



«Educational Robotics at Schools Online with Augmented Reality»
eROBSON ERASMUS+ KA2

How to use ARTutor for eROBSON



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



Educational Robotics at Schools Online with Augmented Reality - eROBSON project has received funding from the European Union's Erasmus Plus programme, grant agreement 2020-1-NO01-KA226-SCH-094120

<https://erasmus-plus.ec.europa.eu/projects/search/details/2020-1-NO01-KA226-SCH-094120>

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

What is ARTutor?



- ARTutor is an Augmented Reality Educational Platform developed by Advanced Educational Technologies and Mobile Applications (AETMA) Research Lab at the International Hellenic University, since 2016.
- ARTutor is available free of cost to all the educators and the students around the globe, in order to help them to develop technology enhanced educational material and improve the educational performances and experiences.



What is ARTutor?



- The main impact of ARTutor in the field of education can be summarized to the following objectives:
 - Maximize students' engagement to the educational material (textbooks).
 - Enable teachers with limited IT skills to develop augmented reality books and create highly engaging and immersive educational activities and experiences in the class.
 - The implementation of a single mobile application to enable students to access all the augmented reality books in order to enhance their study and to promote independent, self-paced distance learning
 - Easy interaction with the enhanced digital content of any book using haptic commands in order to assist even students with movement disabilities



Where can I use ARTutor?



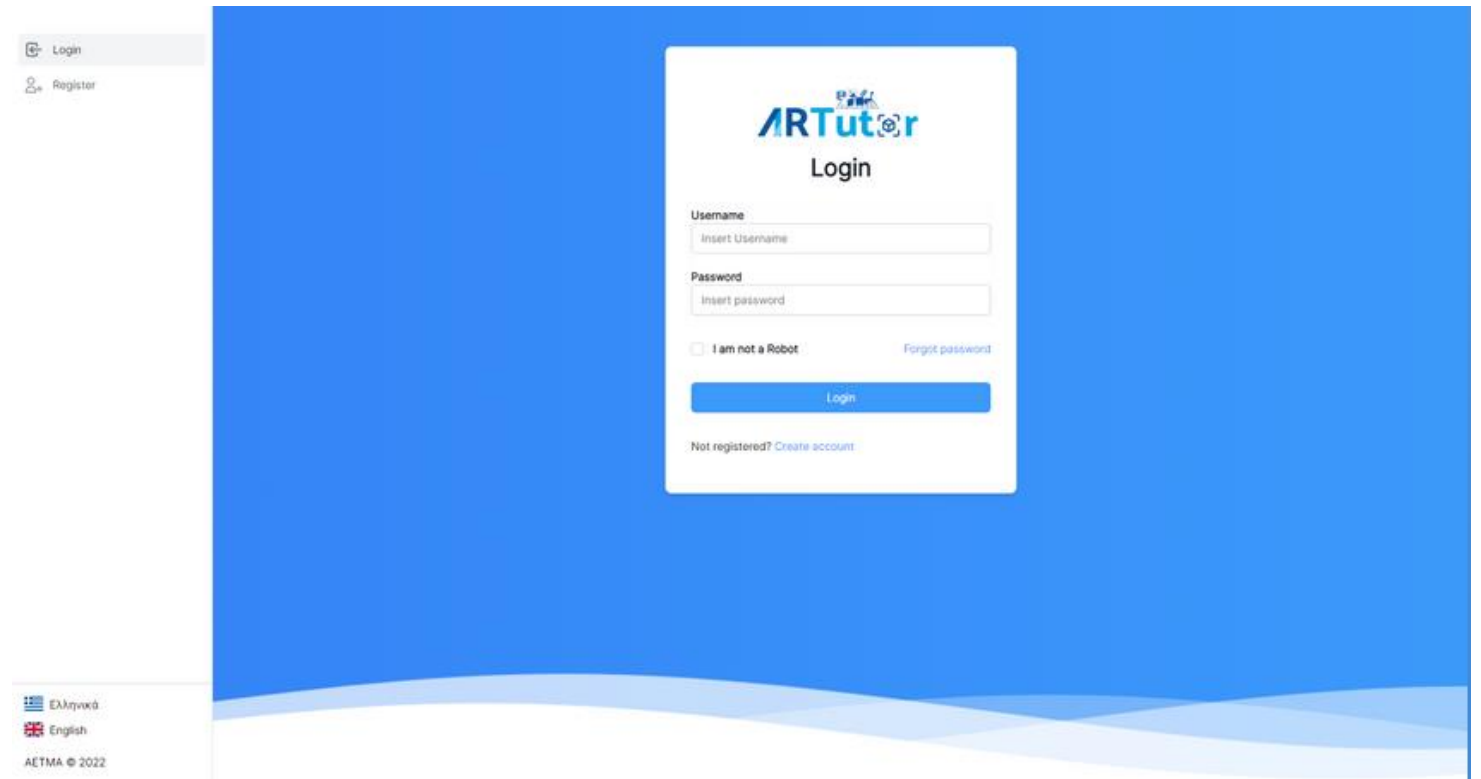
- ARTutor is a domain-independent platform that can be used in many fields.
 - In publishing
 - In education
 - In marketing
 - In museums
 - Training
 - Treasure hunt
 - Escape room



How to use the ARTutor Step 1



- Register for free or login if you have already registered



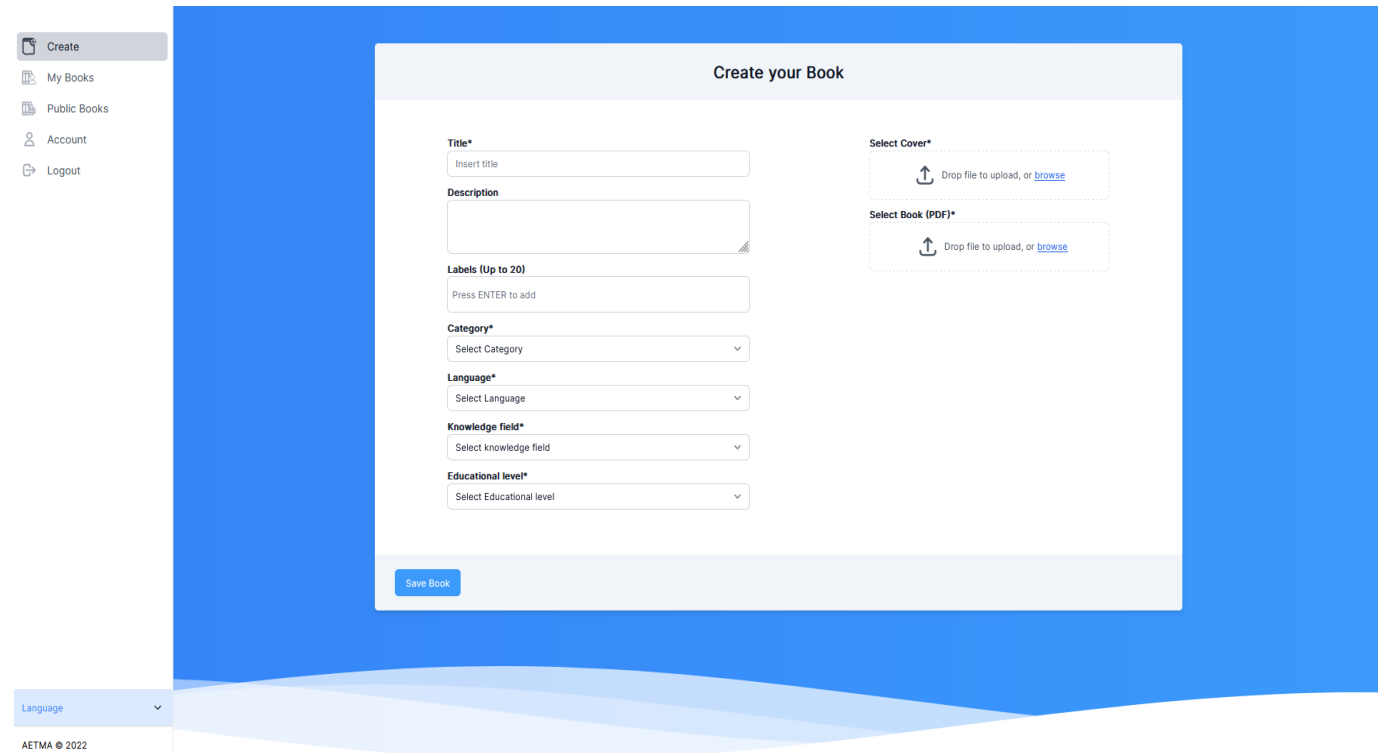
The screenshot shows the ARTutor Login page. On the left, there are links for 'Login' and 'Register'. The main content area has a blue background with a white login form in the center. The form includes the ARTutor logo, a 'Login' title, and fields for 'Username' and 'Password'. Below these fields are a checkbox for 'I am not a Robot', a 'Forgot password' link, and a 'Login' button. At the bottom of the form, there is a link for 'Not registered? Create account'. On the left side of the page, there are language selection options for 'Ελληνικά' and 'English', and a copyright notice 'AETMA © 2022'.



How to use the ARTutor Step 2



- To login click on the **Create** tab to create a book
- There are also other tabs available like **My Books**, **Public Book**, **Account** in which are shown the books you created!



The screenshot shows the 'Create your Book' interface. On the left is a sidebar with tabs: 'Create' (selected), 'My Books', 'Public Books', 'Account', and 'Logout'. The main area contains a form with the following fields:

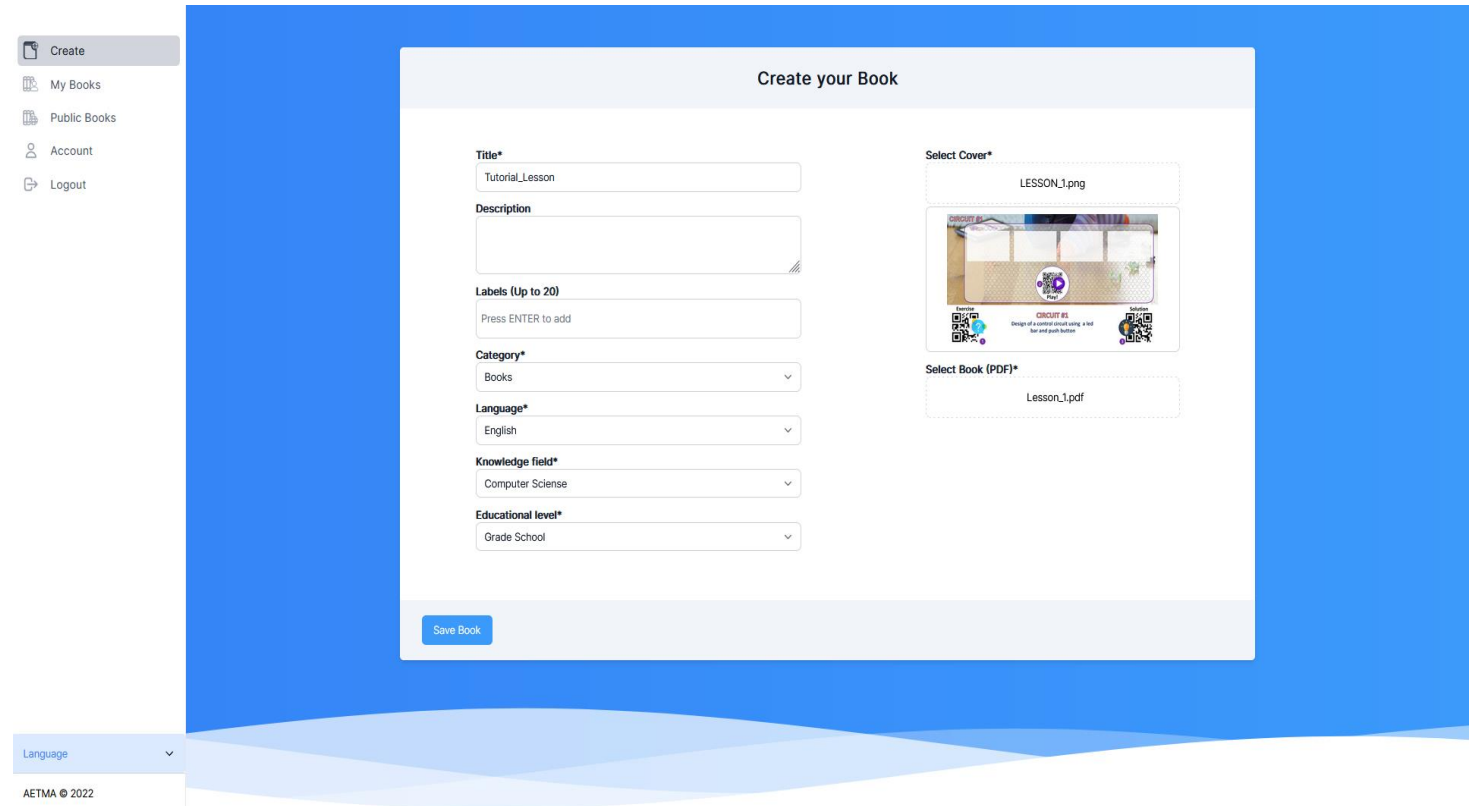
- Title***: Text input with placeholder 'Insert title'.
- Description**: Text area.
- Labels (Up to 20)**: Text input with placeholder 'Press ENTER to add'.
- Category***: Dropdown menu with 'Select Category'.
- Language***: Dropdown menu with 'Select Language'.
- Knowledge field***: Dropdown menu with 'Select knowledge field'.
- Educational level***: Dropdown menu with 'Select Educational level'.
- Select Cover***: Text input with placeholder 'Drop file to upload, or [browse](#)'.
- Select Book (PDF)***: Text input with placeholder 'Drop file to upload, or [browse](#)'.

At the bottom left of the form is a 'Save Book' button. At the bottom of the sidebar is a 'Language' dropdown menu and the text 'AETMA © 2022'.

How to use the ARTutor Step 3



- After the login, fill all the required fields to create the book
- Last, click on the **Save Book** button



The screenshot shows the 'Create your Book' interface. On the left is a sidebar with navigation links: Create, My Books, Public Books, Account, and Logout. The main form contains the following fields:

- Title***: Tutorial_Lesson
- Description**: (Empty text area)
- Labels (Up to 20)**: Press ENTER to add
- Category***: Books
- Language***: English
- Knowledge field***: Computer Science
- Educational level***: Grade School

On the right side of the form:

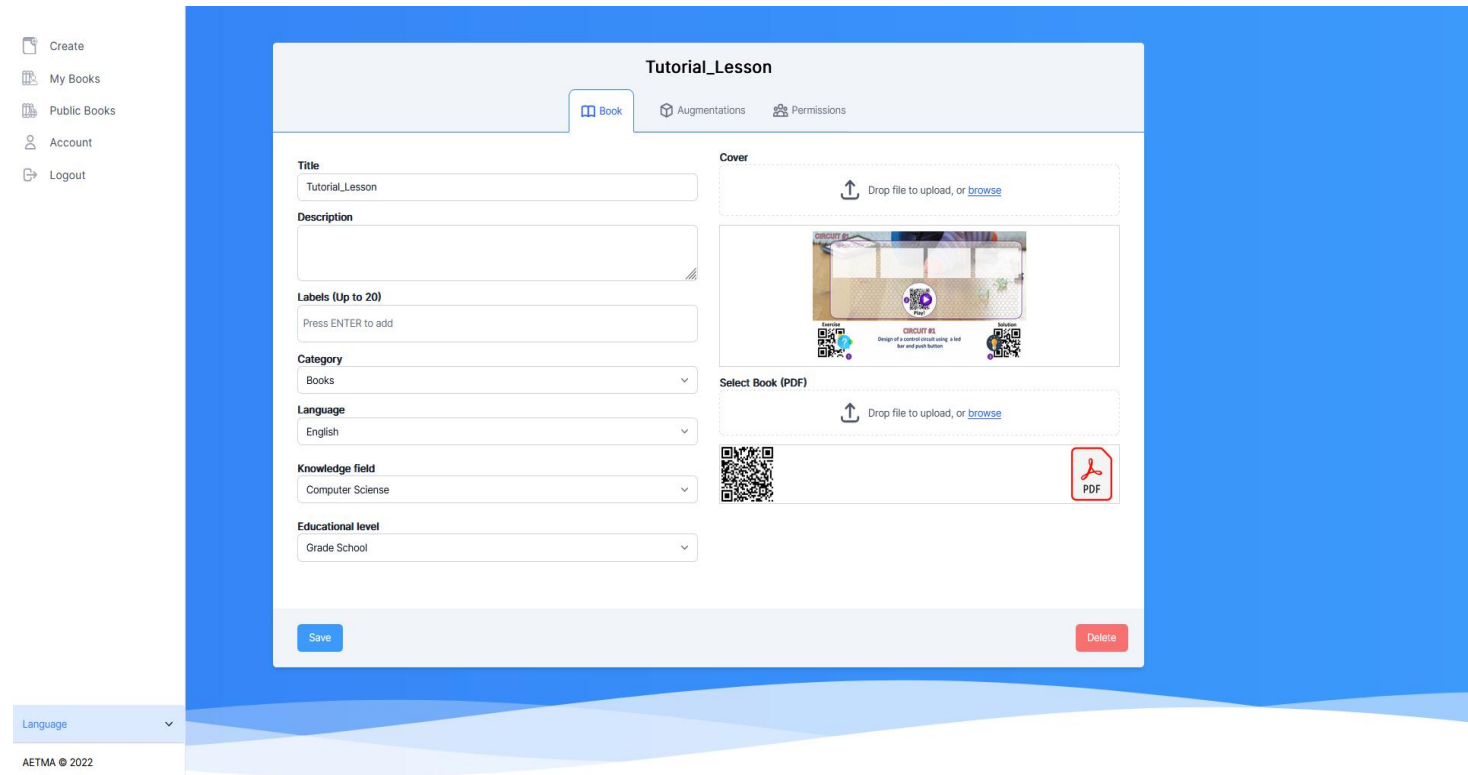
- Select Cover***: LESSON_1.png (with a preview image of a book cover)
- Select Book (PDF)***: Lesson_1.pdf

At the bottom of the form is a blue **Save Book** button. Below the form, there is a 'Language' dropdown menu and a footer that reads 'AETMA © 2022'.

How to use the ARTutor Step 4



- After creating the book three tabs are shown **Book**, **Augmentations** and **Permissions**
- The **Book** tab show the characteristics of our created book.



The screenshot shows the 'Tutorial_Lesson' form with the 'Book' tab selected. The form includes the following fields and sections:

- Title:** Tutorial_Lesson
- Description:** (Empty text area)
- Labels (Up to 20):** (Text input with 'Press ENTER to add' prompt)
- Category:** Books (Dropdown menu)
- Language:** English (Dropdown menu)
- Knowledge field:** Computer Science (Dropdown menu)
- Educational level:** Grade School (Dropdown menu)
- Cover:** (Image upload area with a placeholder image of a book cover)
- Select Book (PDF):** (Text input with 'Drop file to upload, or browse' prompt)
- QR Code:** (QR code image)
- PDF Icon:** (PDF icon)
- Buttons:** Save (Blue), Delete (Red)

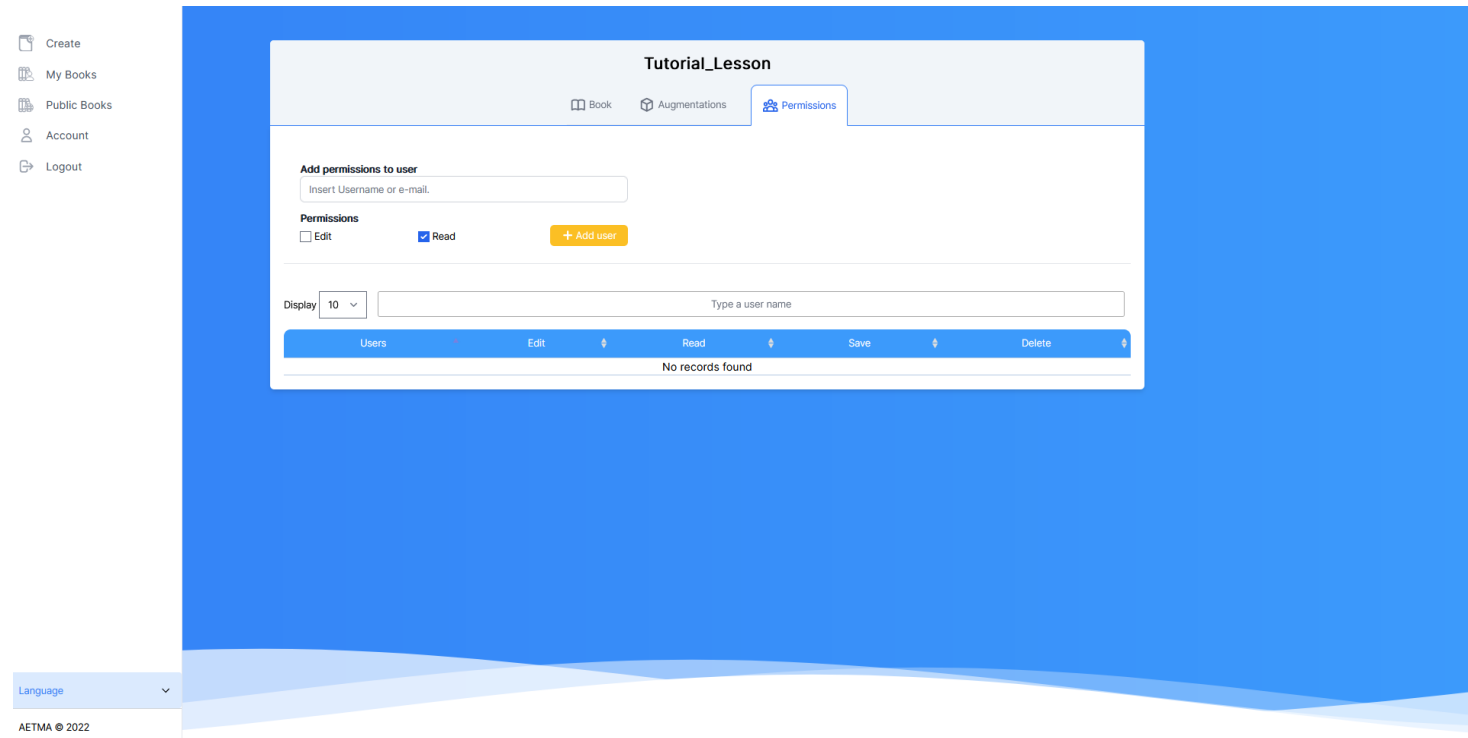
On the left side of the form, there is a sidebar menu with the following options: Create, My Books, Public Books, Account, and Logout.



How to use the ARTutor Step 4



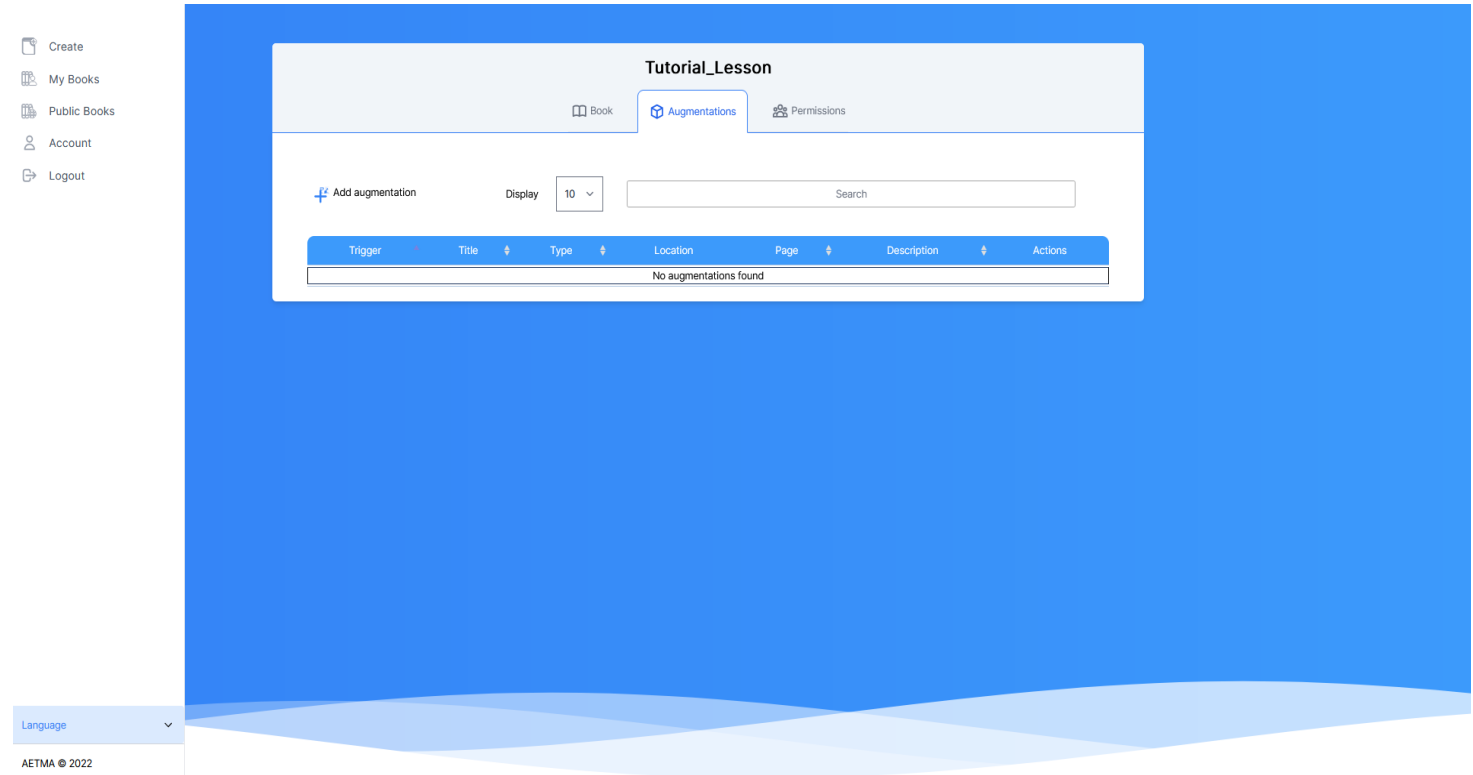
- The **Permissions** tab show the user which have access to the created book.
- In this tab the user can add other users.



How to use the ARTutor Step 4



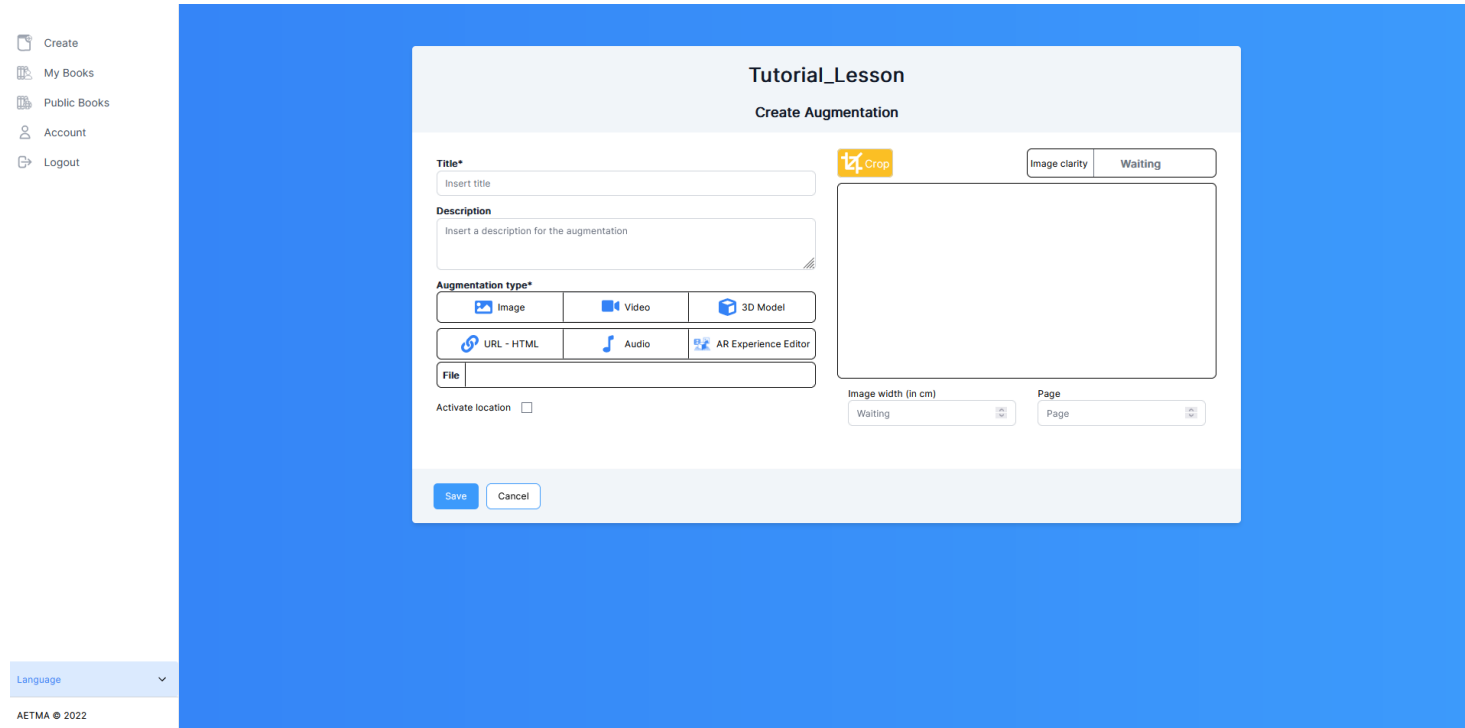
- The **Augmentations** tab show the **Augmentations** of our created book.
- In this tab the user can add his own **Augmentations** by clicking on **Add augmentations**.



How to use the ARTutor Step 5



- After clicking on the **Add augmentations** button the panel provides many augmentation options for the user like.
 - Image
 - Video
 - 3D Model
 - URL-HTML
 - Audio
 - AR Experience Editor



The screenshot shows the 'Tutorial_Lesson' interface for creating an augmentation. On the left is a sidebar with links: Create, My Books, Public Books, Account, and Logout. The main area is titled 'Create Augmentation' and contains the following fields and options:

- Title***: A text input field with the placeholder 'Insert title'.
- Description**: A text area with the placeholder 'Insert a description for the augmentation'.
- Augmentation type***: A row of buttons for 'Image', 'Video', '3D Model', 'URL - HTML', 'Audio', and 'AR Experience Editor'.
- File**: A text input field for uploading a file.
- Activate location**: A checkbox.
- Image width (in cm)**: A text input field with the placeholder 'Waiting'.
- Page**: A text input field with the placeholder 'Page'.
- Buttons**: 'Save' and 'Cancel' buttons at the bottom.
- Top right**: A 'Crop' button and a status bar showing 'Image clarity' and 'Waiting'.

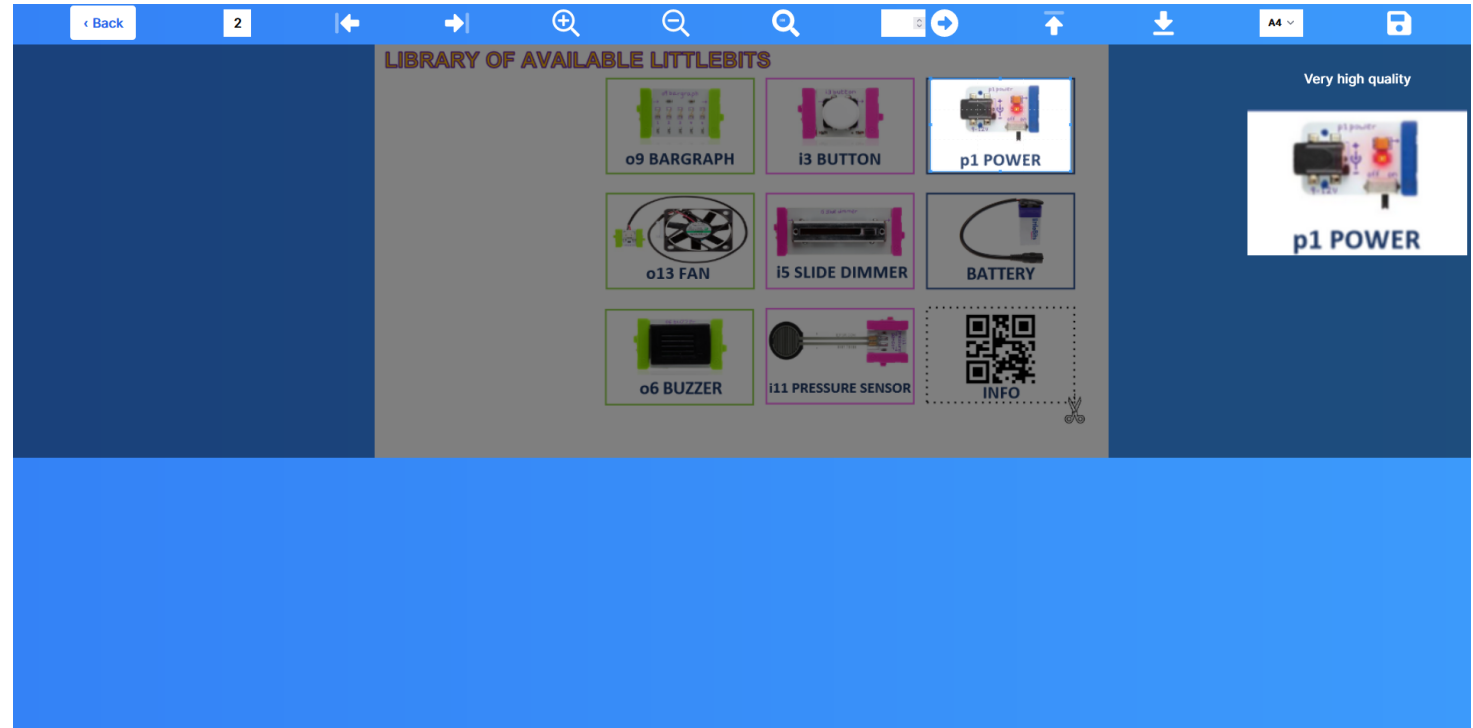
At the bottom left, there is a 'Language' dropdown menu and a copyright notice 'AETMA © 2022'.



How to use the ARTutor Step 6



- After filling all the required fields and choosing the type and after the file of augmentation, the user by clicking on the **Crop button** selects the region of the book which he wants to be augmented.



How to use the ARTutor Step 7



- After the selection region of the book which he wants to be augmented.
- The user can save the augmentation by clicking on the **Save** button.

Create
My Books
Public Books
Account
Logout

Language

AETMA © 2022

Tutorial_Lesson

Create Augmentation

Title*

First_Augmentation

Description

Insert a description for the augmentation

Augmentation type*

Image

Video

3D Model

URL - HTML

Audio

AR Experience Editor

File

POWER.glb

Activate location

☐

Image width (in cm)

6,67

Page

2

Save

Cancel

Crop

Image clarity

Normal

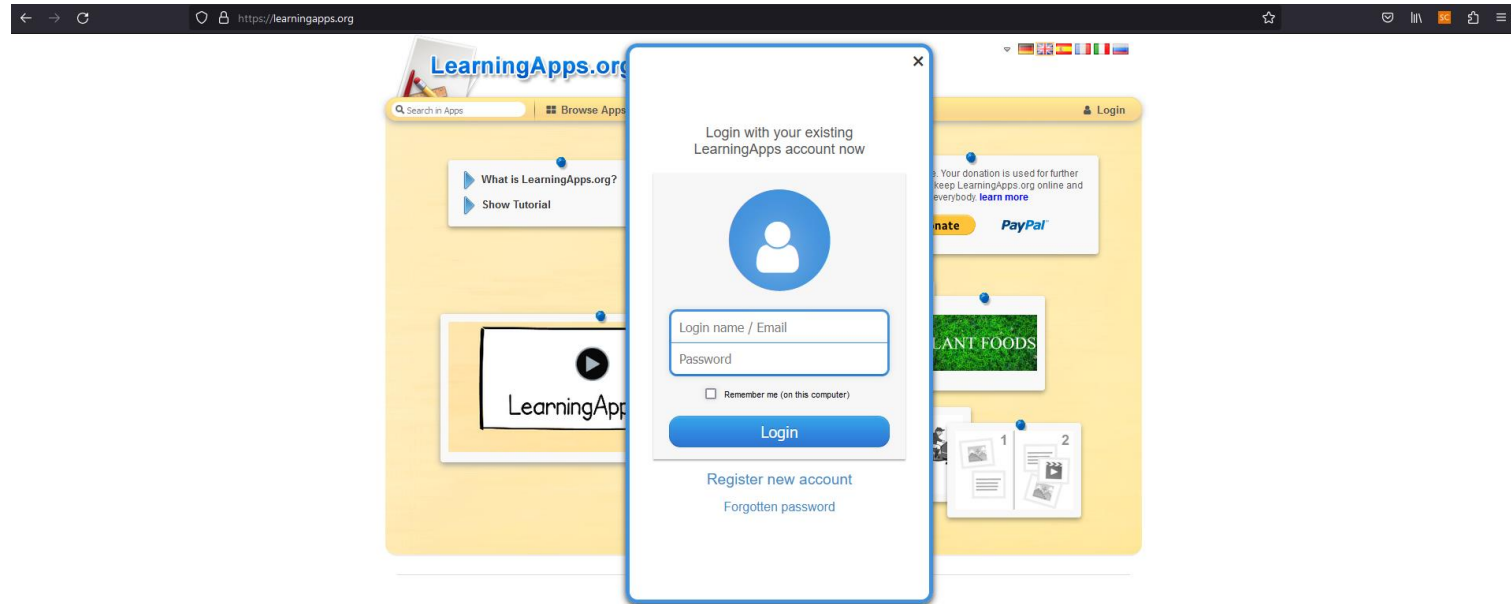


p1 POWER

Create an app with LearningApps



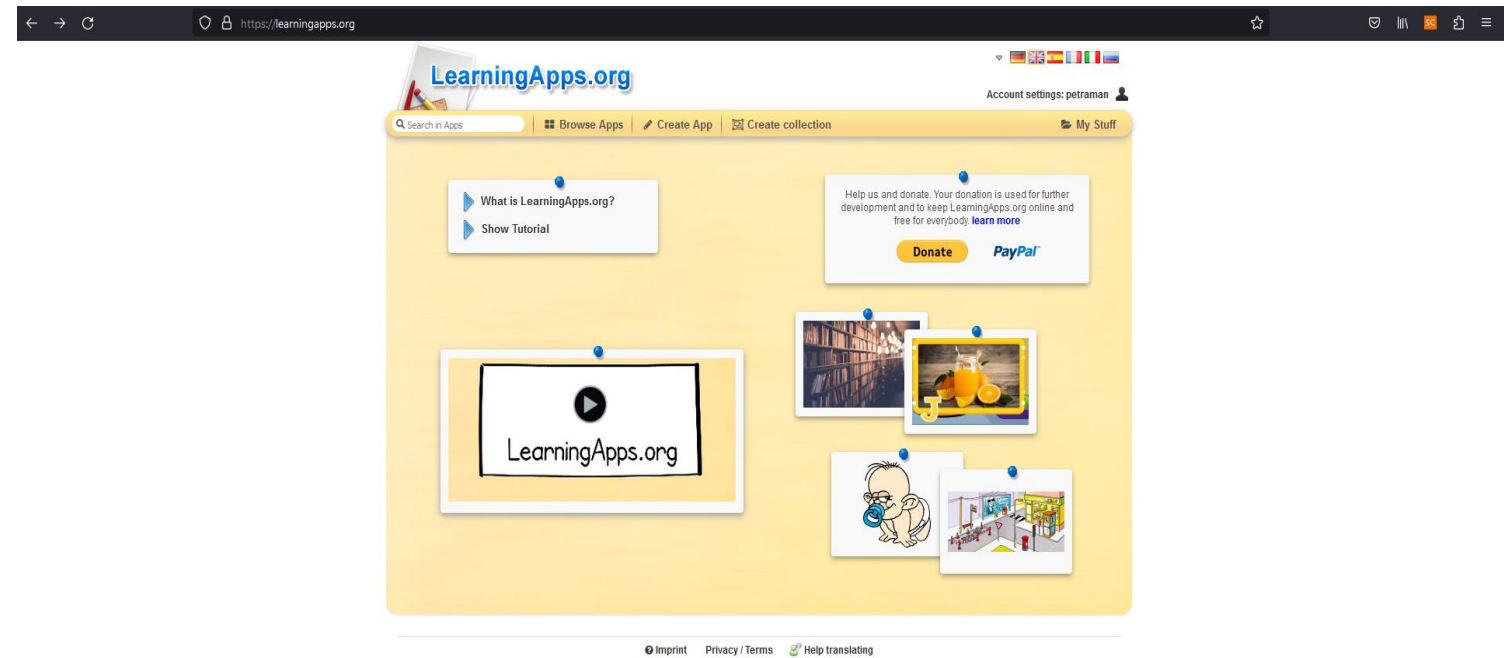
- Register for free or login if you have already registered on <https://learningapps.org/>.



Create an app with LearningApps



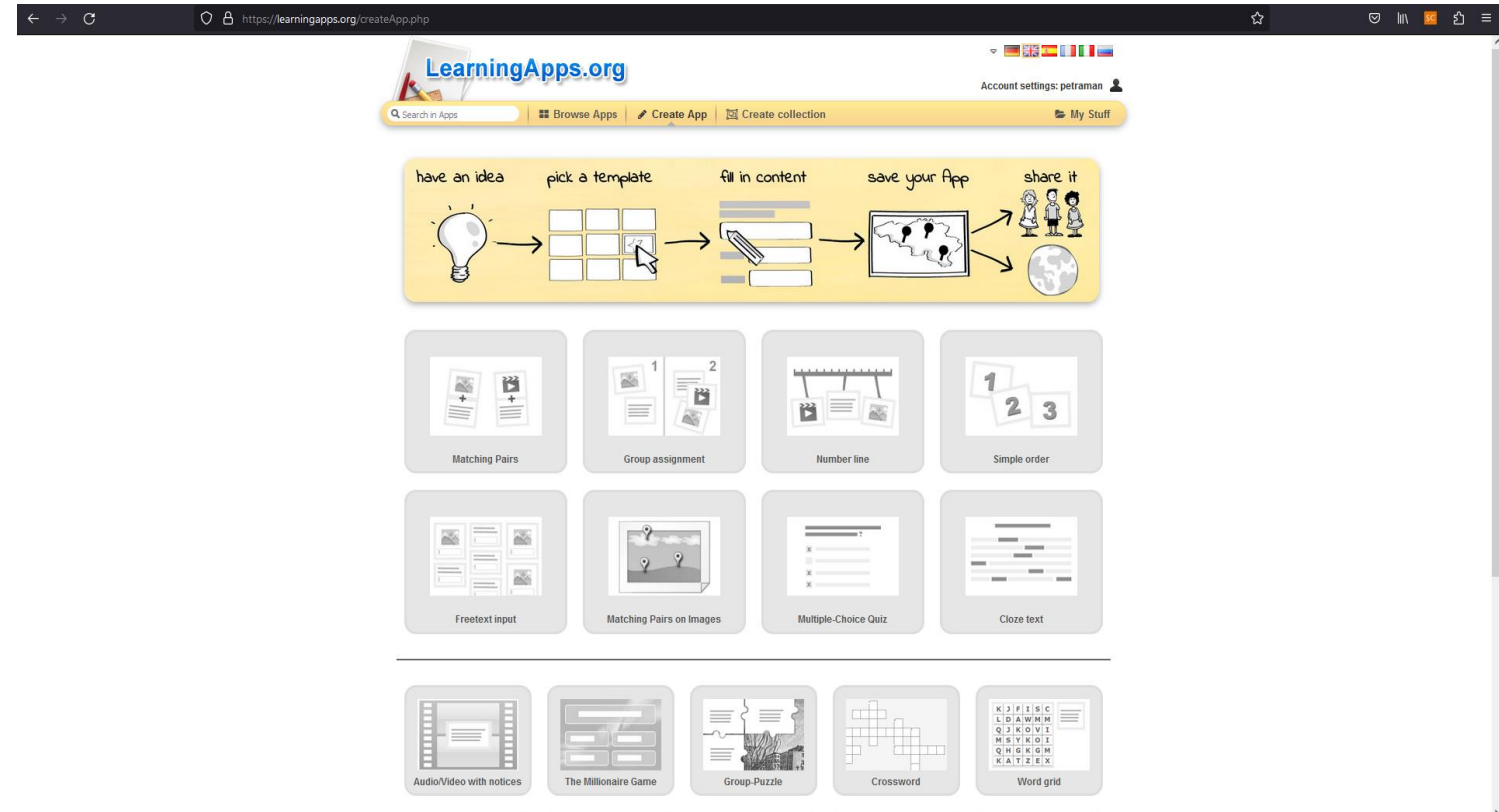
- After the login click on **create app** to make the app you prefer to use.



Create an app with LearningApps



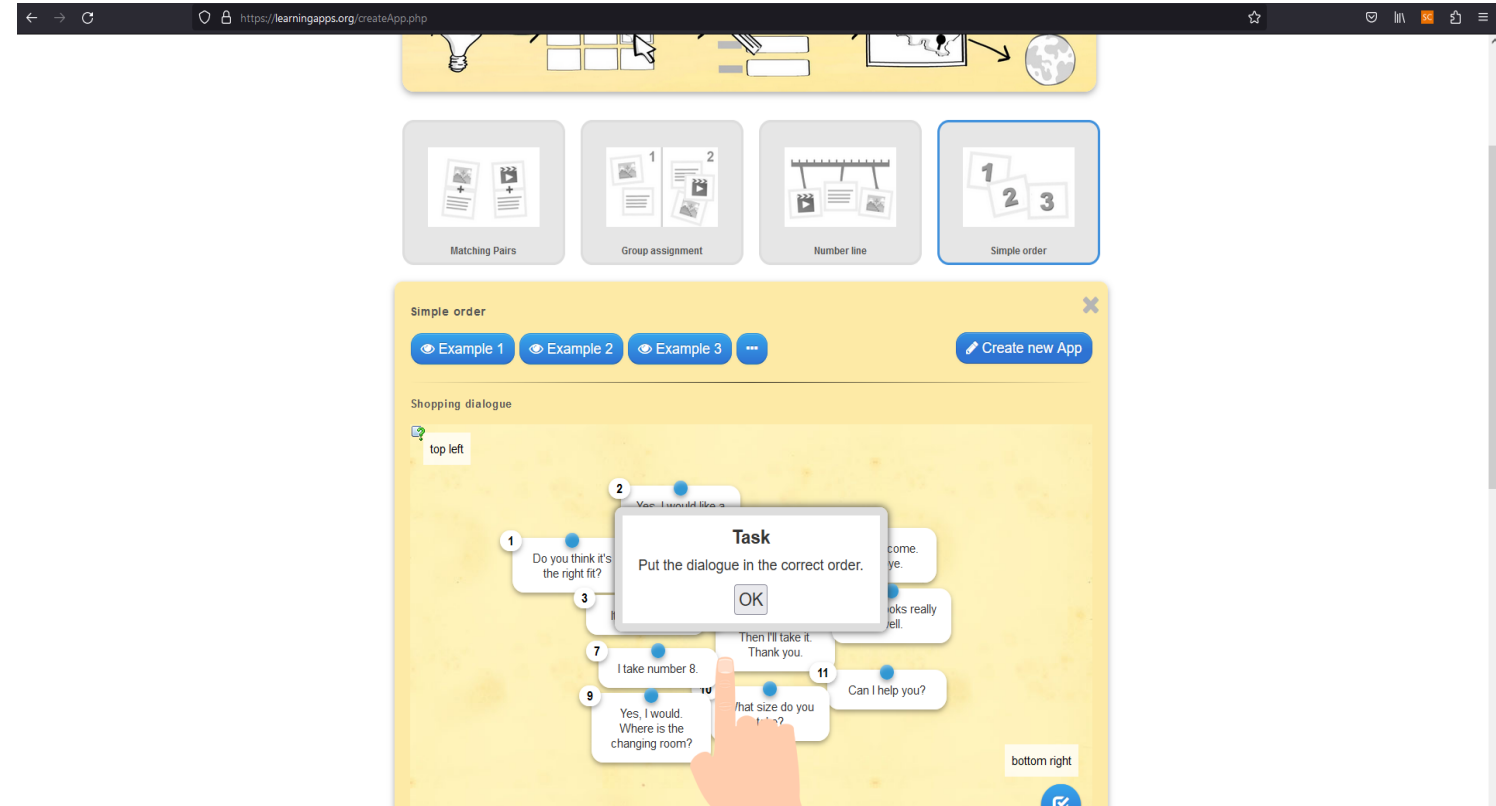
- Choose app option you prefer to create. For example **Simple order**.



Create an app with LearningApps



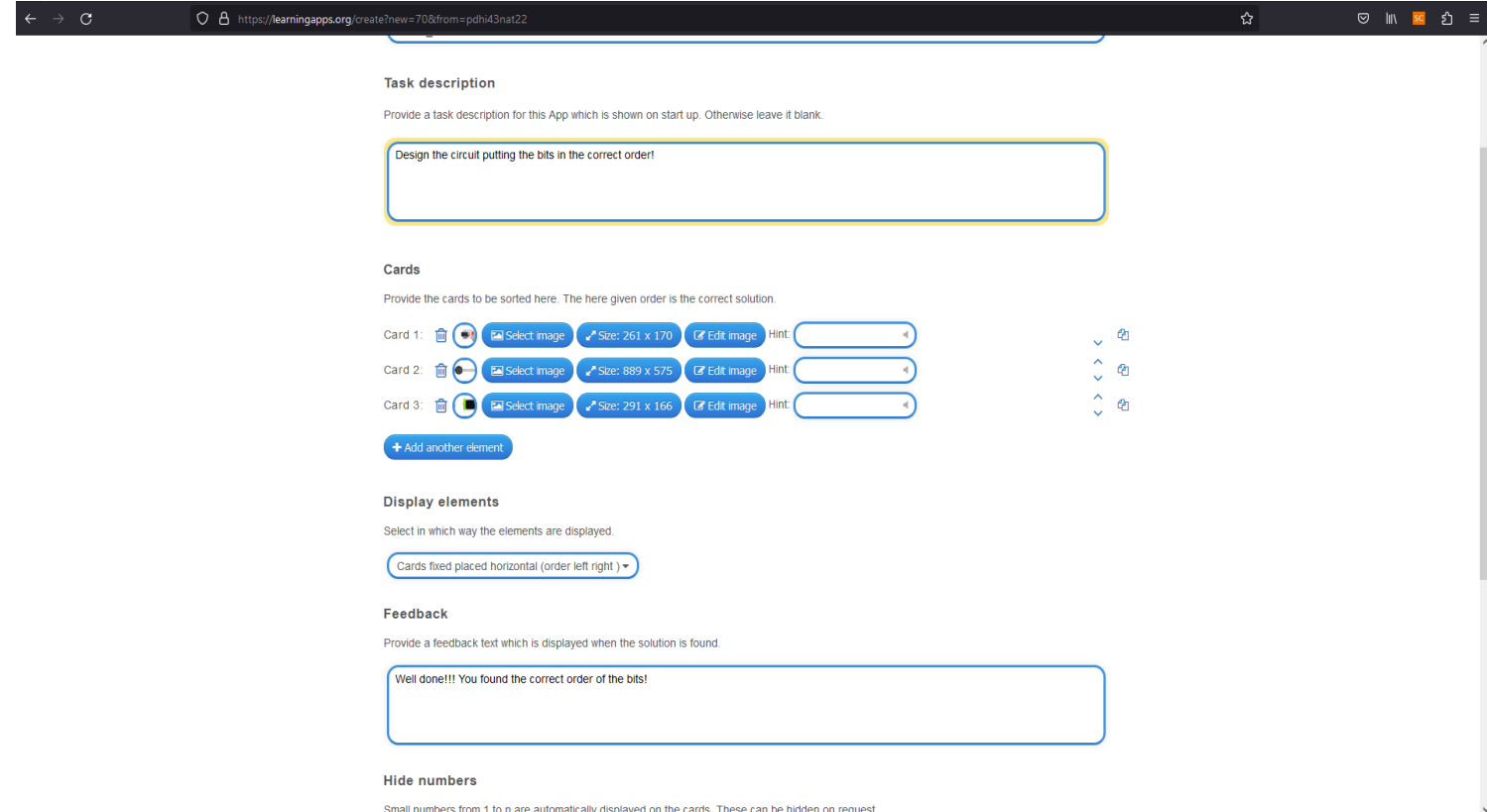
- Click on **Create new App** to start making your app.



Create an app with LearningApps



- Fill the field **Task Description** providing an analytic description of the task.



← → ↻ <https://learningapps.org/create?new=70&from=pdfid3nat22> ☆

Task description

Provide a task description for this App which is shown on start up. Otherwise leave it blank.

Design the circuit putting the bits in the correct order!

Cards

Provide the cards to be sorted here. The here given order is the correct solution.

Card 1:			Select image	Size: 261 x 170		Edit image	Hint:	
Card 2:			Select image	Size: 889 x 575		Edit image	Hint:	
Card 3:			Select image	Size: 291 x 166		Edit image	Hint:	

+ Add another element

Display elements

Select in which way the elements are displayed.

Cards fixed placed horizontal (order left right) ▾

Feedback

Provide a feedback text which is displayed when the solution is found.

Well done!!! You found the correct order of the bits!

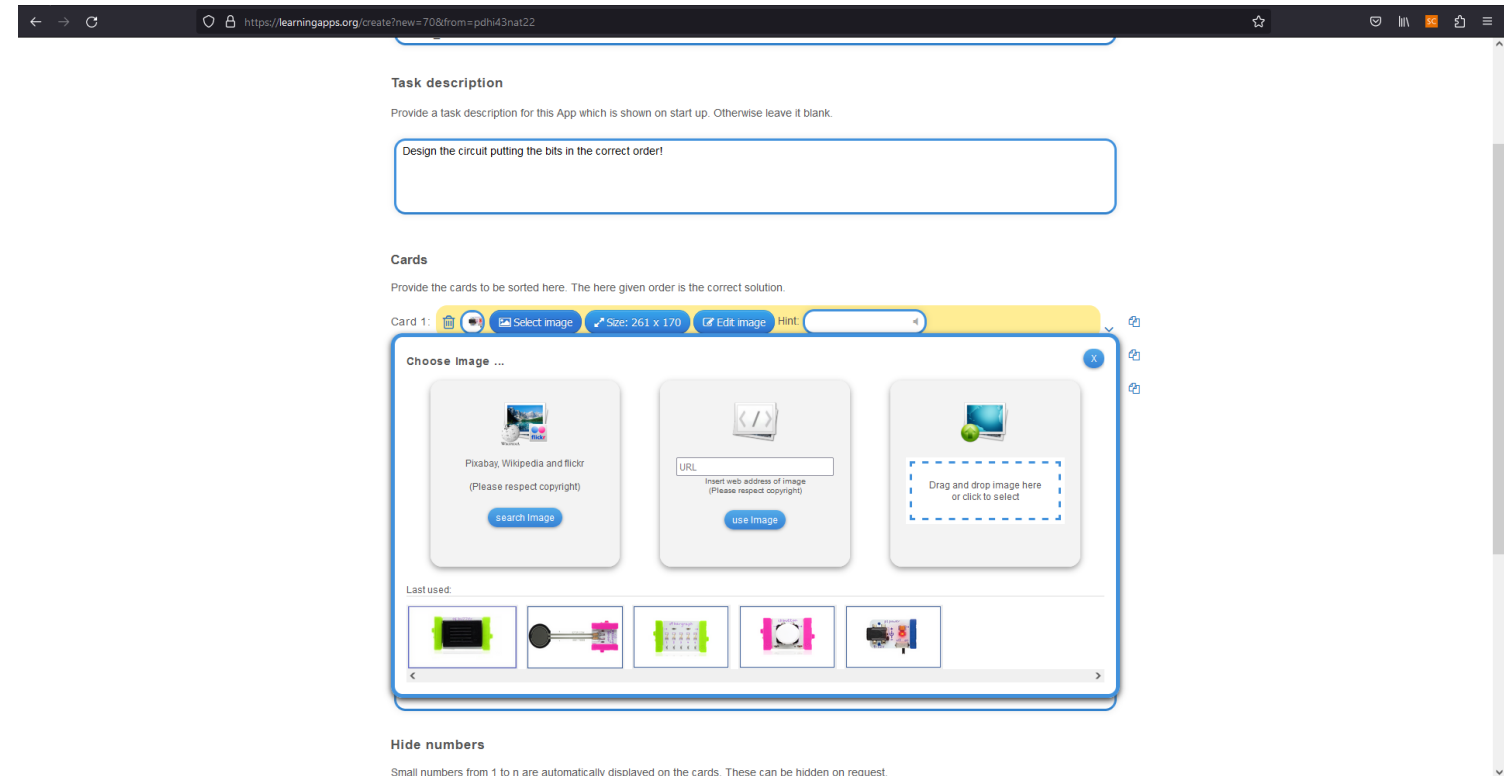
Hide numbers

Small numbers from 1 to n are automatically displayed on the cards. These can be hidden on request

Create an app with LearningApps



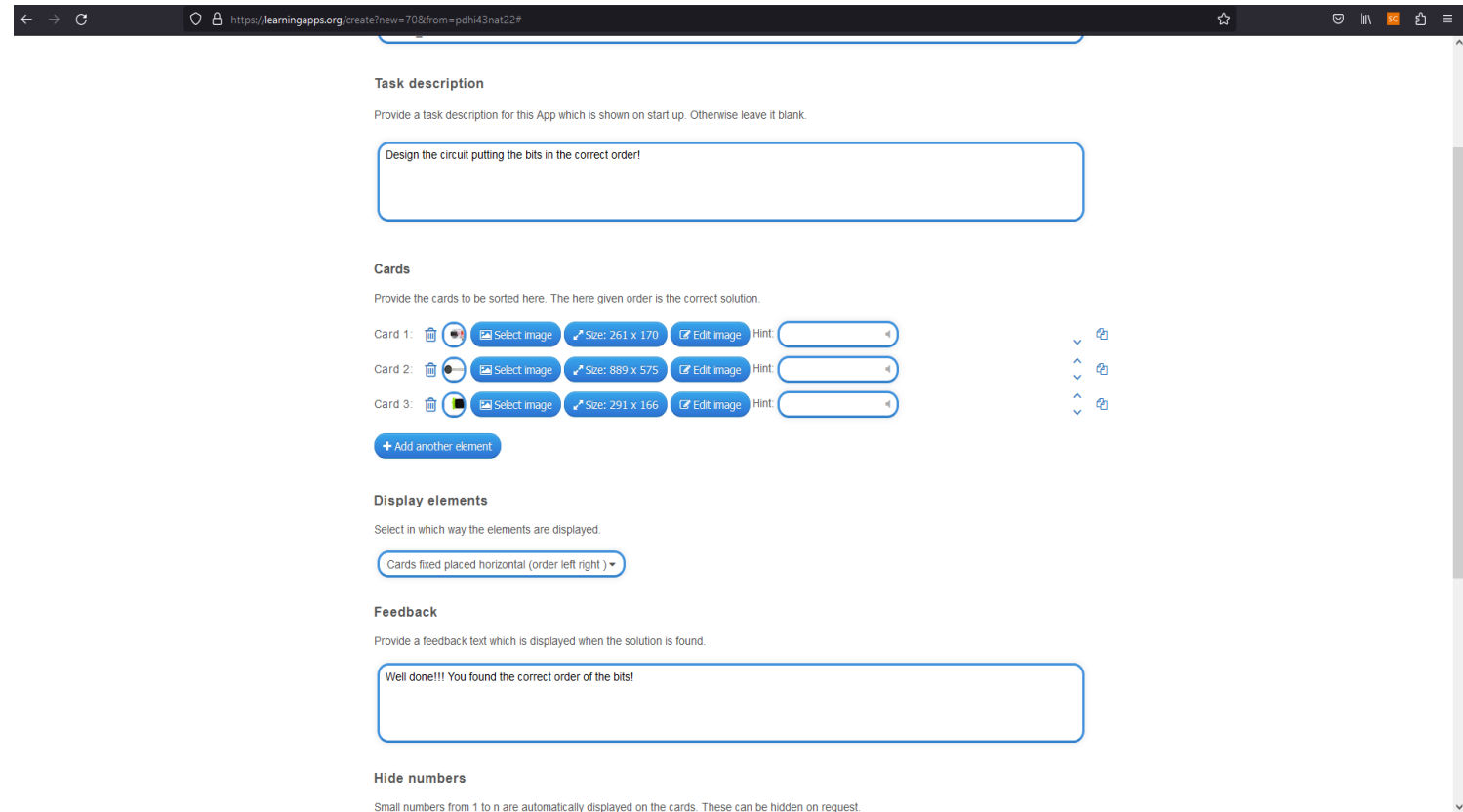
- In the Cards field by clicking on the **Select image** button you can upload and process an image of the card.
- Three upload options are provided.



Create an app with LearningApps



- Select display option on the Display elements field and add a feedback text on the feedback field.



The screenshot shows the LearningApps.org interface for creating an app. The URL in the browser is <https://learningapps.org/create?new=70&from=pdhi43nat22#>.

Task description
Provide a task description for this App which is shown on start up. Otherwise leave it blank.
Design the circuit putting the bits in the correct order!

Cards
Provide the cards to be sorted here. The here given order is the correct solution.

Card	Image	Size	Edit image	Hint
Card 1:		Size: 261 x 170		Hint:
Card 2:		Size: 889 x 575		Hint:
Card 3:		Size: 291 x 166		Hint:

[+ Add another element](#)

Display elements
Select in which way the elements are displayed.
Cards fixed placed horizontal (order left right)

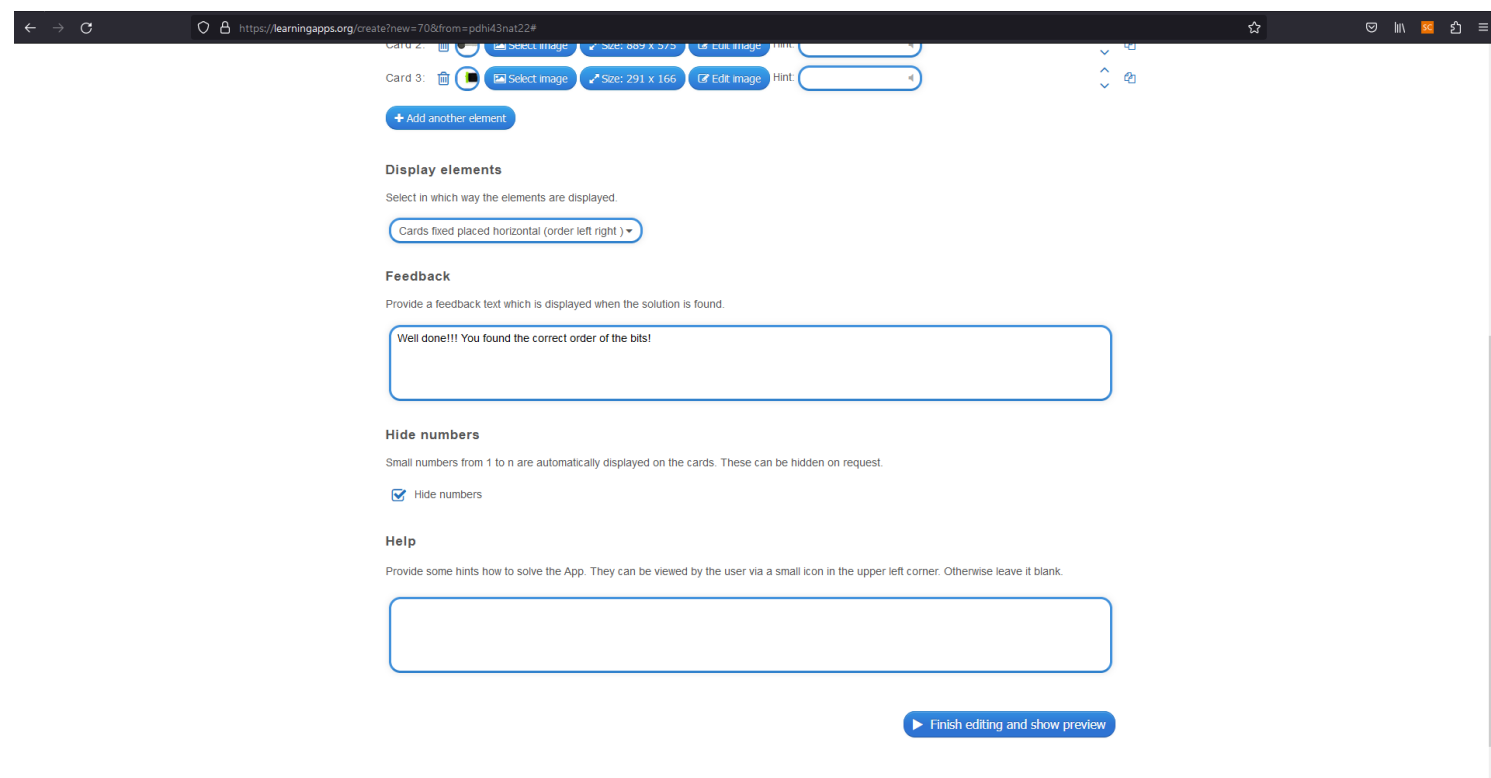
Feedback
Provide a feedback text which is displayed when the solution is found.
Well done!!! You found the correct order of the bits!

Hide numbers
Small numbers from 1 to n are automatically displayed on the cards. These can be hidden on request.

Create an app with LearningApps



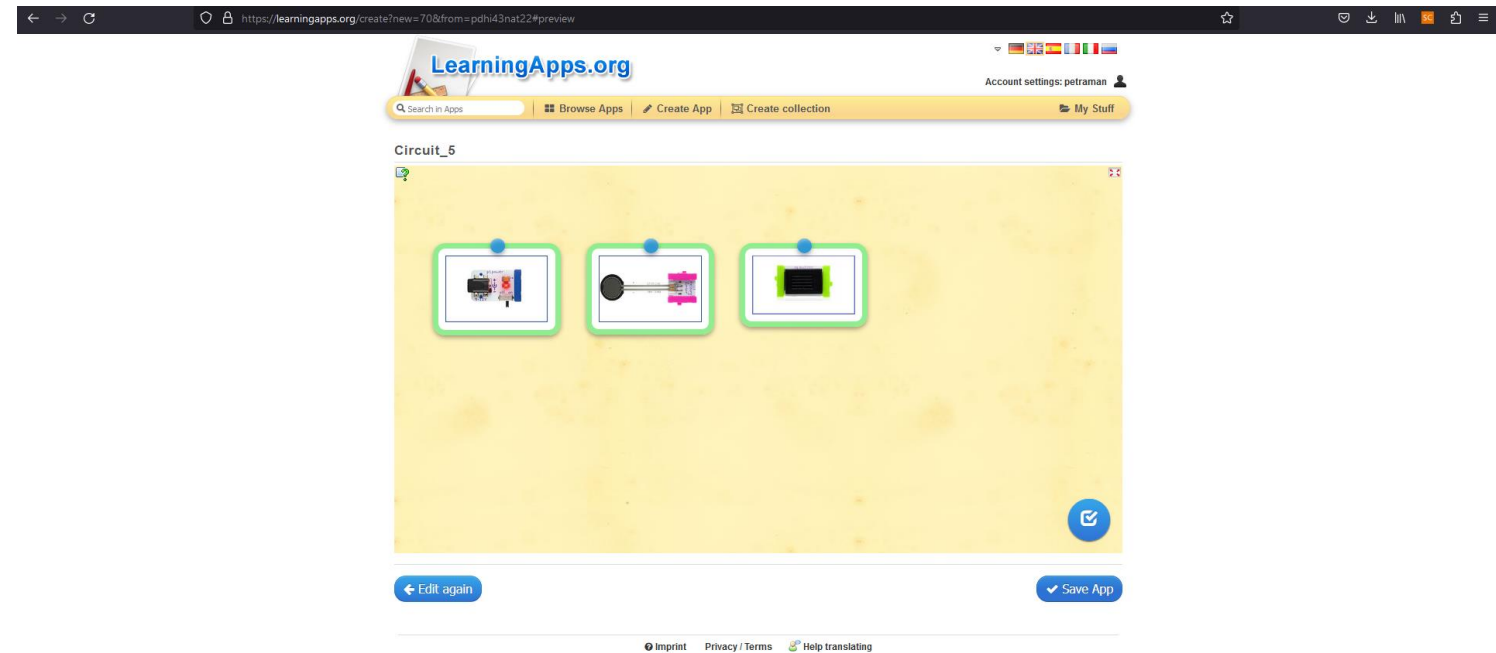
- Click on the **Finish editing and show preview** button to finish the app you created.



Create an app with LearningApps



- Lastly, you can test your app and, also save the app by clicking on the **Save app** button.



Create an app with LearningApps



- To share the app to other users, use the link or the QR code provided.

