google Imagery ©2018 CNES / Airbus, DigitalGlobe. Terms of Use

Once the question is answered and submitted, it cannot be changed.

If a trail point is too far away, it cannot be opened.

Avastusrada

https://kool.avastusrada.ee/et/play/pl5bb86ebe

Tallinna Nõmme Põhikool - Nõmme Põhikooli Avastusrada

Lõpeta mäng

Nüüd oled Puuvilja tänaval.

See tänav on oma nime saanud siin olnud suure õunaaia järgi.

Õunapuu on põhjapoolkera parasvöötme kõige vähenõudlikum, laiema levikuga ja enim kasvatatud viljapuu. Meie looduslik liik mets-õunapuu on siin kasvanud vähemalt viis tuhat aastat, kultuurtaime aed-õunapuu ajalugu Eestis ulatub 800 aastani. Esimesed õunaaiad asusid Eestis kloostrite juures, näiteks Tallinna Mihkli tsistertslaste kloostri juures 13. sajandi lõpul. Alates 16. sajandist on õunaaedu Eestis rohkem.

Küsimus: Milline järgnevast pole õunasort?

- Tellissaare
- Rumba
- Kuku
- Polli kaunitar

Edasi

Question 1/1

Orthodox Church
Ristija Johannese kirik

Map data ©2018 Google Imagery ©2018 CNES / Airbus, DigitalGlobe. Terms of Use

Avastusrada

https://kool.avastusrada.ee/et/play/pl5bb86ebe

Tallinna Nõmme Põhikool - Nõmme Põhikooli Avastusrada

Lõpeta mäng



Nõmme raudteejaam on kuulnud oma ilusa katusealuse poolest. Esimene puidust jaamahoone ehitati aastatel 1904–1905, 1912. aastal rajati jaamahoone ette uus varikatus ning 1914. aastal täiendav jaamapaviljon. Praegusel kujul on varikatus taastatud 1999. aastal.

Ülesanne: tee Nõmme jaamas pilt sellise nurga alt, mis sulle tundub kõige ilusam ja Nõmmele iseloomulikum. Lisa pilt küsimuse vastuseks.

Browse... No file selected.

Faali suuruse piirang: 50MB

Vasta

Question 1/1

It is possible to use pictures in the heading of every question.

Inside the text, it is possible to use video, audio, additional pictures, forms, and so on with the help of embedded codes.

Avastusrada

https://kool.avastusrada.ee/et/play/pl5bb86ebe

Tallinna Nõmme Põhikool - Nõmme Põhikooli Avastusrada

Lõpeta mäng

Oled jõudnud ühe huvitava kujuga puu juurde. See puu on elu ja tervise juures. Linnaparkides surnud puid naljalt ei leiagi, sest need saetakse juba enne suremist maha.

Looduses surevad puud aga jäävad pikaks ajaks edasi seisma ning neil on oma tähtis roll ökosüsteemis. Võib lausa öelda, et surnud puu metsas on peaaegu sama tähtis, kui elus puu. Väga paljudele mikroobidele, seene-, looma- ja taimeliikidele on lagunev puit oluline elupaik ja/või energiaallikas. Mitmed haruldased liigid ongi kohastunud elama vaid surnud puudel. Seetõttu on surnud puudel bioloogilise mitmekesisuse seisukohast täita äärmiselt oluline roll.

Vaata ka videot:

VIMEO LIIS KURESOO

Surnud puud. Rein Kuresoo
from Liis Kuresoo

Vapramäe 03:05

Question 1/1

It is possible to answer with photo.

Avastusrada

https://kool.avastusrada.ee/et/play/pl5bb86ebe

Tallinna Nõmme Põhikool - Nõmme Põhikooli Avastusrada

Lõpeta mäng



Teadetetahvlid on inimestele olnud väga olulisel kohal - lisaks ürituste ja teenuste reklaamimisele on nende abil saanud tutvuda, leida uue kodu või otsida kaduma läinud koduloomi. Tänapäeval on Tallinnas selliseid tahvleid väga väheseks jäänud, sest sellise suhtlusvormi on üle võtnud internet.

Ülesanne:
Vaata teadetetahvil olevaid kuulutusi ning leia enda jaoks kõige huvitavam või ilusam ning tee sellest pilti. Pilt ongi selle punkti vastuseks.

No file selected.

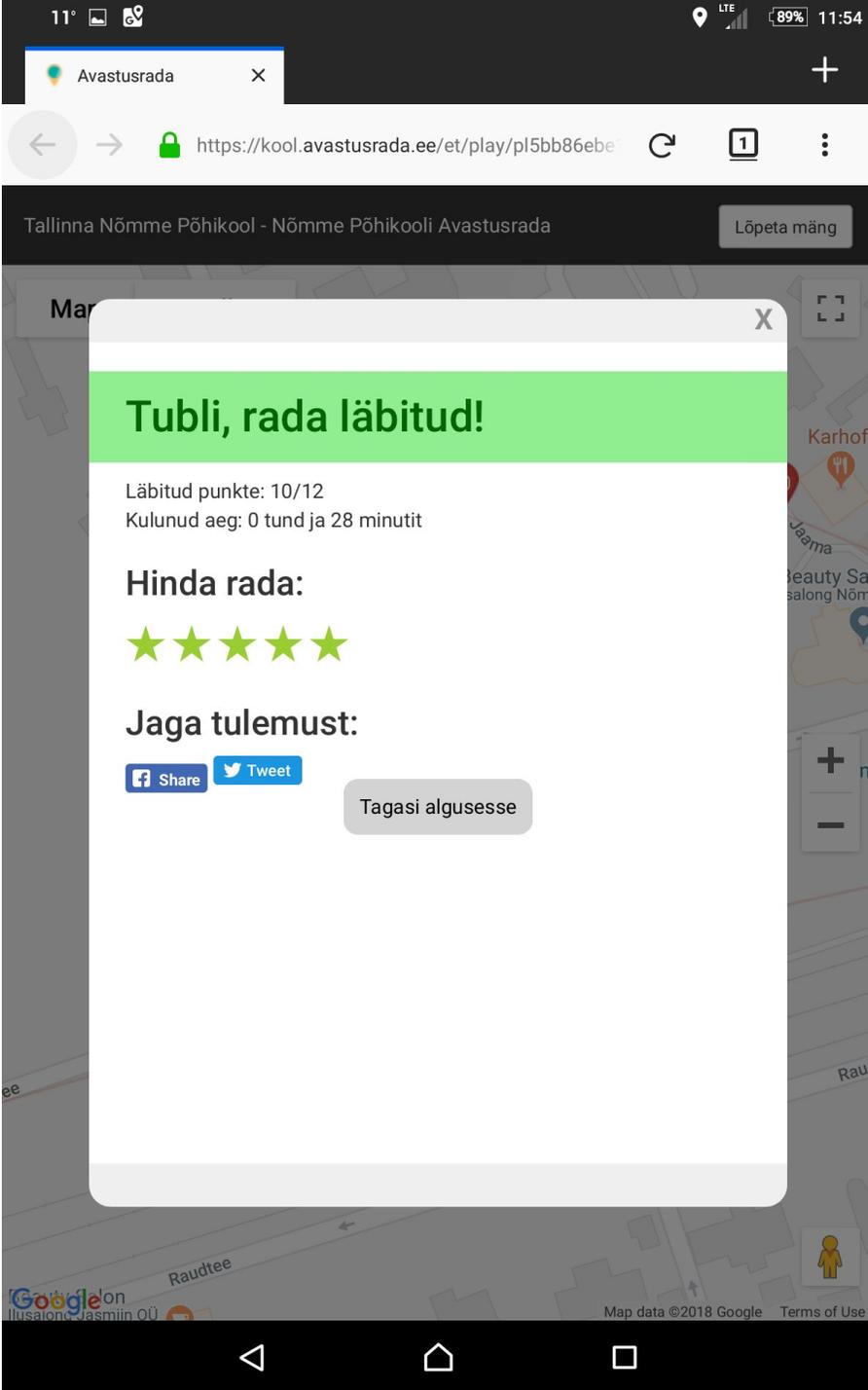
Faili suuruse piirang: 50MB

Question 1/1

Beauty Salon
Ilusalong ilunurgake

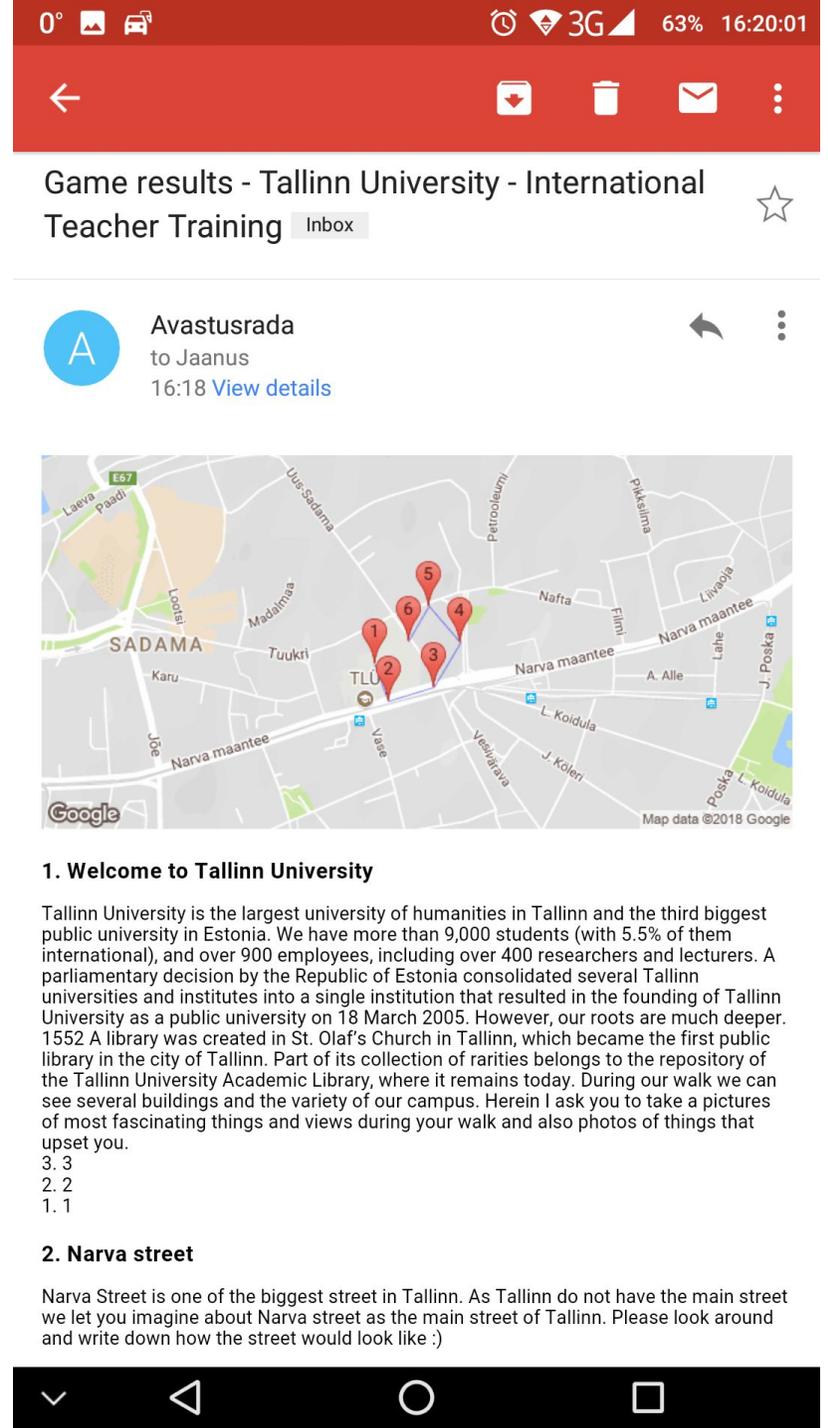
Raudtee

Map data ©2018 Google Terms of Use



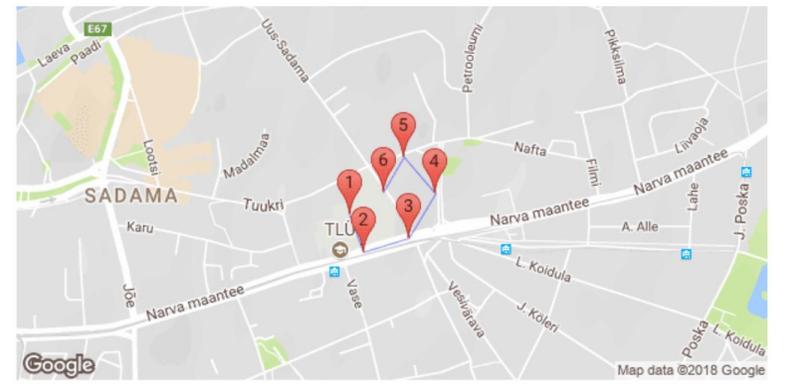
When all questions are answered, the player can rate the track and share it on social media.

After the game, the player will receive a game report by email with all questions and answers.



Game results - Tallinn University - International Teacher Training Inbox ☆

Avastusrada to Jaanus 16:18 [View details](#)



1. Welcome to Tallinn University

Tallinn University is the largest university of humanities in Tallinn and the third biggest public university in Estonia. We have more than 9,000 students (with 5.5% of them international), and over 900 employees, including over 400 researchers and lecturers. A parliamentary decision by the Republic of Estonia consolidated several Tallinn universities and institutes into a single institution that resulted in the founding of Tallinn University as a public university on 18 March 2005. However, our roots are much deeper. 1552 A library was created in St. Olaf's Church in Tallinn, which became the first public library in the city of Tallinn. Part of its collection of rarities belongs to the repository of the Tallinn University Academic Library, where it remains today. During our walk we can see several buildings and the variety of our campus. Herein I ask you to take a pictures of most fascinating things and views during your walk and also photos of things that upset you.

3. 3
2. 2
1. 1

2. Narva street

Narva Street is one of the biggest street in Tallinn. As Tallinn do not have the main street we let you imagine about Narva street as the main street of Tallinn. Please look around and write down how the street would look like :)

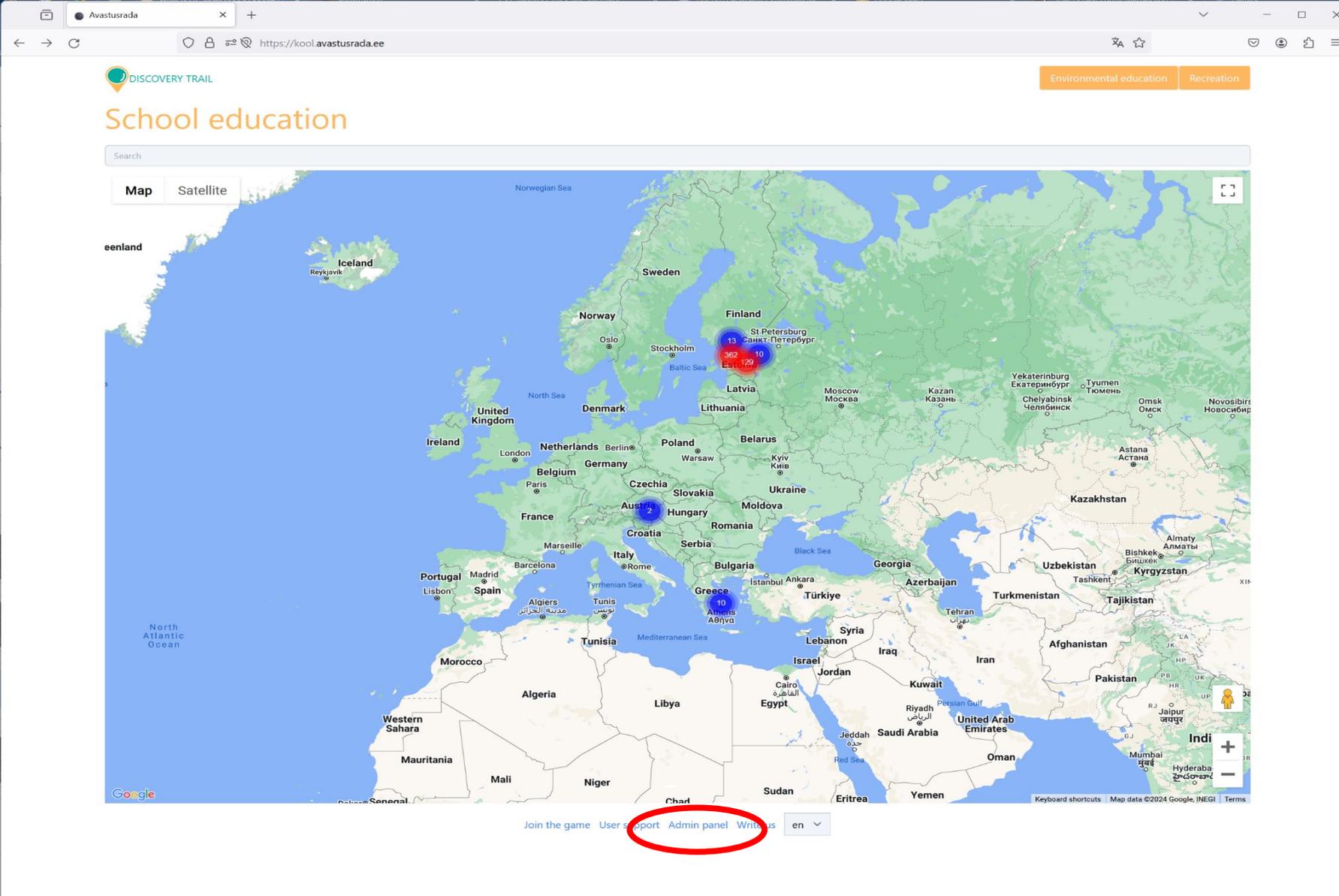


How to create Discovery Trail?

Discovery Trail

Smart trails for everyone





The best way to create a new Discovery Trail is to use a computer. The phone screen is too small for doing it conveniently.

At first, you need an account. To create one, choose Environmental Education, School Education, or Recreation.

In the footer of those pages, there is a link "Admin panel".



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



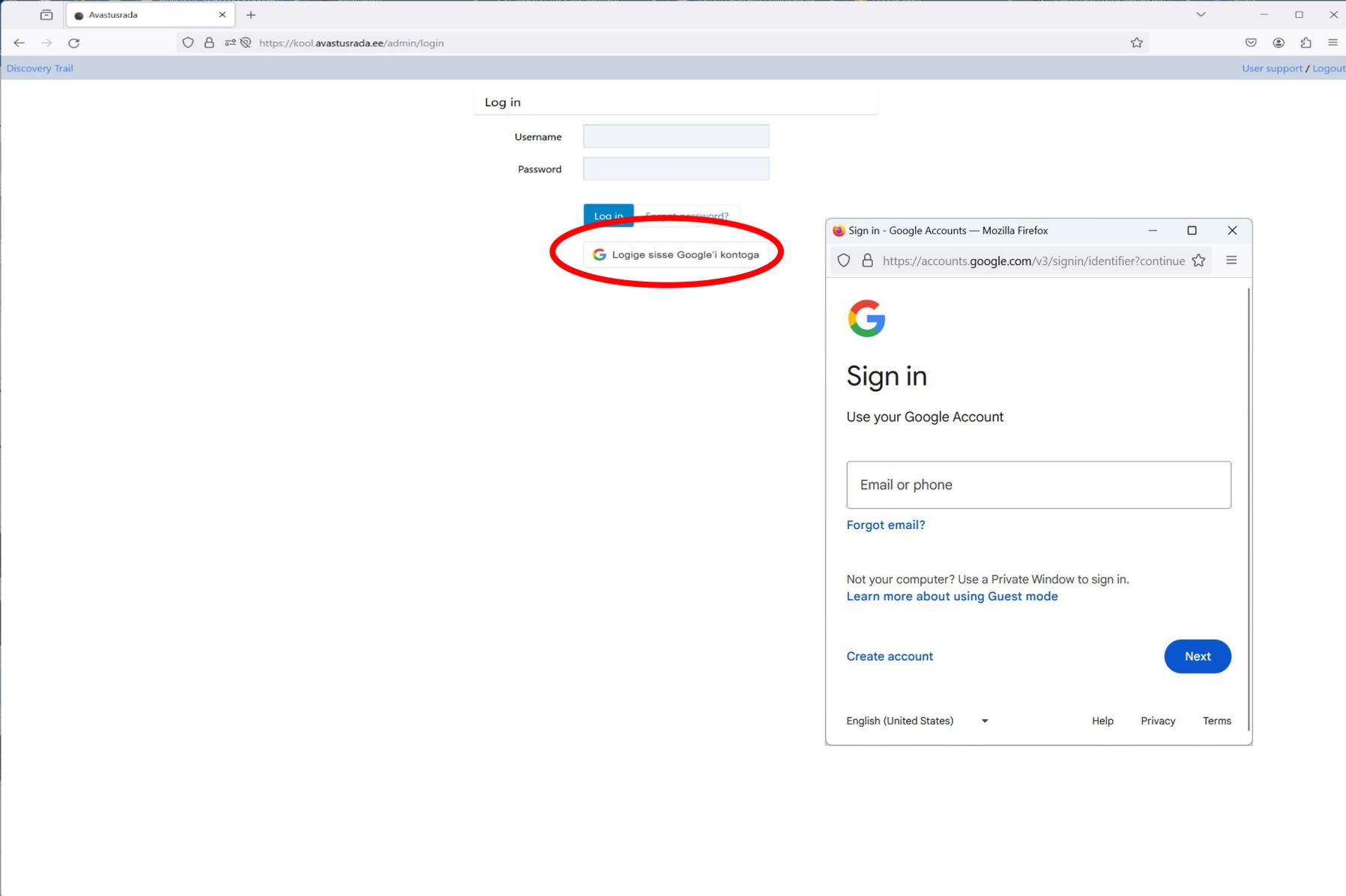
UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union





To register, the easiest way is to log in with a Google account. After that, you will have student (player) rights - allowing you to join games.

To obtain teacher rights, you need to contact your local representative or use the "Write us" link in the footer of the page.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY



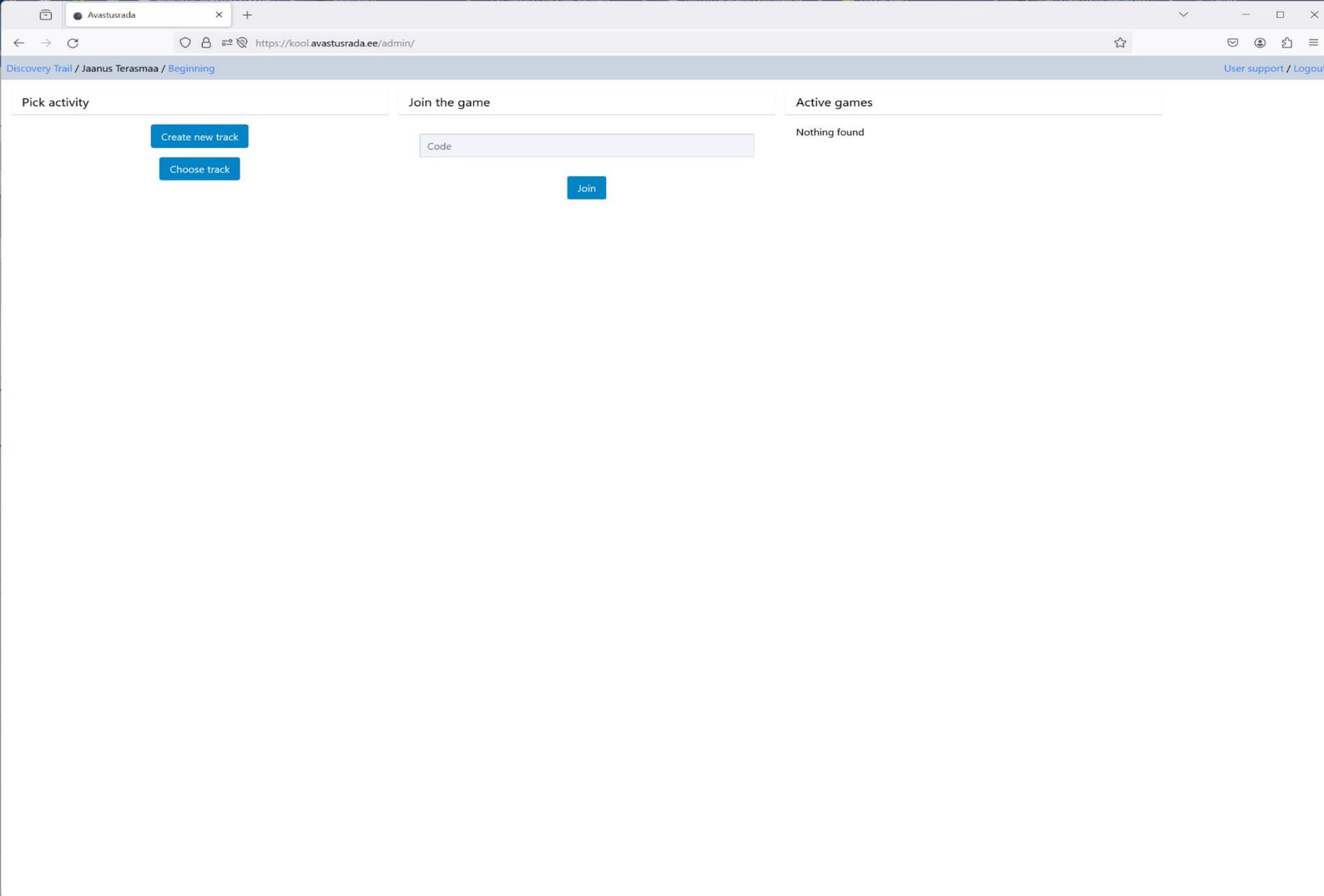
UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union





If you have teacher's rights, you can choose between two activities:

- Create new track
- Choose track

"Choose Track" will show you the list of all tracks in the system.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/maps/list

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track

User support / Logout

Only my maps

Elurikkus ja kliima minu koolis 03.01.2024 hidden

Jaanus Terasmaa SEEMIK

« 1 »

Untick the box “Only my maps” to see other tracks.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnis Park
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/maps/list

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track

User support / Logout

Only my maps

search

Elanikkonnakaitse 03.04.2024	hidden	Elari Kliiman Päästeamet	⋮
Kooliümbruse taimede määramine 31.03.2024	hidden	Janika Loos Paldiski Ühisgümnaasium	⋮
Esimese aprilli jooksuring 29.03.2024		Triin Saue Lauka põhikool	⋮
Aive Aun 27.03.2024	hidden	Aive Aun Kiili Gümnaasium	⋮
Orienteerumiskaart 25.03.2024	hidden	karina partasjuk Kiili Gümnaasium	⋮
Ainedidaktika refleksiooniring 23.03.2024		Kerli Vallmann Tallinna Ülikool	⋮
Happevihmad TLÜ 22.03.2024		Kerli Vallmann Tallinna Ülikool	⋮
Paide Vallimägi 20.03.2024	hidden	Siim Sisask Tallinna Ülikool	⋮
Elekter minu ümber 20.03.2024	hidden	Kristin Uuemäe Jüri Gümnaasium	⋮
lkl 20.03.2024	hidden	Jaanus Terasmaa Alatskivi Looduskeskus	⋮
Puud 20.03.2024	hidden	Janika Kõiv Tallinna Ülikool	⋮
Rada1 20.03.2024	hidden	Aili Elts Tallinna Ülikool	⋮
Kliimateadlik proovimäng 20.03.2024	hidden	Merle Orgmets Tallinna Ülikool	⋮
Saue Kool 8. kl putukad 07.04.2024	hidden	Age T Tallinna Ülikool	⋮
Happevihmad 20.03.2024	hidden	Olga Aavasalu Tallinna Ülikool	⋮
Happevihmad 20.03.2024	hidden	Kerli Vallmann Tallinna Ülikool	⋮
Elurikkus 20.03.2024	hidden	Eva Hindremäe Tallinna Ülikool	⋮
Minu rada 20.03.2024	hidden	Heli Viitul Tallinna Ülikool	⋮
Loomad looduses 20.03.2024	hidden	Eve Sarap Kuusalu Keskkool	⋮
Märka märke ja liigu õues. 20.03.2024	hidden	Aive Aun Kiili Gümnaasium	⋮

You can choose from all the tracks in the avastusrada.ee environment.

Behind every piece of track information, you can see three dots.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



The screenshot shows a web browser window with the URL <https://kool.avastusrada.ee/admin/maps/list>. The page title is "Discovery Trail / Jaanus Terasmaa / Beginning / Choose track". There is a search bar and a "Only my maps" checkbox. The main content area displays a track titled "Elurikkus ja kliima minu koolis" with a "hidden" status and a date of "03.01.2024". The track is owned by "Jaanus Terasmaa" (SEEMIK). A red circle highlights a row of action buttons: "Copy", "Play!", "Demo", "Edit track", "Results", and "Delete". Below the track, there is a pagination control showing "« 1 »".

After clicking on the dots, a new menu will appear.

You can choose between:

- **Copy** (make your own editable copy)
- **Play** (go and start the new game)
- **Demo** (play the game in the browser without going out)
- **Edit track** (make changes, add new points, etc.)
- **Result** (see the results of the played games)
- **Delete** (delete the track)



Avastusrada

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track

Elurikkus ja kliima minu koolis

Name
Elurikkus ja kliima minu koolis

Organisation
SEEMIK

Target group
III school level

Extra information
See rada on loodud projekti "Kliimateadlik: Kliimateadlikkus koolist ühiskonda: laste, noorte ja õpetajate võimastamine kliimamuutuste mõjude vähendamiseks" raames. Näidisrada on mõeldud toetamaks õpiobjekti, mis kirjeldab Avastusraja rakenduse kasutamist kliimateadlikkuse teemadega õpetamisel. Rohkem infot projekti kohta ja teised õpiobjektid leiad siit: <https://sisu.ut.ee/kliimatarkused>

Contact
jaanus.terasmaa@tlu.ee

Language
et

Game type
Discovery Trail

Access
Hidden

Radius
10000000

Track time during the game
Yes

Send results to email
Yes

Map engine
Google Maps

Category
School education , Environmental education

Edit

Actions

Copy Play! Demo Edit track Results

If you click on the track name on the list, you will see the track info and some links under the section "Action":

- Copy
- Play
- Demo
- Edit track
- Result

In addition to that, you can also change the track info by choosing the "Edit" button.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/newmap

Discovery Trail / Jaanus Terasmaa / Beginning

New track

Name

Organisation

Target group

Extra information

Contact

Language
en

Game type
Discovery Trail

Access
Hidden

Radius
25

Track time during the game
Yes

Send results to email
Yes

Map engine
Google Maps

Category
School education
Environmental education
Recreational

Save

Target group

Preschool
I school level
II school level
III school level
High school
Other

Access

Hidden
Public
Hidden

Track time during the game

Yes
Yes
No

Send results to email

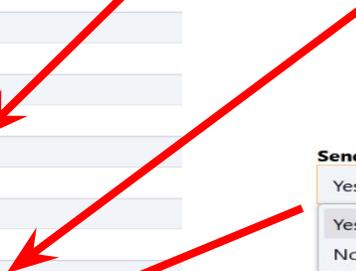
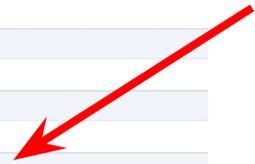
Yes
Yes
No

Map engine

Google Maps
Google Maps
Maa amet

Category

School education
Environmental education
Recreational



In the track info, you have to fill in several fields and make some choices from the dropdown menus.



Discovery Trail
Systematic use of digital outdoor learning tool



TALLINN UNIVERSITY



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI AGOGI

Co-funded by the Erasmus+ Programme of the European Union



Avastusrada x +
https://kool.avastusrada.ee/admin/newmap
Discovery Trail / Jaanus Terasmaa / Beginning User support / Logout

New track

Name
New DT Estonia

Organisation
SEEMIK

Target group
II school level

Extra information
You need boots!

Contact
jaanus.terasmaa@tlu.ee

Language
en

Game type
Discovery Trail

Access
Hidden

Radius
25

Track time during the game
Yes

Send results to email
Yes

Map engine
Google Maps

Category
School education
Environmental education
Recreational

Save

After filling out the form, click "Save". You will be directed to the map view of the track editor.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



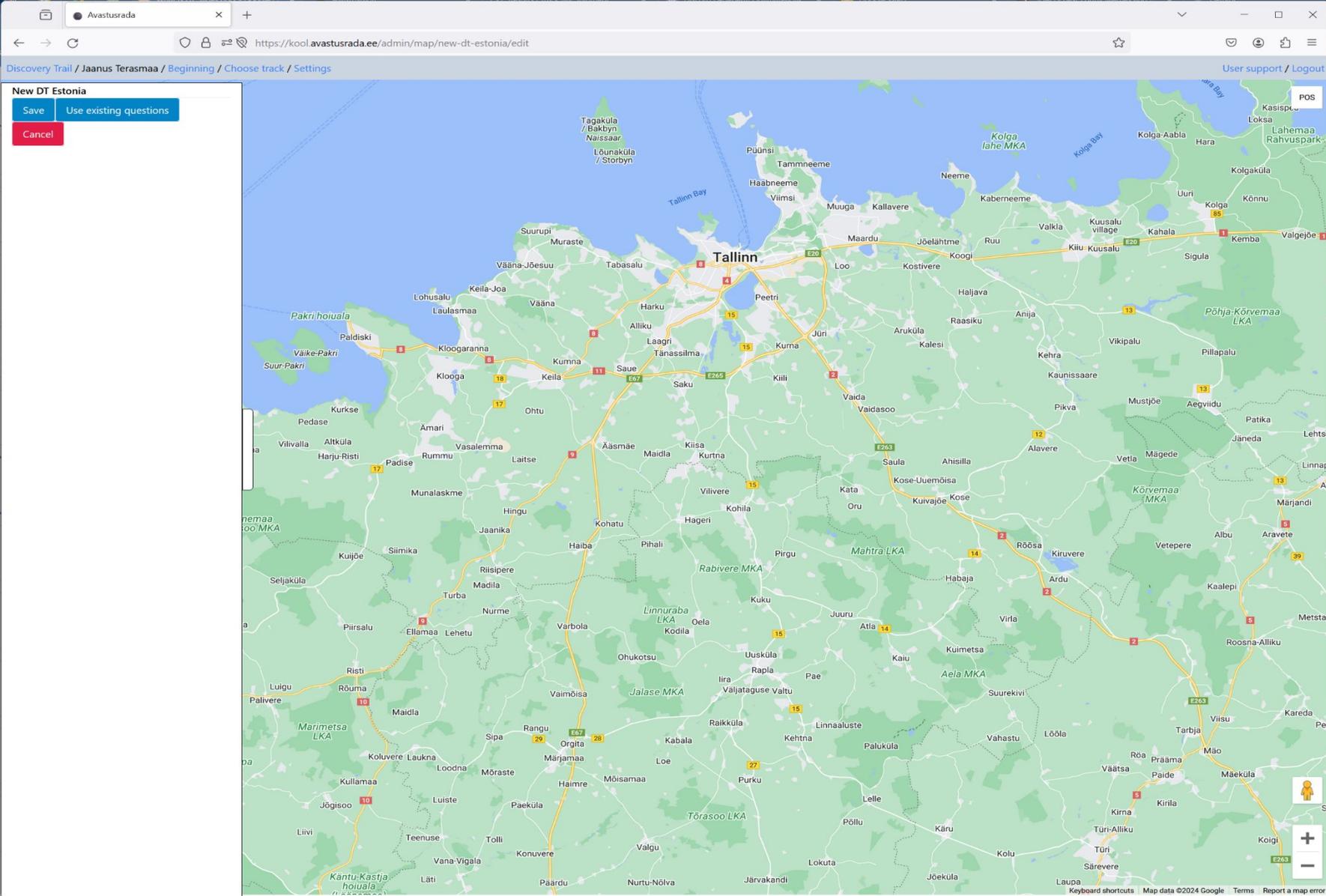
UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union





In the map view of the track editor, you have to manually find the place where you want to build your track. You can zoom in and out and move freely on the map.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



The screenshot shows a web browser window with the URL <https://kool.avastusrada.ee/admin/map/new-dt-estonia/edit>. The page title is "Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / Settings". On the left, there is a form titled "New DT Estonia" with fields for "Task title", "Task description", "Choose question type", and "Extra information". A red arrow points from the "Choose question type" dropdown menu to the "Choose question type" field in the form. The dropdown menu is open, showing options: "One right answer", "Multiple answers", "Freeform answer", "Info", and "Photo". The map on the right shows a street view of Tallinn, with a red location pin placed on Narva mnt. Various landmarks and businesses are labeled on the map, such as "EuroPark EP30", "Tallinna Ülikooli konverentsikeskus", "SuperNova kino", "Balti filmi, meedia ja kunstide instituut", "Skulptuur 'Ainult filmis ja pildiraamatus'", "CIEE Estonia MTÜ", "Eesti Naisuurimus- ja Teabekeskus", "Oaas Catering", "Tallinna Ülikooli Akadeemilise...", "Tallinna Ülikooli Konfutsiuse Instituut", "Tandoori Kebab Asian", "Tallinn Dolls OÜ Clothing store", "N48 Boutique", "Looduskaitsealune hariilik hobukastan", "Beauty salon", "Apartaments", "Bogi (BHP Tallinn)", "R-Kiosk Kodutarve Sise Convenience store", "TLÜ", "Mobifon Tallinn", "EuroP...", "fexpert OÜ", "bride room", "Gamer's Guild E... (MABRI)", "Cadenza Dance Outlet Dance store", "Medisfäär AS", "AngelBlade Tattoo Stu... Tattoo", "Vase".

When you find the desired location on the map, you can add a trackpoint by simply clicking on the map.

A red marker will appear on the map, and a new form for the task description will be presented on the side.

There, you can provide the following information:

- name of the task
- task description
- type of the question
- extra information



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/map/new-dt-estonia/edit

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / Settings

User support / Logout

New DT Estonia

1. Point 1

Point 1

Do something nice for the nature!

Freeform answer

You did good!

Save

1.

Task title

Task description

Choose question type

Extra information

Save

Add a question

Save Use existing questions

Cancel

The screenshot shows a web browser window displaying the Discovery Trail admin interface. The main area is a map of Tallinn, Estonia, with various points of interest marked. A sidebar on the left allows for editing a track point. The 'Add a question' button is highlighted with a red circle.

You can add more than one task to a single trackpoint by clicking "Add a question".



Discovery Trail
Systematic use of digital outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/map/new-dt-estonia/edit

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / Settings

User support / Logout

New DT Estonia

1. Point 1 question 2

2. **X**

Task title

Task description

Choose question type

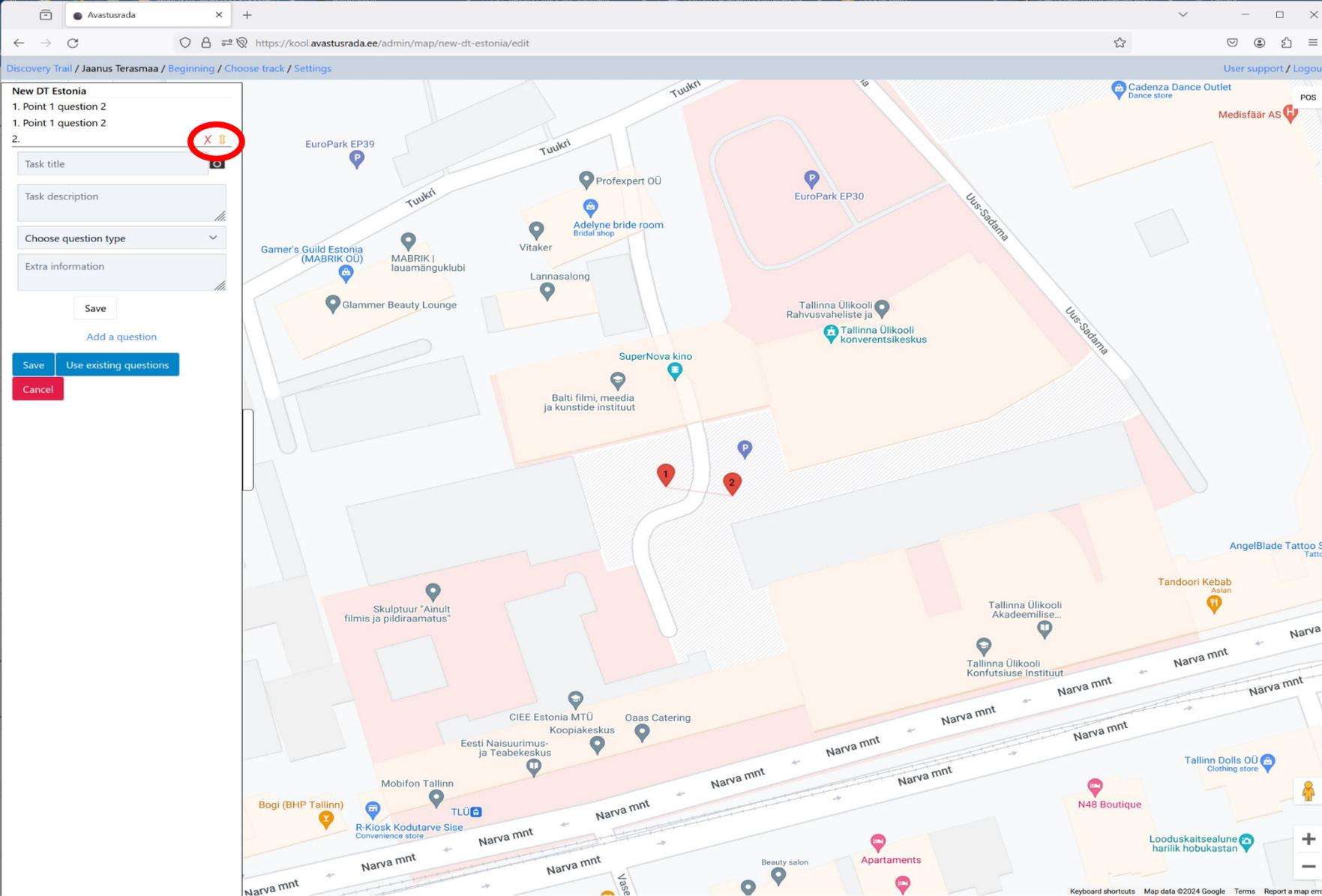
Extra information

Save

Add a question

Save Use existing questions

Cancel



To add more trackpoints, simply click on the map.

You can change the order of the trackpoints by using the arrow in the right corner of the task description form.

By clicking on the "X", you can delete a trackpoint (confirmation for this action will be requested).



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/map/new-dt-estonia/edit

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / Settings

User support / Logout

New DT Estonia

1. Point 1 question 2

2. Point 1 question 2

Task title

Task description

Choose question type

Extra information

Save

Add a question

Use existing questions

Cancel

The screenshot shows a web browser window with the URL https://kool.avastusrada.ee/admin/map/new-dt-estonia/edit. The page title is 'Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / Settings'. On the left, there is a sidebar for 'New DT Estonia' with fields for 'Task title', 'Task description', 'Choose question type', and 'Extra information'. Below these fields are buttons for 'Save', 'Add a question', and 'Use existing questions'. The 'Use existing questions' button is circled in red. The main area is a map of Tallinn, Estonia, showing streets like Tuukri and Narva mnt, and various points of interest such as EuroPark EP39, Profexpert OÜ, Adelyne bride room, Vitaker, Lannasalong, Tallinna Ülikooli, and others. Two red location markers labeled '1' and '2' are placed on the map. The bottom of the page contains keyboard shortcuts, map data attribution to Google, and a report error link.

If you want to find an already existing question (made by others) in Avastusrada, you can click on the button "Use existing questions".

A new dialogue window will open.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



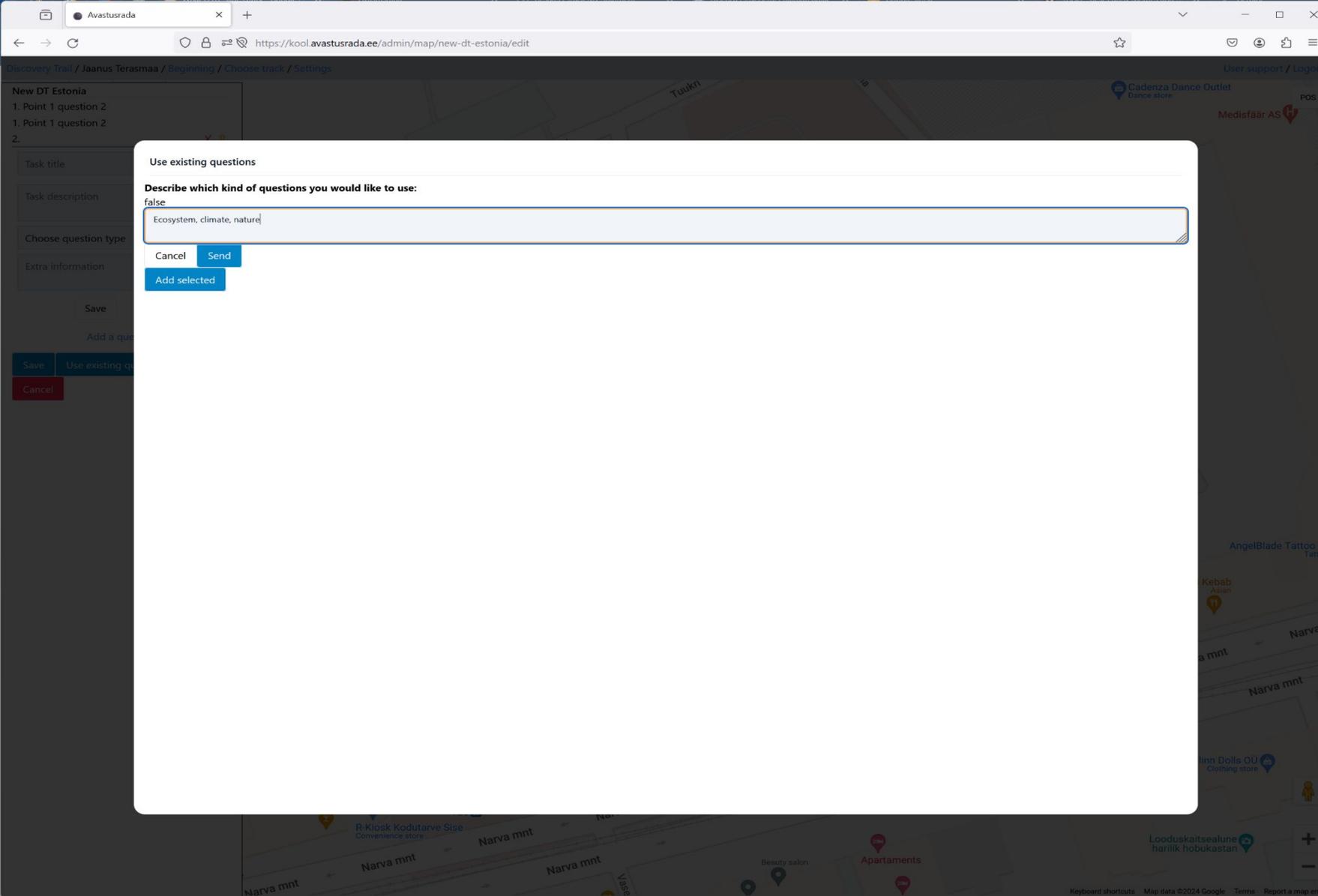
UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union





Use keywords or a description of the desired outcome.

This search uses AI, so the results are directly related to the quality of your prompt.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/map/new-dt-estonia/edit

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / Settings

New DT Estonia

1. Point 1 question 2

1. Point 1 question 2

2.

Task title

Task description

Choose question type

Extra information

Save

Add a question

Save

Use existing questions

Cancel

Use existing questions

Describe which kind of questions you would like to use:

false

Ecosystem, climate, nature

Cancel Send

Population Growth
Task description: Ecosystems include both the living (biotic) and non-living (abiotic) components of an ecological unit. In relation to ecosystems, which of the following are correct?
Multiple answers
 Some ecosystems provide unlimited resources allowing populations to increase indefinitely. Populations will increase until the limits of the ecosystem are reached and the population levels crash. In an ecosystem populations remain at an exact constant to ensure the ecosystem is stable. Population in an ecosystem will fluctuate in a state of dynamic equilibrium around the average population size. I don't know the answer.

Changes in environment
Task description: Evolution is response to environmental changes. The Earth's climate has changed throughout history. The current warming trend is of particular significance because most of it is very likely human-induced and proceeding at a rate that is unprecedented in the past 1,300 years. Ice cores drawn from Greenland, Antarctica, and tropical mountain glaciers show that the Earth's climate responds to changes in greenhouse gas levels. They also show that in the past, large changes in climate have happened very quickly, geologically-speaking: in tens of years, not in millions or even thousands. Task: Find species nearby who are most influenced by climate changes right now. Write the names below.
Freeform answer

Kliima
Task description: Kohaliku metsa tähtsus globaalsetes süsteemides:
Extra information: Kliimasüsteem on keerukas süsteem, mis koosneb viiest komponendist: atmosfäär, hüdroosfäär, krüosfäär, liitosfäär ja biosfäär, ning nende vastasmõjudest. Kliimasüsteemi olek muutub pidevalt. Kliimasüsteemi häirimisel kaob ökosüsteemide tasakaal ja tagajärjeks on kliimamuutused.
Multiple answers
 * osaleb orgaanilise aine loomises * kaitseb vaartuslikku pinnast * reguleerib õhkkonna gaasilist koostist * määrab veerežiimi ja kliima * on elupaik spetsiifilistele organismidele * võtab osa hapniku-, süsiniku- ja lämmastikuringest * parandab vee-, mulla- ja õhukvaliteeti * täidab veereservuaari rolli

Peejel
Task description: Ökosüsteem on igal pool Su ümber. Ökosüsteem koosneb kõikidest elus- ja eluta looduse koostisosadest, mis on omavahel tihedates seostes. Ökosüsteemis toimuvad kogu aeg protsessid, mis hoiavad elu Maal jätkusuutlikuna. Loodus tervikuna (ökosüsteemina) annab inimestele suure hulga hüvesid, mida nimetatakse looduse hüvedeks ehk ökosüsteemi teenusteks. Milliseid hüvesid loodus pakub, mis on ka Sulle vajalikud?
Extra information: Ökosüsteemi eluta osa moodustavad õhk, vesi (veeaur, õhus, vesi pinnases, maapinnal ja veekogudes), kivimid (maakoores ja mulla koostises), päikesevalgus ja –soojus. Ökosüsteemi elusosa moodustavad kõik taime-, looma-, seene-, ainuraksete- ja bakterite liigid (elurikkus).
Multiple answers
 * hapnik * toit * tolmeldamine * kliima reguleerimine * mulla teke * kütused * ravimite tooraine

Iga vaade näitab ökosüsteemi!
Task description: Ökosüsteem on igal pool Su ümber. Ökosüsteem koosneb kõikidest elus- ja eluta looduse koostisosadest, mis on omavahel tihedates seostes. Ökosüsteemis toimuvad kogu aeg protsessid, mis hoiavad elu Maal jätkusuutlikuna. Loodus tervikuna (ökosüsteemina) annab inimestele suure hulga hüvesid, mida nimetatakse looduse hüvedeks ehk ökosüsteemi teenusteks. Milliseid hüvesid loodus pakub, mis on Sulle vajalikud?
Extra information: Ökosüsteemi eluta osa moodustavad õhk, vesi (veeaur, õhus, vesi pinnases, maapinnal ja veekogudes), kivimid (maakoores ja mulla koostises), päikesevalgus ja –soojus. Ökosüsteemi elusosa

Add selected

You will be presented with a list of questions. Tick the boxes for the ones you would like to use.

When the selection is made, click on "Add selected".

You can repeat the search later for different results.



Discovery Trail
Systematic use of digital outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / Settings

New DT Estonia

- Point 1 question 2
- Point 1 question 2
- Changes in environment
- Kliima

Kliima

Kohaliku metsa tähtsus globaalsetes süsteemides:

Multiple answers

Options	Correct
osaleb orgaanilise aine loomises	<input checked="" type="checkbox"/>
kaitseb väärtuslikku pinnast	<input checked="" type="checkbox"/>
reguleerib õhkonna gaasilist koostist	<input checked="" type="checkbox"/>
määrab veerežiimi ja kliima	<input checked="" type="checkbox"/>
on elupaik spetsiifilistele organismidele	<input checked="" type="checkbox"/>
võtab osa hapniku-, süsiniku- ja lämmastikuringi	<input checked="" type="checkbox"/>
parandab vee-, mulla- ja õhukvaliteeti	<input checked="" type="checkbox"/>
täidab veereservuaari rolli	<input checked="" type="checkbox"/>

Add option

Kliimasüsteem on keerukas süsteem, mis koosneb viiest komponendist: atmosfäär, hüdrosfäär, krüosfäär, litosfäär ja biosfäär.

Save

Add a question

Save Use existing questions Cancel

A new trackpoint will be added to the map randomly.

You can drag them to the correct places by using your cursor (or finger on the phone).

When the track is ready, click the "Save" button.

You must also save each trackpoint as you create them.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/maps/list

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track

User support / Logout

Only my maps

search

New DT Estonia 07.04.2024	hidden	Jaanus Terasmaa SEEMIK
Elurikkus ja kliima minu koolis 03.01.2024	hidden	Jaanus Terasmaa SEEMIK

« 1 »

New DT Estonia
07.04.2024

hidden

Jaanus Terasmaa
SEEMIK

Copy Play! Demo Edit track Results Delete

When the track is ready and you want to ask people to use it, click on the three dots and choose "Play!"



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/k/seemik/new-dt-estonia/enter

DISCOVERY TRAIL

Environmental education Recreation

School education

SEEMIK

New DT Estonia

Target group: II school level
Enter players names and e-mail addresses. Players will receive link to the game via e-mail.

Player:

Jaanus Terasmaa

pootsman@tlu.ee

Choose game mode:

Avastusrada

Register for game

[Join the game](#) [User support](#) [Admin panel](#) [Write us](#) en

You have to fill in the form and click "Register for game".



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada x +
https://kool.avastusrada.ee/k/seemik/new-dt-estonia/enter

DISCOVERY TRAIL
School education

Environmental education Recreation

Instructions sent to your e-mail

Invite to play

Code 5155

With link <https://kool.avastusrada.ee/join/gr6612acfdee78e>

With email
Enter players names and e-mail addresses. Players will receive link to the game via e-mail.

Player 1:

Name

E-mail

Add more players +

Save

[Join the game](#) [User support](#) [Admin panel](#) [Write us](#) en

You will be presented with three choices on how to invite others to the game:

- Code
- With link
- With email

You can make your choice by using the slider buttons.

When a choice is made, click "Save".



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnis Park
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada x +
https://kool.avastusrada.ee/k/seemik/new-dt-estonia/enter

DISCOVERY TRAIL
School education

Environmental education Recreation

Instructions sent to your e-mail

Invite to play

Code 5155  

With link <https://kool.avastusrada.ee/join/gr6612acfdee78e> 

With email 
Enter players names and e-mail addresses. Players will receive link to the game via e-mail.

Player 1:

Name

E-mail

Add more players +

Save

[Join the game](#) [User support](#) [Admin panel](#) [Write us](#) en 

Join the game

Name

E-mail

Code

Join

If you choose "Code", you can send this code to your players.

They can join the game by clicking the link "Join the game" in the footer of the page.

They will be presented with a small form to fill out.



Discovery Trail
Systematic use of digital outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



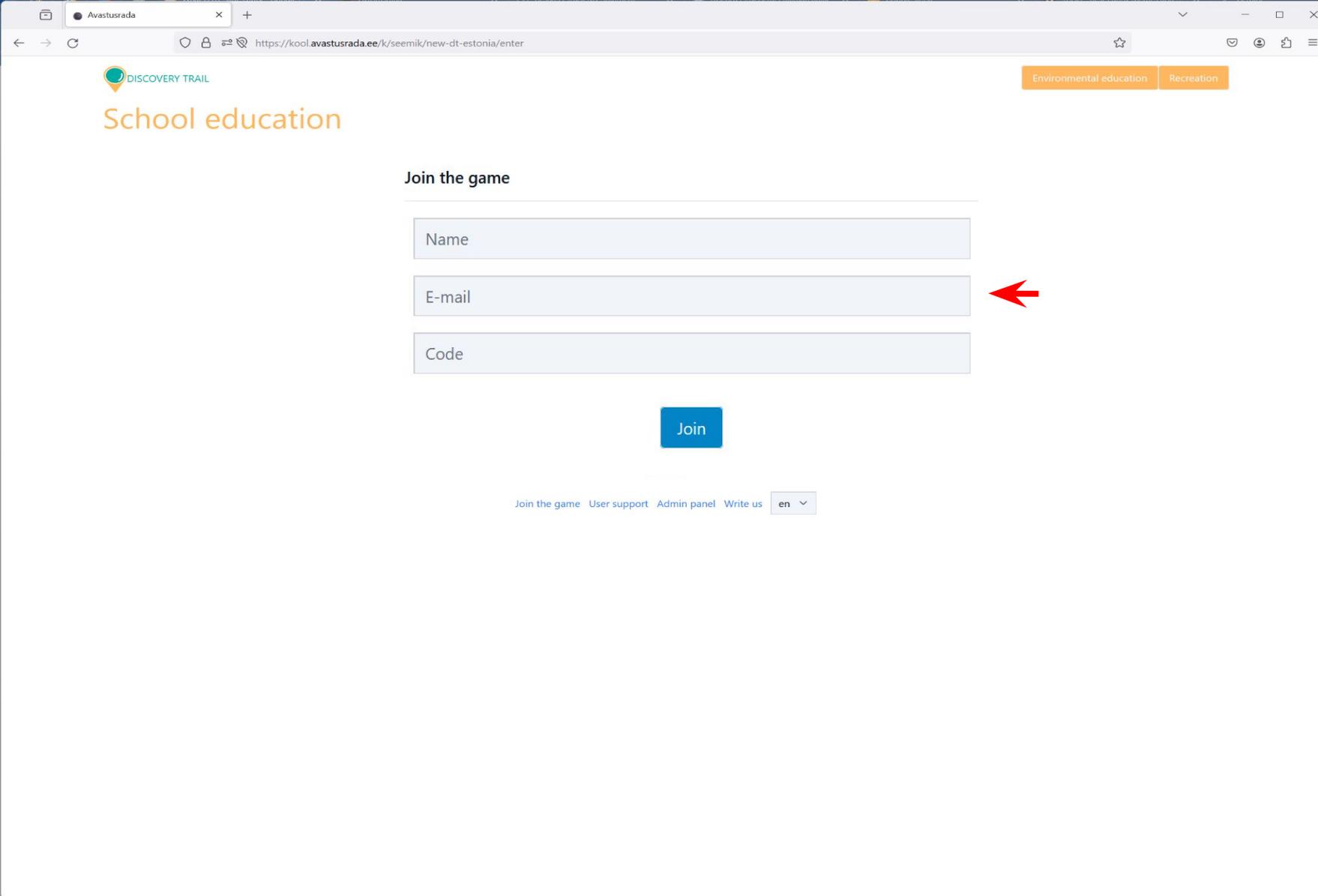
UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union





After clicking "Join", the player will be directed to the game.

If they type in the email address (recommended), they will receive a link to the game in their mailboxes.

From that link, they can continue the game later, etc.

If an email is not provided, it is not possible to continue the game if the player exits the game, closes the browser window, etc.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada x +
https://kool.avastusrada.ee/k/seemik/new-dt-estonia/enter

DISCOVERY TRAIL
School education

Environmental education Recreation

Instructions sent to your e-mail

Invite to play

Code 5155

With link <https://kool.avastusrada.ee/join/gr6612acfdee78e> 

With email
Enter players names and e-mail addresses. Players will receive link to the game via e-mail.

Player 1:

Name

E-mail

Add more players +

Save

[Join the game](#) [User support](#) [Admin panel](#) [Write us](#) en

Using the "Link" option, you can send players the link, and they only have to fill in their name and email address.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur ErlebnisPark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada x +
https://kool.avastusrada.ee/k/seemik/new-dt-estonia/enter

DISCOVERY TRAIL
School education

Environmental education Recreation

Instructions sent to your e-mail

Invite to play

Code 5155

With link <https://kool.avastusrada.ee/join/gr6612acfdde78e>

With email 
Enter players names and e-mail addresses. Players will receive link to the game via e-mail.

Player 1:

Name

E-mail

Add more players +

Save

[Join the game](#) [User support](#) [Admin panel](#) [Write us](#) en

With the email option, you have to prefill the form yourself, player by player.

You can add as many players as you like by clicking on the link "Add more players".

When you click "Save", players will receive an invitation email with a link.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnis Park
SCIENCE EDUCATION CENTER



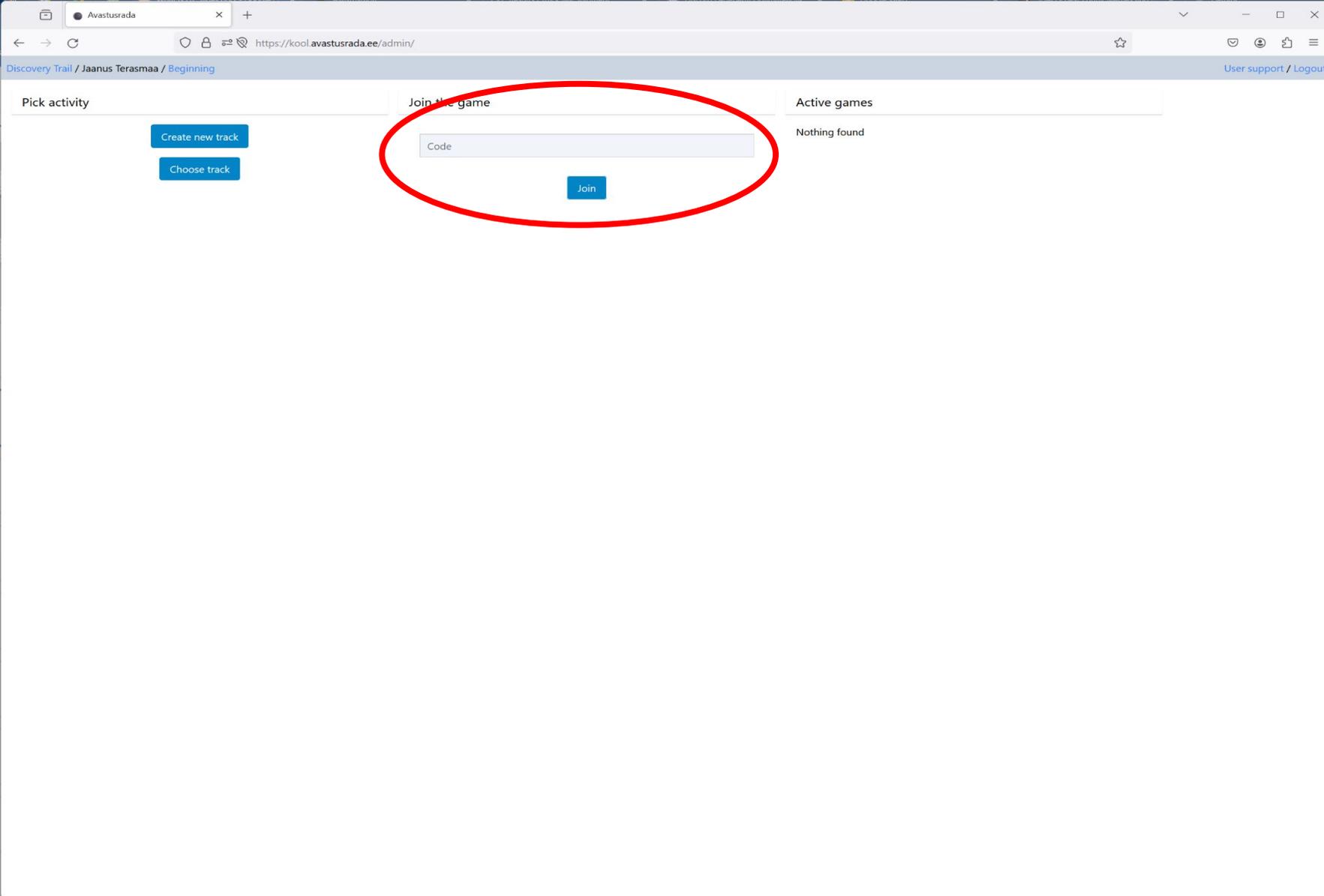
UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union





Players can also join if they are logged in with a Google account.

This way, they will have all their played games in the list.



Discovery Trail
Systematic use of digital
outdoor learning tool



TALLINN UNIVERSITY



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Avastusrada

https://kool.avastusrada.ee/admin/map/new-dt-estonia/results/gr6612acdee78e

Discovery Trail / Jaanus Terasmaa / Beginning / Choose track / New DT Estonia / Results

Players

Nimi	Läbitud	Õigeid	Algus	Viimane
Jaanus Terasmaa	0	0		
Jaanus2	0	0		

Pictures [csv](#) Statistics

Players: 2
 Total tasks: 5
 Game mode: Avastusrada
 Fastest player: - minutit
 Average time: - minutit
 Joining with the game: open [close joining](#)
 Code for joining: 5155
 Link fo joining: [play_link](#)
 Email required: No
 Game open: 14.04.2024 17:26

Kaart

The teacher can see all started games in their list.

Players, their answers, and location on the map during the game are presented.

It is also possible to turn off the registration and see the game code and link.

You can export the result as a CSV file.



Discovery Trail
Systematic use of digital outdoor learning tool



TALLINN UNIVERSITY

Natur Erlebnispark
SCIENCE EDUCATION CENTER



UNIVERSITY OF HELSINKI



ELLINOGERMANIKI
AGOGI

Co-funded by the
Erasmus+ Programme
of the European Union



Results are exportable to the CSV-format. CVS-format is compatible with every tabula data platform. So it is possible to send results to the players, use them as education topic in class and so on.

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Lõpp	1. Sissejuhatus	2. Küsimuste	3. Ökosüsteemi teenused	4. Keskkonnakaitse I	5. Luigetiik	6. Sadeveekanal	7. Tolmeldamine	8. Muld	9. Nahkhiirte pesakast	10. Suurpuu	11. Keskkonnakaitse II	12. Mür	13. Pirita tee	14. Tallinna laht	15. Kergliiklustee	16. Ökosüsteemi sarnasused	17. Lõpp
2	4.04.2016 17:26			Elus ja eluta keskkonna hoidmine	Jooditabletti dega			Mesilane, inimene, üldse paljud putukaliikiid.	Kurnab, erodeerib ehitab täis	2	2000000	Loodushoid	80 dB	Paekivi	Ilus vaade, lainetav meri	Jalutamine, jooksmine looduse vaatlemine	Mõlemad on süsteemid	
3	4.04.2016 17:25			Need on tegevused, mille käigus me otsesel või kaudsel moel käitume jätkusuutlikult tarbides ökosüsteemiteenuseid nii, et nende kvaliteet ei langeks	Filtreerin ja keedan			Herilased, liblikad, mesilased, kimalad, nahkhiired, koolibtid jne	Väetamis, ehituse, kaevandmise, kylvamise, tallumisega jne	2	25.-	Tegevus jätkusuutliku elu säilitamiseks Maal	80	Laagna tee materjal I kasutati pirita tee ehituseks	Paluti pildistada	Naudivad vaadet, pildistavad, joovad, hingavad, jooksevad, sõidavad laevaga. Jne	Mõlemad on süsteemid. Mõlemad on kehad.	
4	4.04.2016 17:23			...	..			..	..	2		..	86	..	..	..	..
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		



kool.avastusrada.ee

keskkonnaharidus.avastusrada.ee

seiklus.avastusrada.ee

facebook.com/avastusrada

Avastusrada

Smart trails for everyone



TALLINNA ÜLIKOOL