



brainboost

ACADEMY

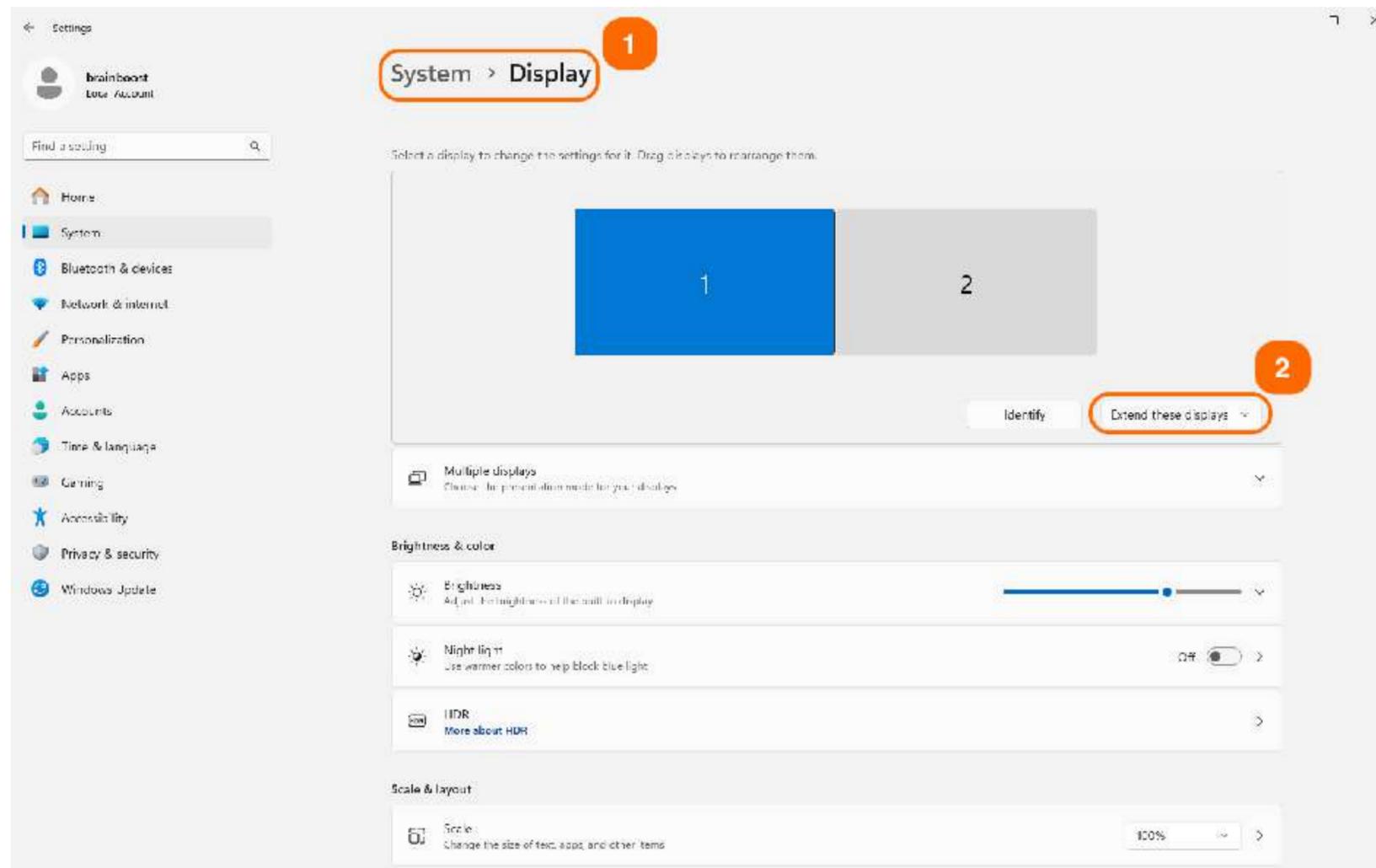
TRAINING | CERTIFICATION | SUPERVISION

BrainAssistant

Quick Start



PREPARATION BEFORE THE SESSION



Connect the laptop/PC to **another monitor/TV** (you will need an HDMI cable for this). We recommend a TV > 45 inches.

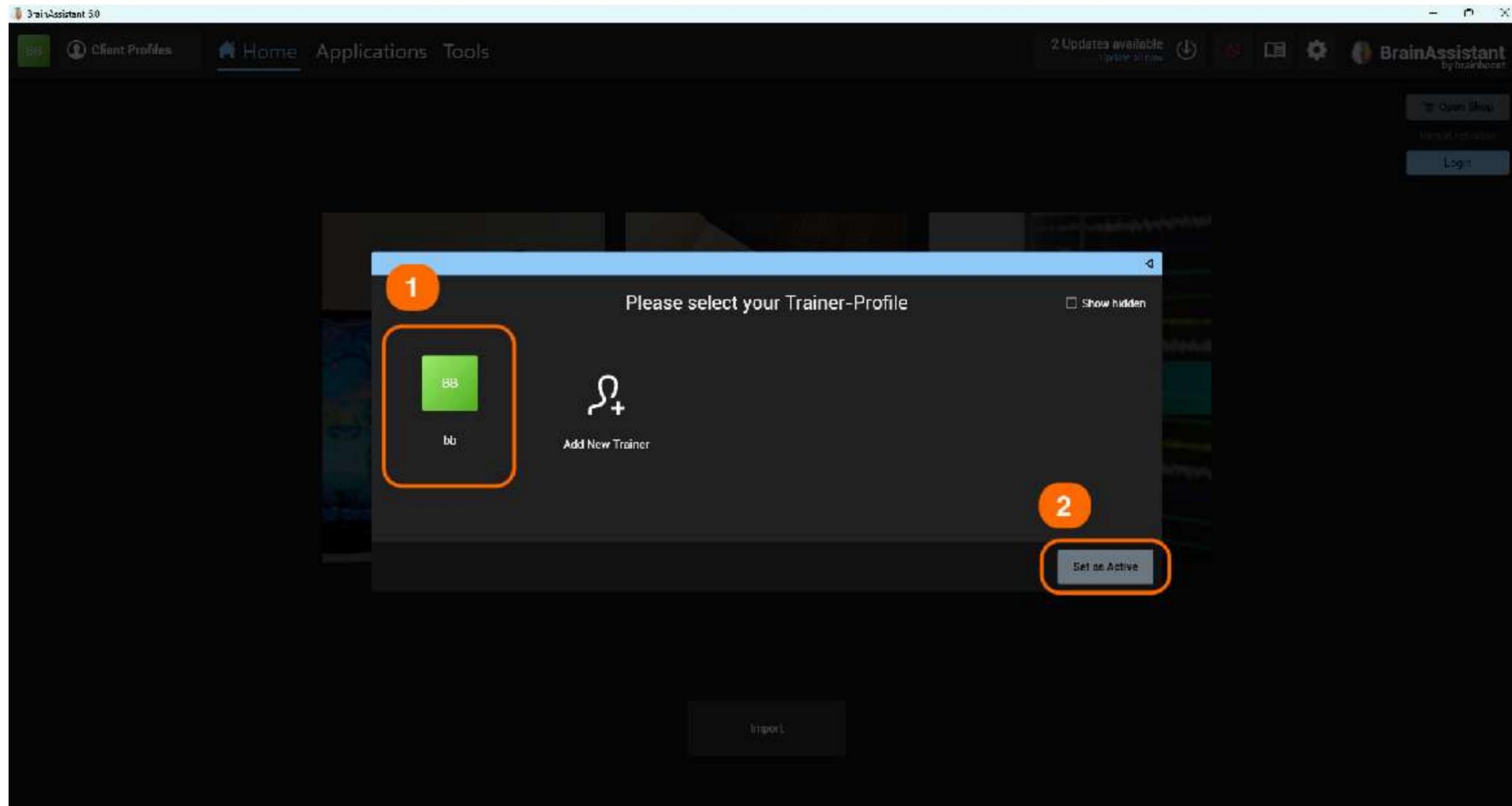
To expand the screen, click on the system settings and then on "**System**" (1). Then select "**Extend these displays**" (2). Click "**Keep**" when a pop-up window appears.

We will expand the screen to ensure that the application opens automatically on the user's screen.

If you are using a laptop, always connect it to the power supply during the session.

Connect headphones to the PC/laptop before the session. We recommend **on-ear headphones**.

TRAINER-PROFILE



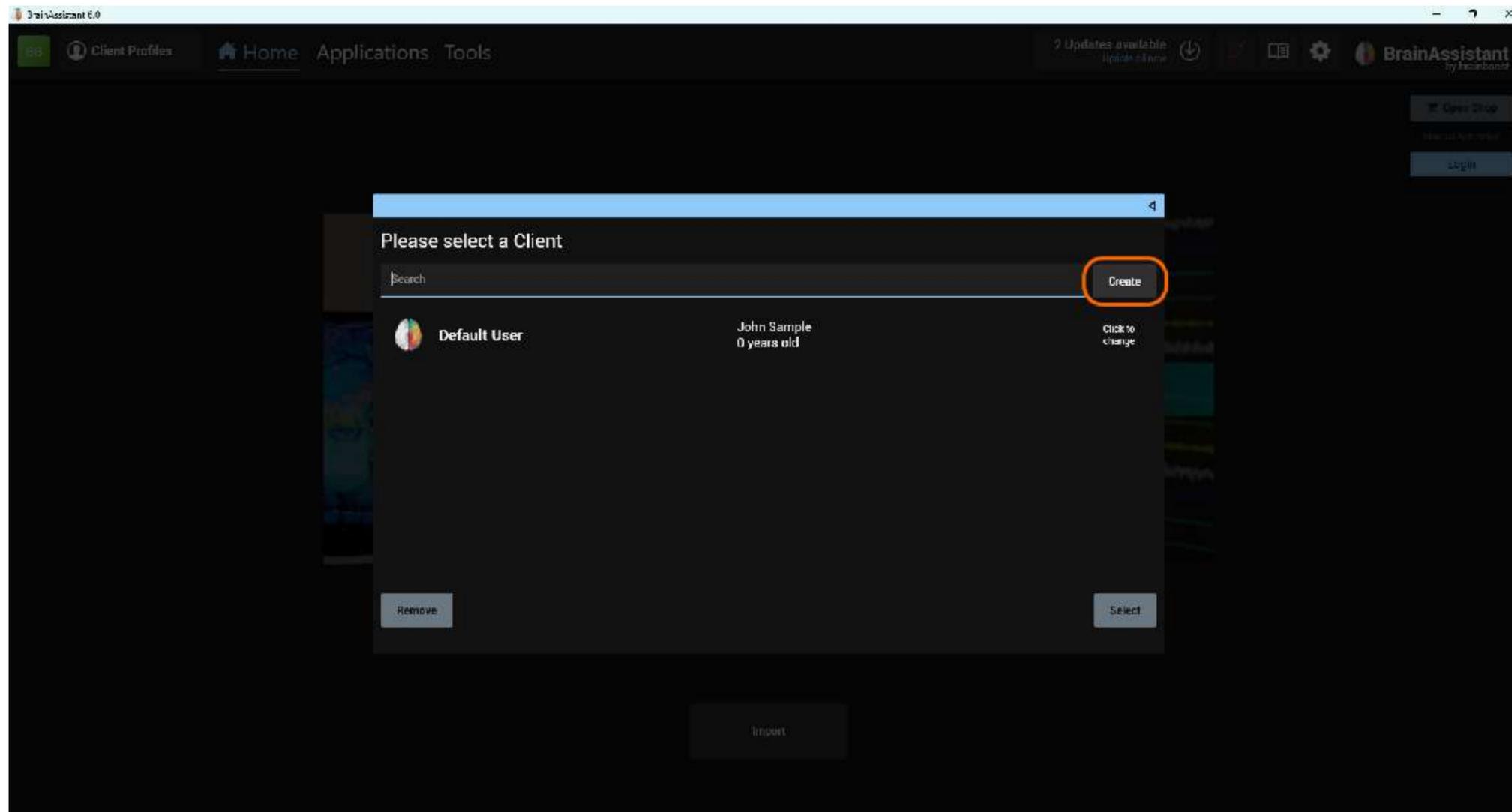
Open the BrainAssistant via the Windows taskbar.

Select an existing Trainer-Profile or create a new one by clicking on "**Add new trainer**" (1). Then click on the "**Set as active**" button to select the Trainer-Profile (2).



Make sure you only open the BrainAssistant ONCE.

CHOOSE A CLIENT



Select the desired client by **clicking on the client** and on the "**Select**" button. You can also find the client using the search function.

To create a new client, click on the "**Create**" button.

CREATE A CLIENT

BrainAssistant 6.0

Client Profiles Home Applications Tools

9 Updates available Update all now

BrainAssistant by headband

Create Client Profile

Username: Default User

First Name: [Text Field]

Last Name: [Text Field]

Date of Birth: Day - Month - Year

Age: 0

Gender: Not Specified

Handedness: Not Specified

Reason for visit: [Text Field]

Research Tags: [List]

Comment: [Rich Text Editor]

Client Address: [Text Field]

E-Mail: [Text Field]

Phone: [Text Field]

E-Mail (Invoice): [Text Field]

Invoice Address: [Text Field]

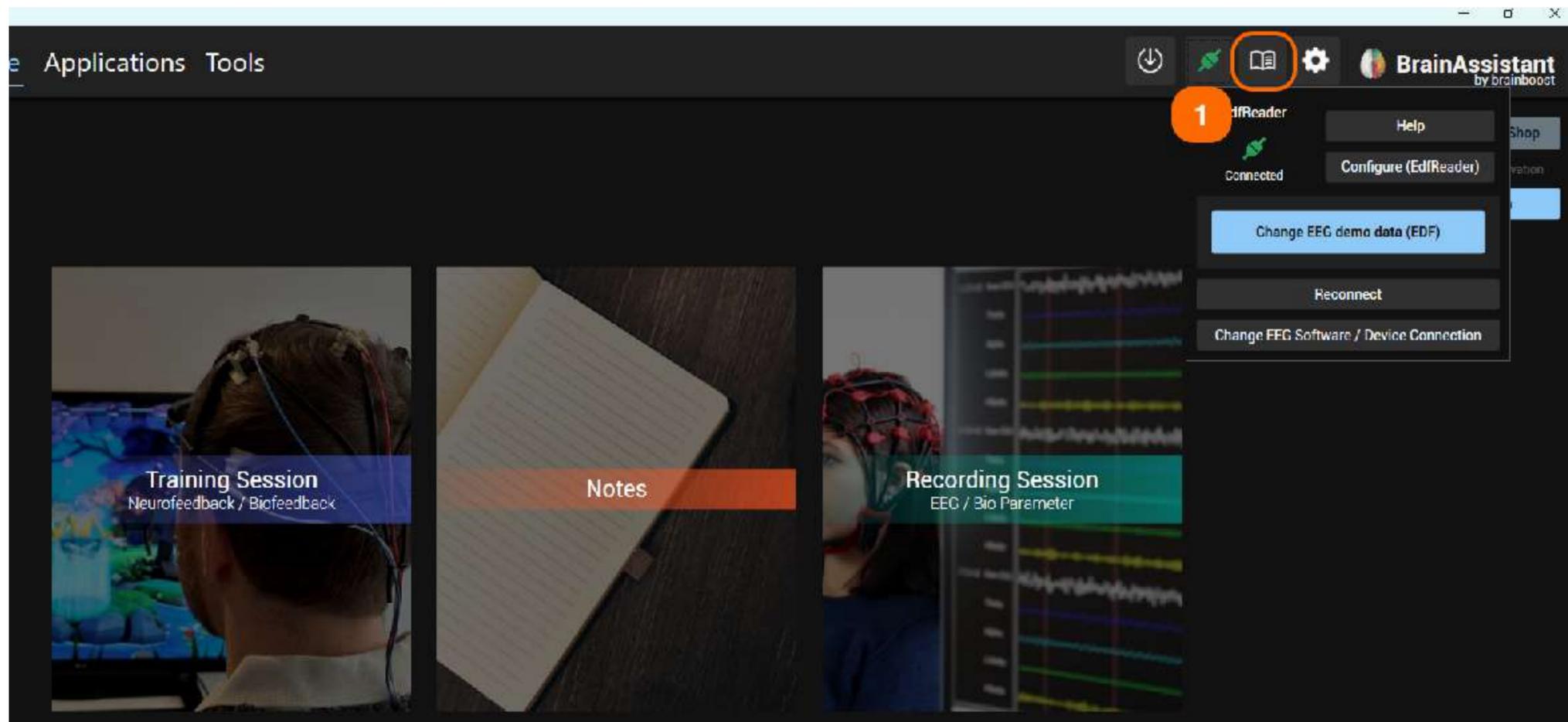
Invoice creation comment: [Text Field]

Back Create

To create a new client, please fill in the information at least until **handedness**. You can ignore the other fields if you do not need them.

Then click on the "**Create**" button.

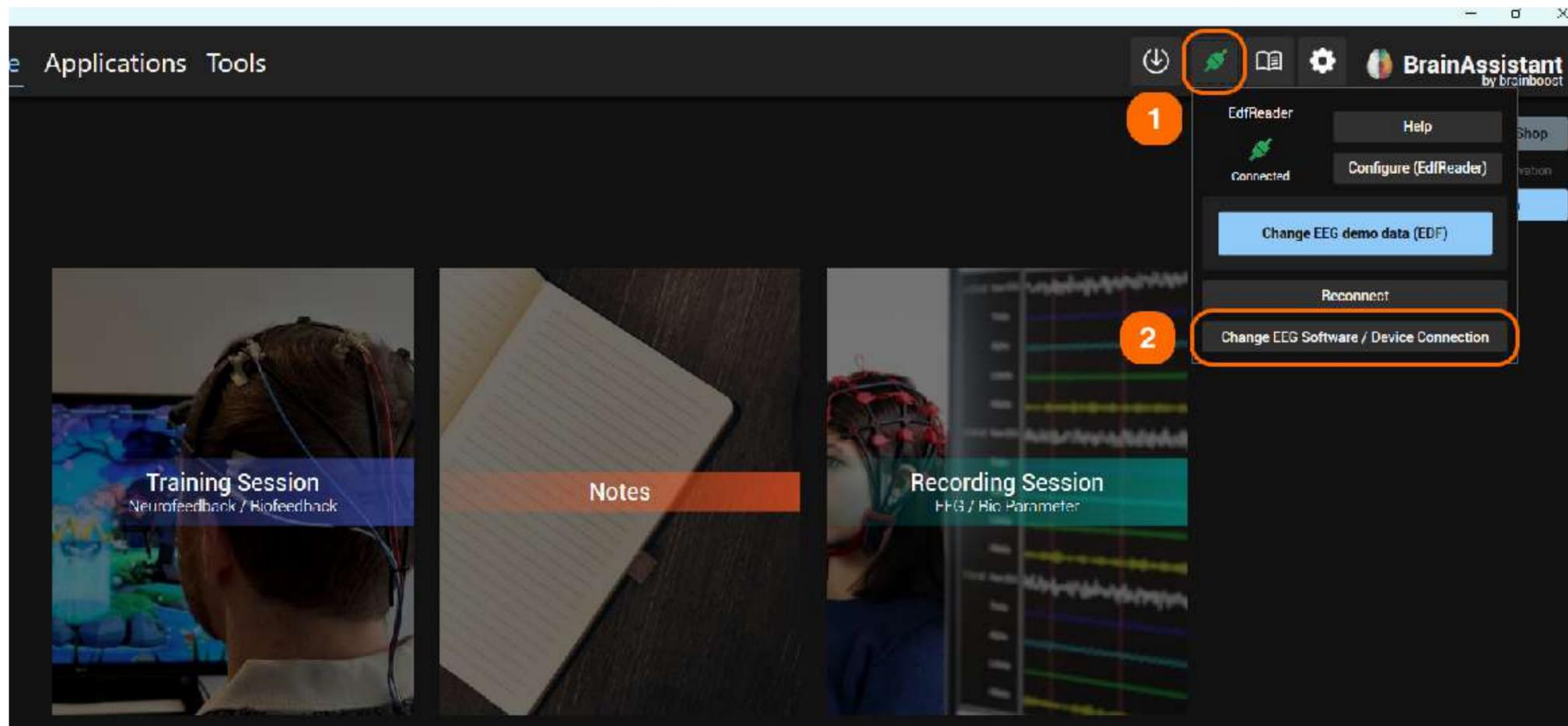
MANUAL



You can access our interactive manual via the **manual symbol** (1). If you press this button, a browser window will open.

Here you will find many tips and tricks, as well as answers to common questions.

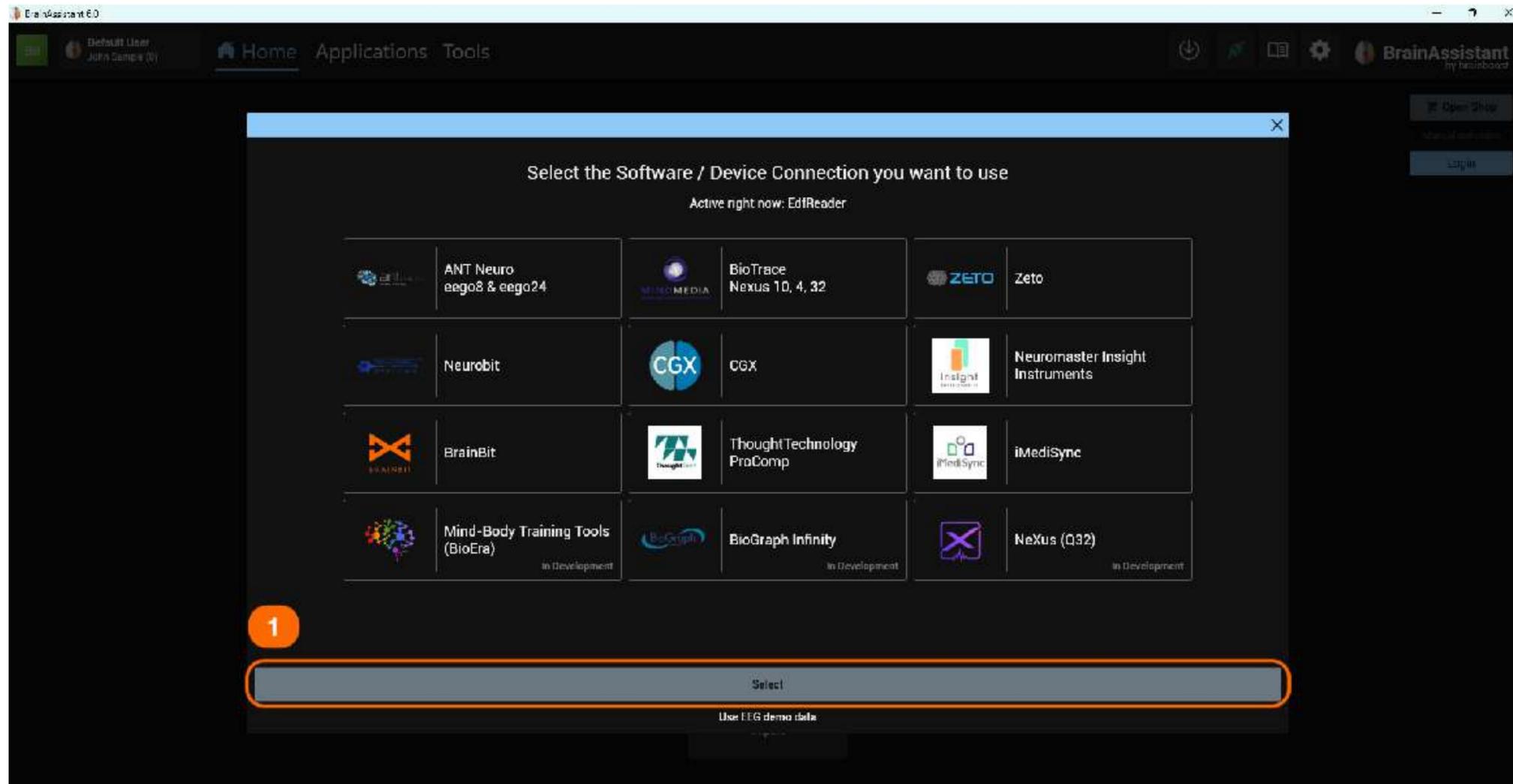
CONNECTING THE RIGHT DEVICE



Click on the **connection icon** at the top right (1). If no device is connected or it is not switched on, this icon will either be red or a spinning circle will be visible.

Now click on "**EEG Software/Change device connection**" to connect the correct device you are using (2).

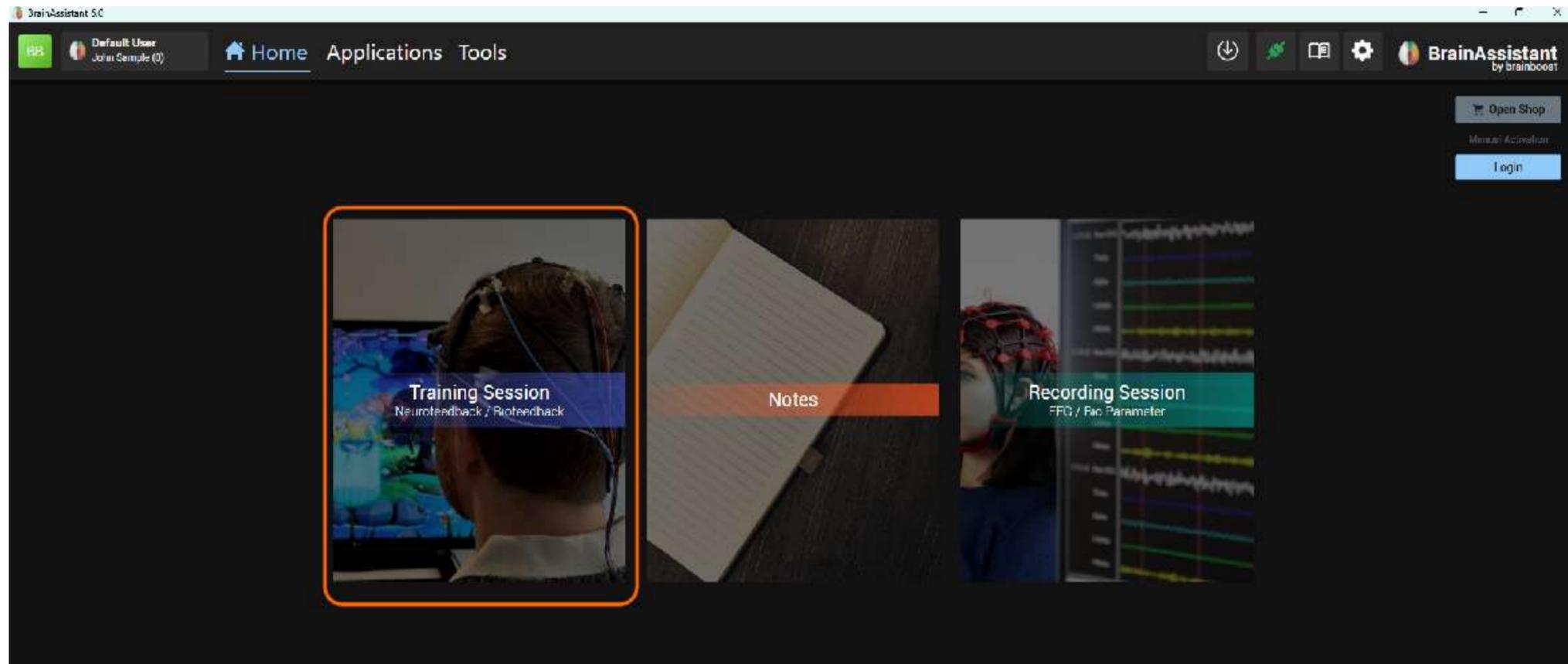
CHOOSING THE RIGHT HARDWARE



Now click on the **manufacturer of the device** you are using.

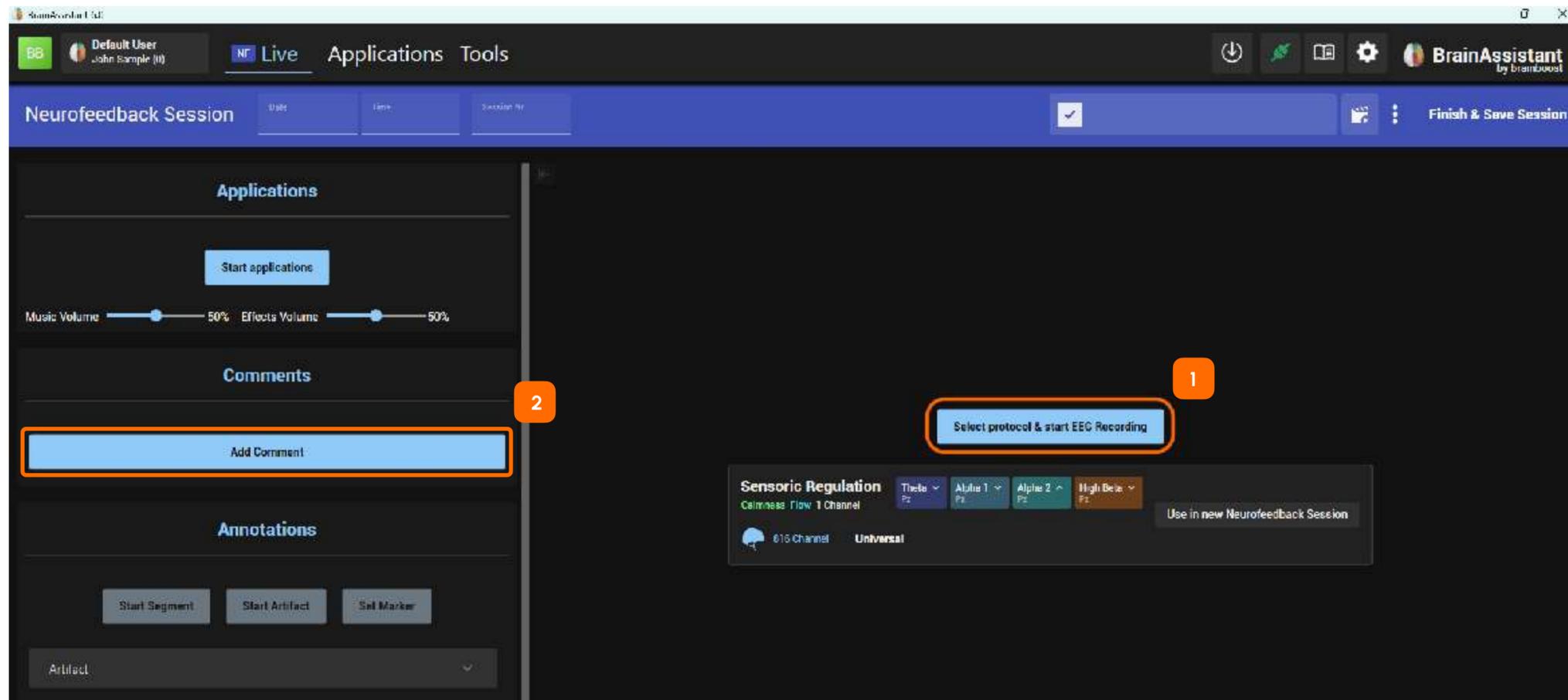
Then confirm your selection with the "**Select**" button (1), which has now turned blue.

START A TRAINING



You can now start the neurofeedback training by selecting "**Training session**" on the left.

CHOOSING A PROTOCOL AND COMMENTING

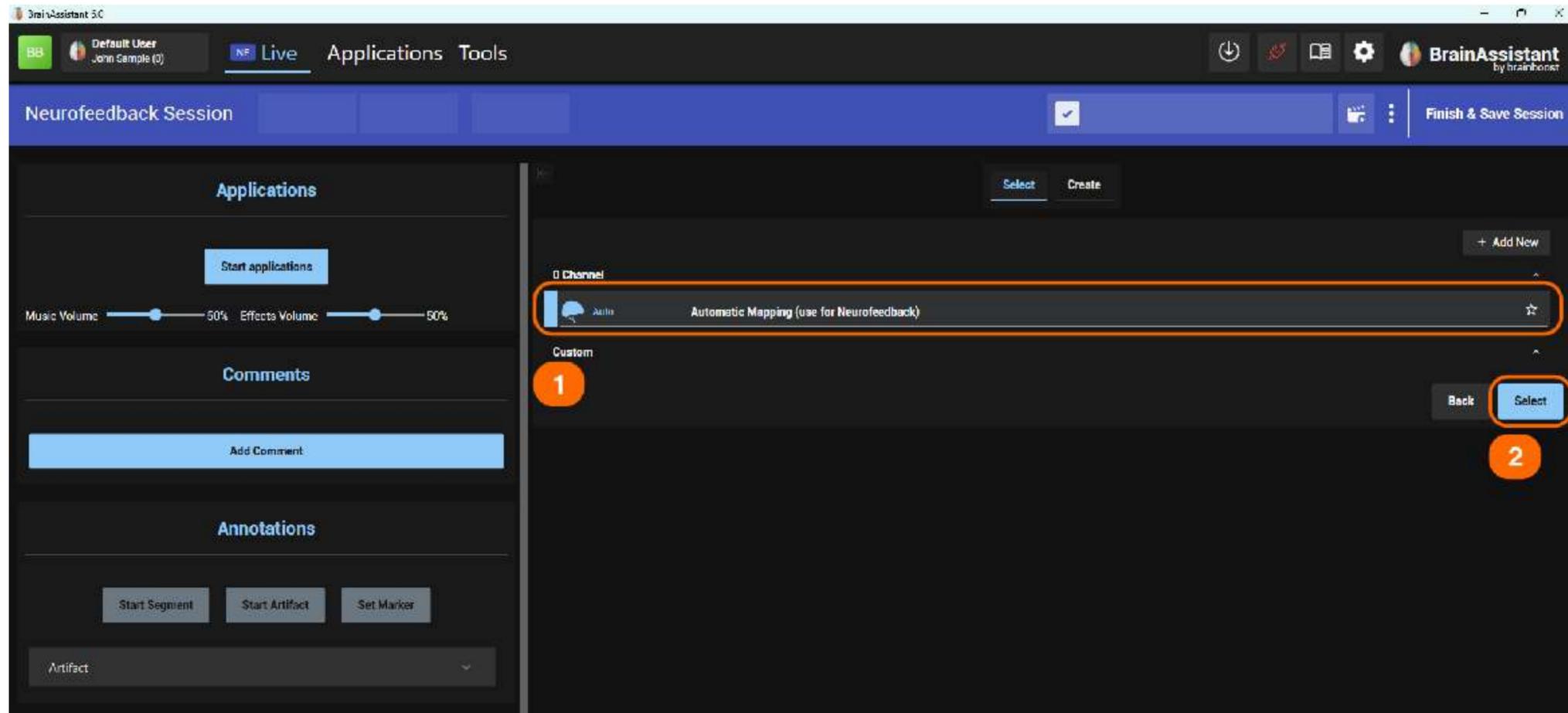


Click on the "**Select protocol and start EEG recording**" button in the middle (1).

Below this you will see the protocol that you last used with the client. If you click on "**Use in new neurofeedback session**", you will be taken directly to the signal check.

On the left, you can create notes using the blue "**Add comments**" button, e.g. in case the client shared important information in the spontaneous anamnesis (2).

CHOOSING ELECTRODE MAPPING



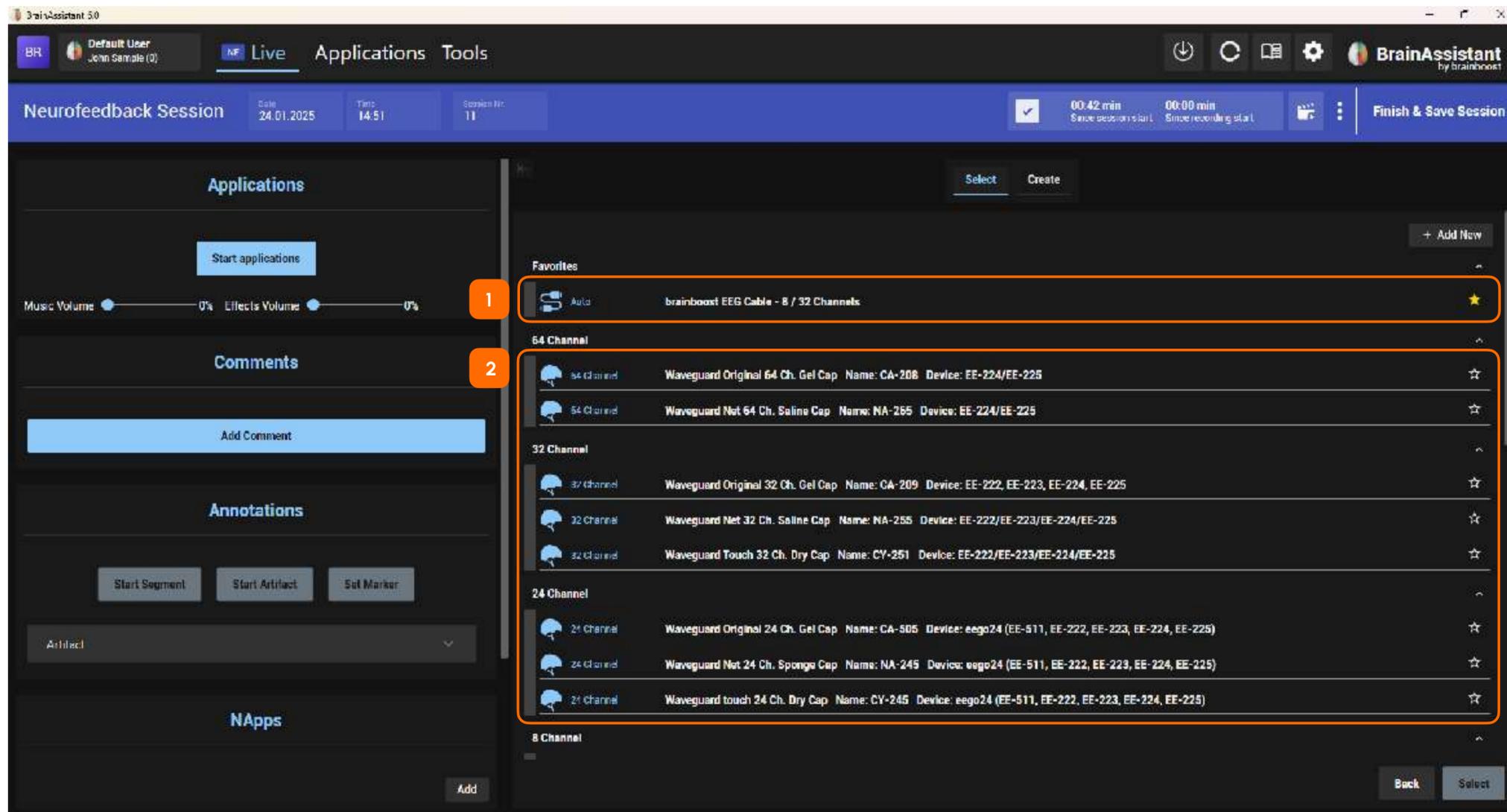
Select **Automatic Mapping** here (1) and then click on the "**Select**" button (2).

You can find out more about mapping in the webinars on our YouTube channel.

For some selected amplifiers this step may be skipped.

! This view is different for EEG amplifiers that use caps with integrated electrodes (e.g. eego 24). See the example on the next slide.

CHOOSING ELECTRODE MAPPING / CHOOSING A CAP



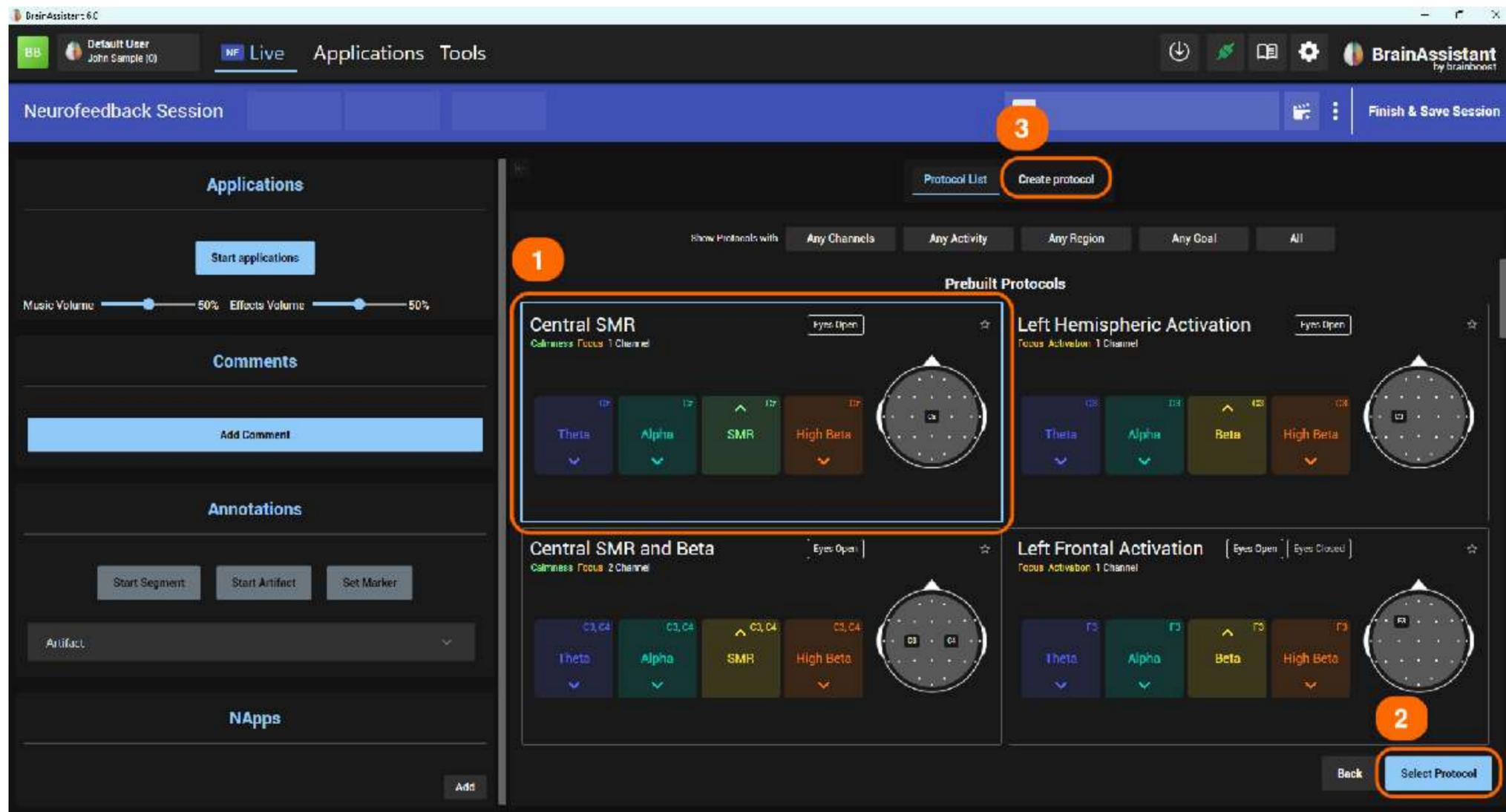
For certain EEG amplifiers, you can use caps with **integrated electrodes or adapters** with individual cables (1).

This example shows an overview for eego devices.

This **view varies depending on the selected manufacturer.**

Make sure you select the **correct type of cap** (2), which can usually be found on a label on the cap/plug-in cable.

CHOOSING A PROTOCOL

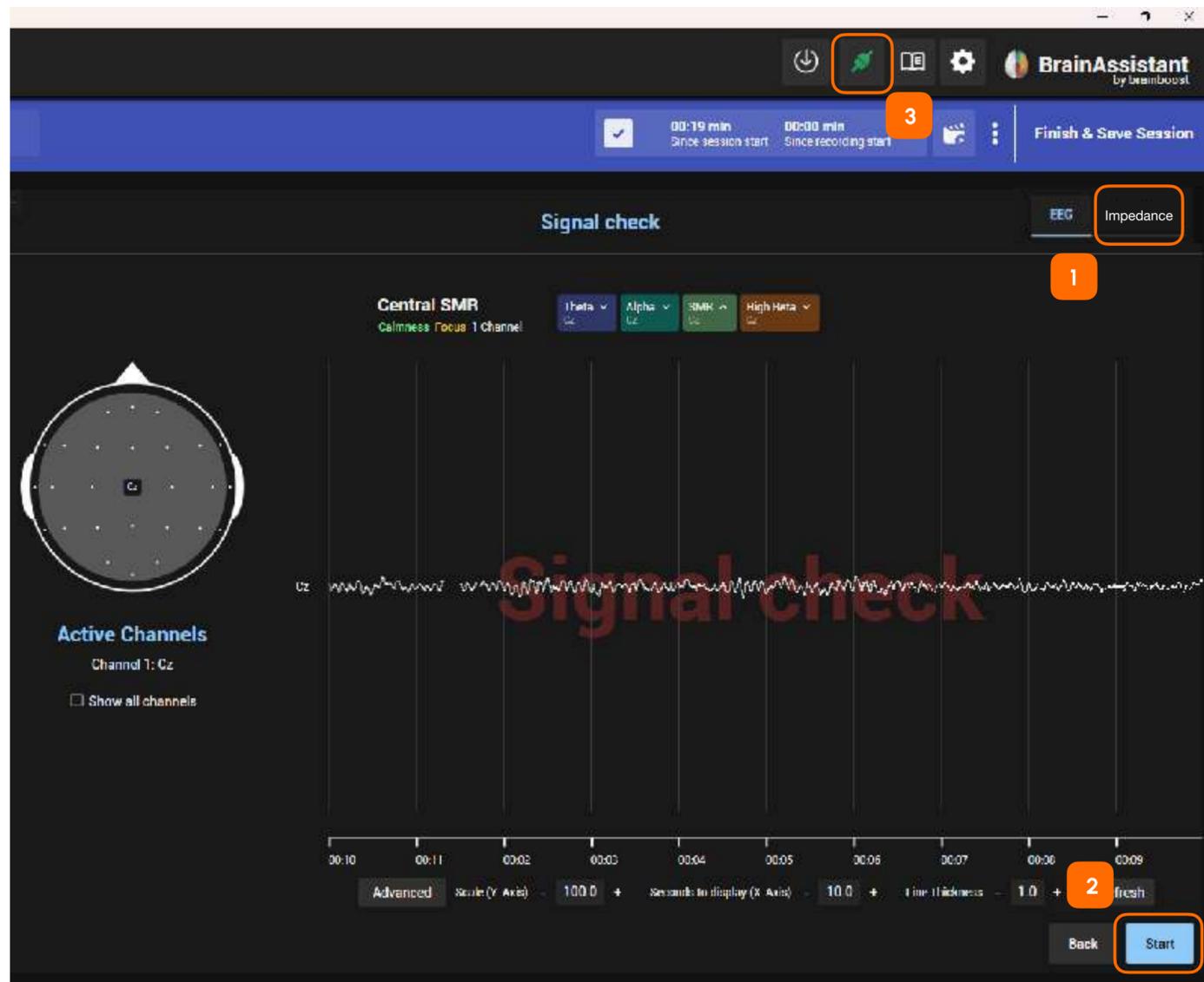


In the next step, you can select your training protocol. For example, if you want to use the central SMR protocol (1), **choose it** and then click on the **"Select protocol"** button at the bottom right (2).

Alternatively, you can **create your own protocols** with individual frequency bands (3). You can find more information in our webinar on YouTube or in our user manual.

Webinar: " Webinar FEB 2024 Create your own BrainAssistant protocols."

SIGNAL CHECK AND START



The EEG signal is now displayed. Check whether the **signal quality** is good.

This can be done **visually by looking at the EEG line** and by checking the **impedance** (1). If your EEG amplifier does not have an impedance meter, this option will not be displayed.

Click on the **"Start"** button (2) at the bottom right to start the recording and begin neurofeedback training.

If there are connection problems, make sure that the EEG amplifier is switched on and that the **connection symbol** (3) is green. If it is red, click on the icon and click on "Reconnect".

! If you want to use multiple channels, please refer to the next slide.

SIGNAL CHECK AND START WITH MULTIPLE CHANNELS



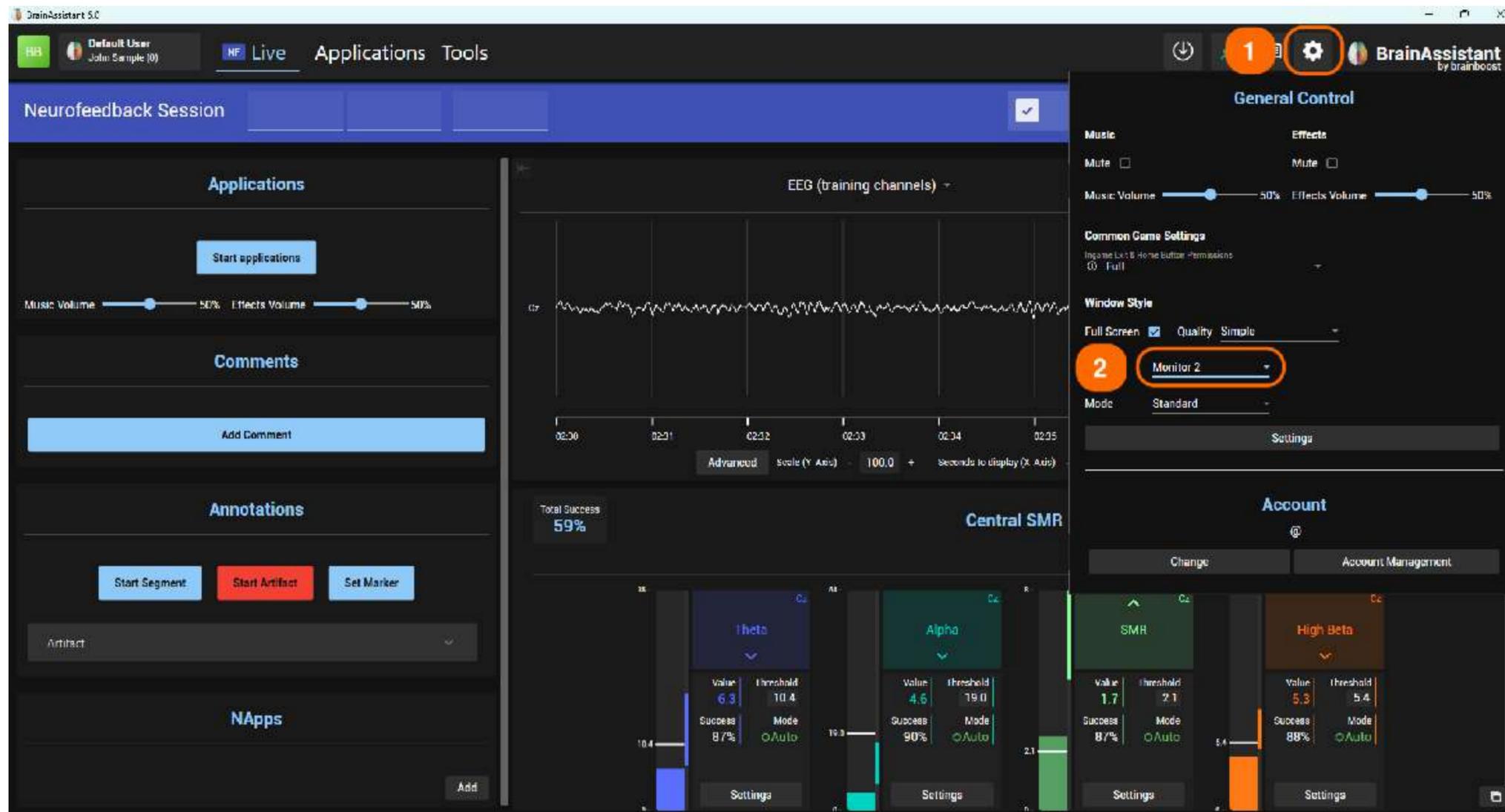
If you use individual electrodes and record an EEG at several positions, ensure that the **electrodes are attached in the correct order**. The sequence is displayed under "Active channels" (1).

The signal and the **corresponding channel are labeled** (2 and 3).

If you are unsure, you can **tap on an electrode after it has been fully attached**, in this example on F3, and check whether the EEG signal on F3 is also affected.

Important: Now press the **blue start button** (4).

FEEDBACK ON THE RIGHT MONITOR



To ensure that a feedback game/ application starts on the correct screen, you can take the following steps in the BrainAssistant:

Click on the "**Gear / Settings**" icon at the top right (1).

The "**General controls**" window (2) will now open. Select the correct monitor in the middle of the window (Monitor 1 or 2).

If no external monitor is connected, you can only see "Monitor 1" here.

START AN APPLICATION

The screenshot displays the BrainAssistant 5.0 software interface. The top navigation bar includes a user profile, a menu with 'Applications' (3) and 'Tools' (2), and system icons. The main window is titled 'Neurofeedback Session' and features a 'Finish & Save Session' button. On the left sidebar, the 'Applications' section is active, showing a 'Start applications' button (2) and volume sliders for Music and Effects. Below this are sections for 'Comments' (with an 'Add Comment' button), 'Annotations' (with 'Start Segment', 'Start Artifact', and 'Set Marker' buttons), and 'NApps' (with an 'Add' button). The main display area shows an 'EEG (training channels)' waveform and a 'Central SMR' control panel. The 'Central SMR' panel includes a 'Scale' dropdown, a 'Thresholds' button (1), and a 'Protocol' dropdown. Below these are four application cards: Theta, Alpha, SMR, and High Beta, each with a bar chart and a table of settings.

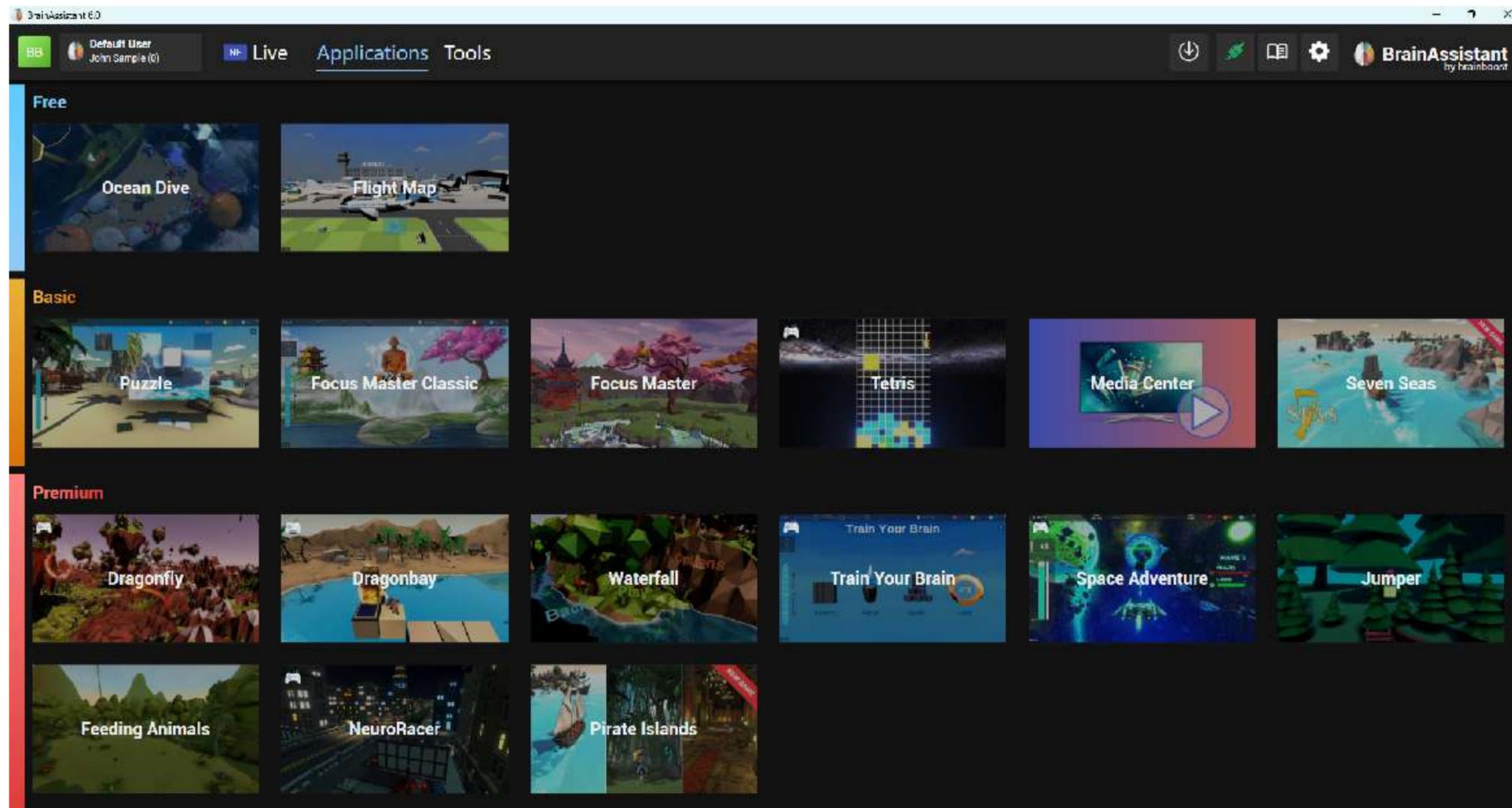
Application	Value	Threshold	Success	Mode
Theta	7.9	10.4	88%	Auto
Alpha	10.3	19.1	90%	Auto
SMR	3.8	2.1	86%	Auto
High Beta	3.8	5.4	87%	Auto

You can switch between **manual and automatic threshold setting** in the threshold settings (1).

You can find more information on threshold settings in our online manual.

To start an application, click on the "**Start application**" button (2) on the left-hand side or select "**Applications**" (3) in the top menu.

CHOOSING AN APPLICATION

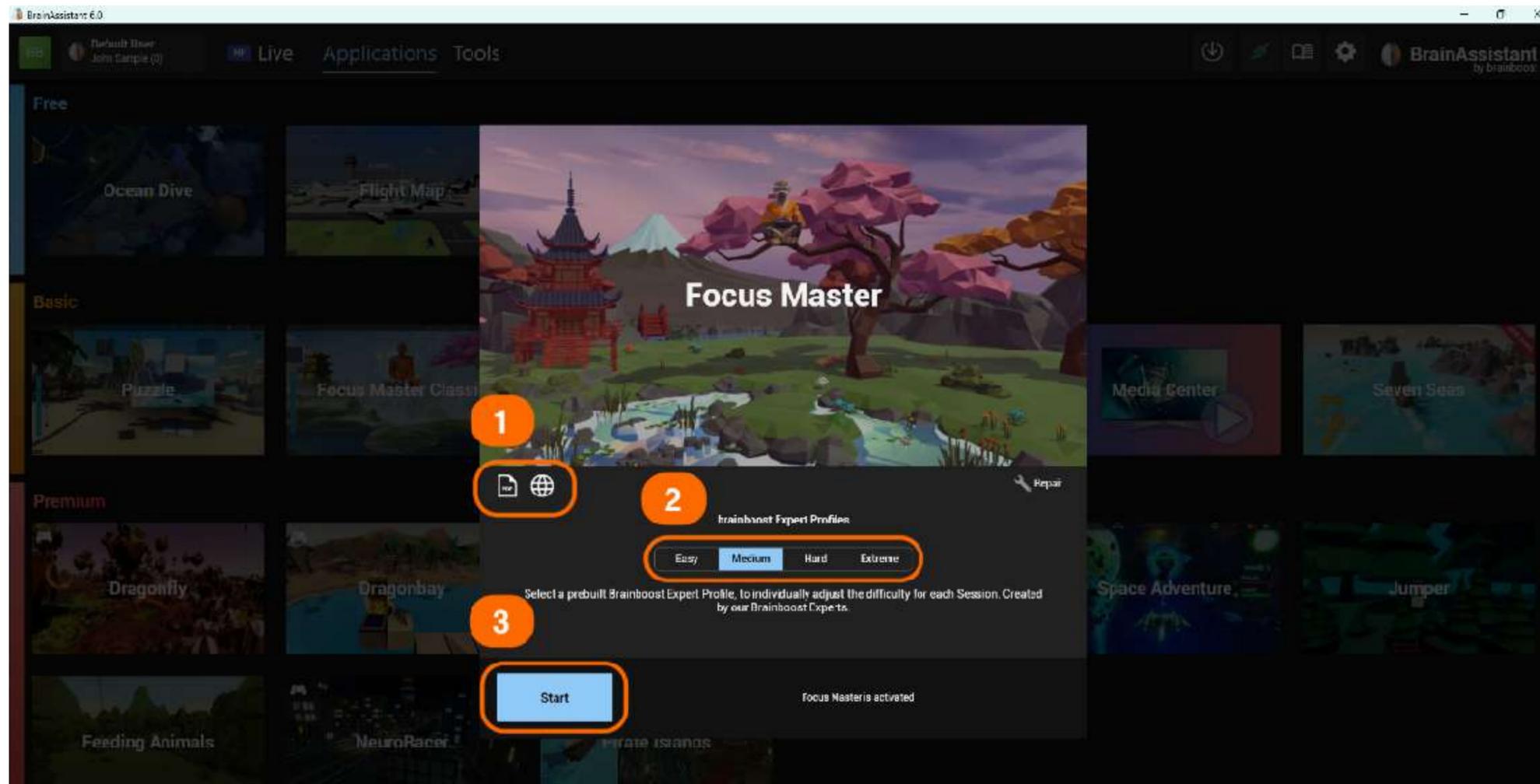


You can now choose between various **neurofeedback games and applications.**

For games with a **controller icon**  in the top left corner, you will need an Xbox controller connected to your PC.

Make sure that it is an **original Xbox controller.**

APPLICATION MANUAL AND START



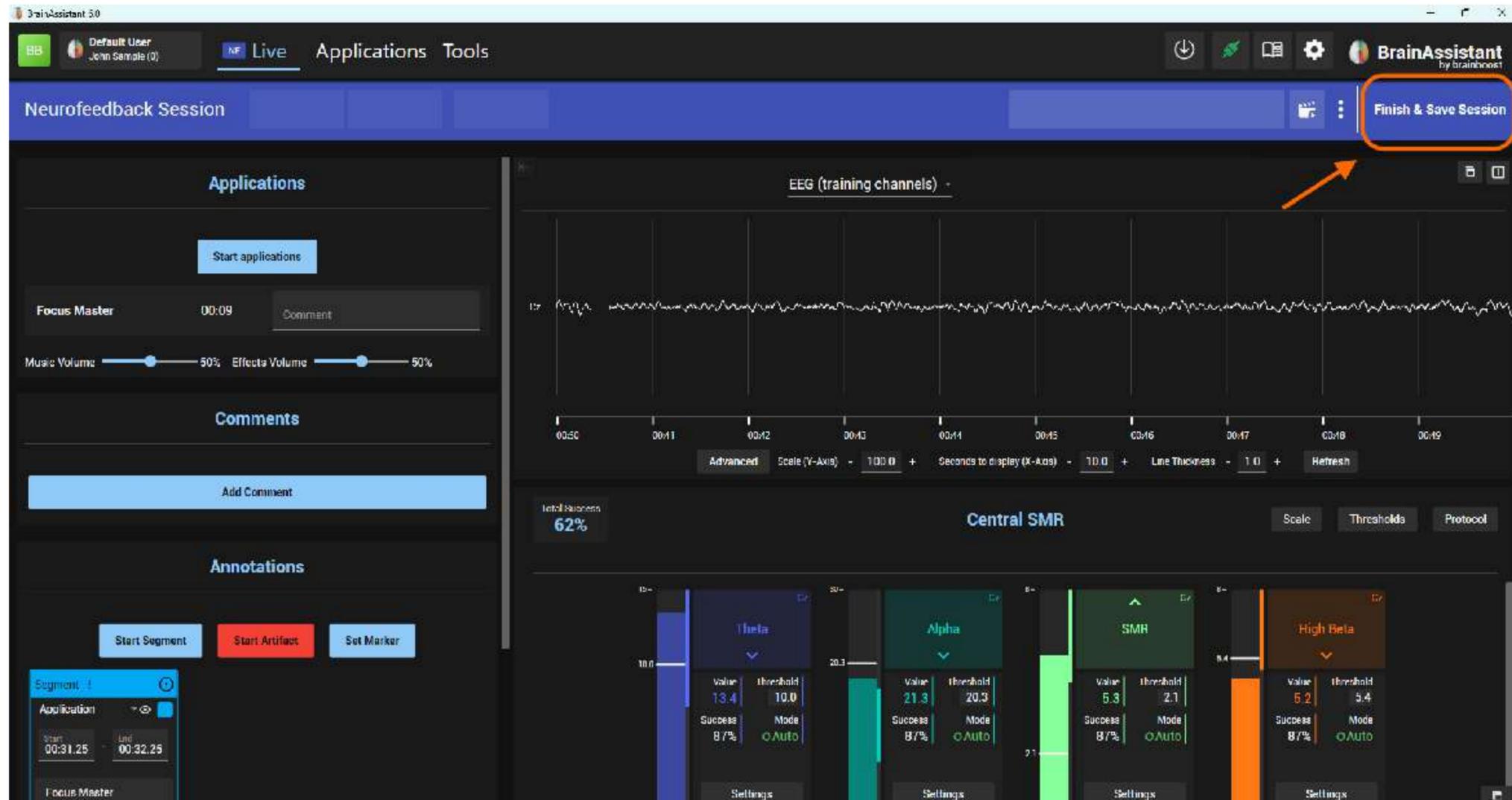
Click on a game or an application. At the top left you will find instructions and **further information on the game** you have selected (1).

You can use the brainboost expert profiles to **select the difficulty level** (2) of the game. This has **no effect on threshold settings**; not even with automatic thresholds. We recommend selecting **Medium** for most games.

To start the game, click on the "**Start**" button at the bottom left (3).

! Note that the application will open on the previously selected monitor. If the wrong monitor is selected, close the application and select the other monitor using the settings symbol.

SAVING AND FINISHING A SESSION

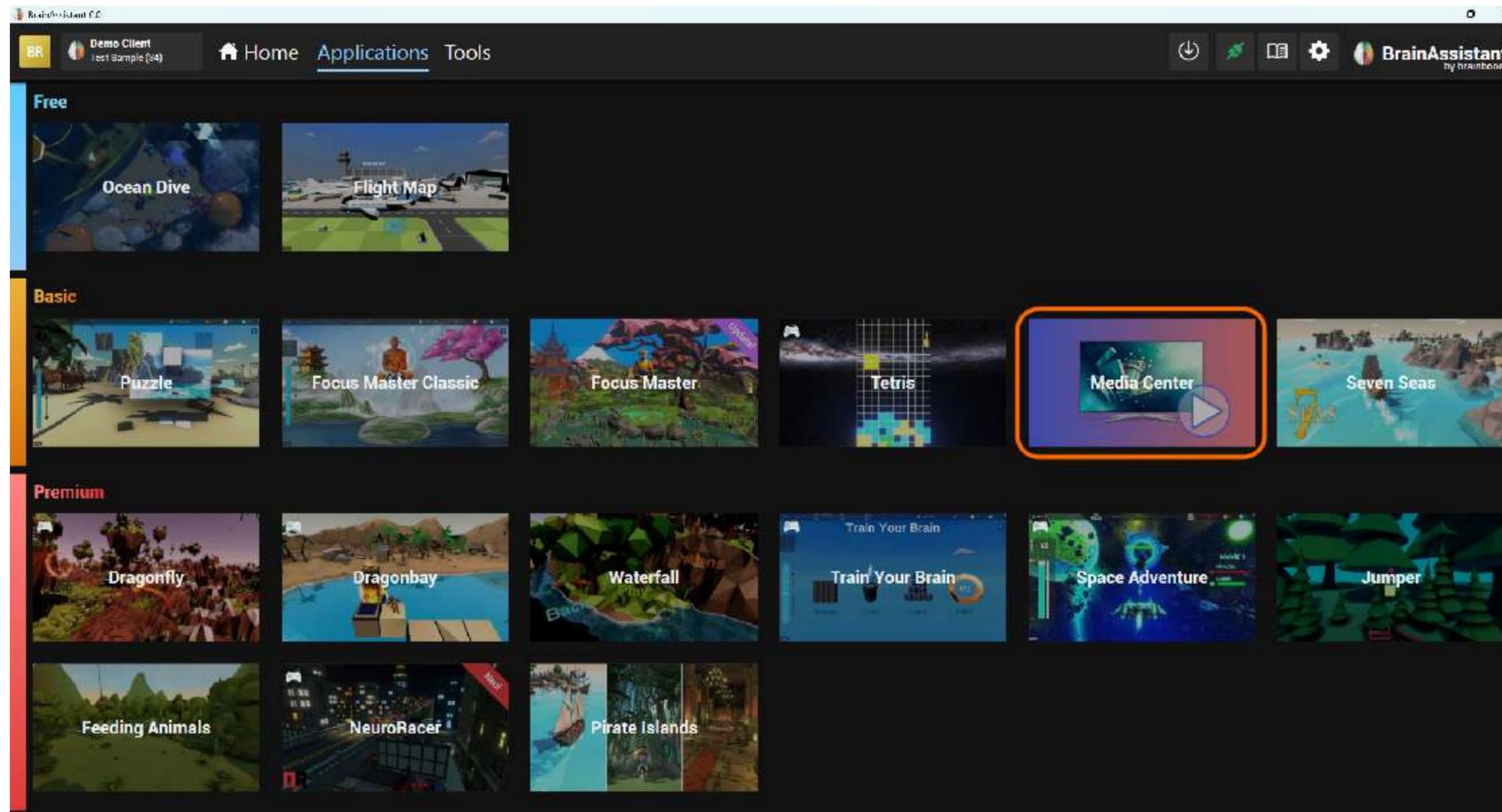


When you have finished your neurofeedback training, click on "**Finish & Save Session**" in the top right corner to save all data and stop the recording.

BrainAssistant

Media Center

MEDIA CENTER

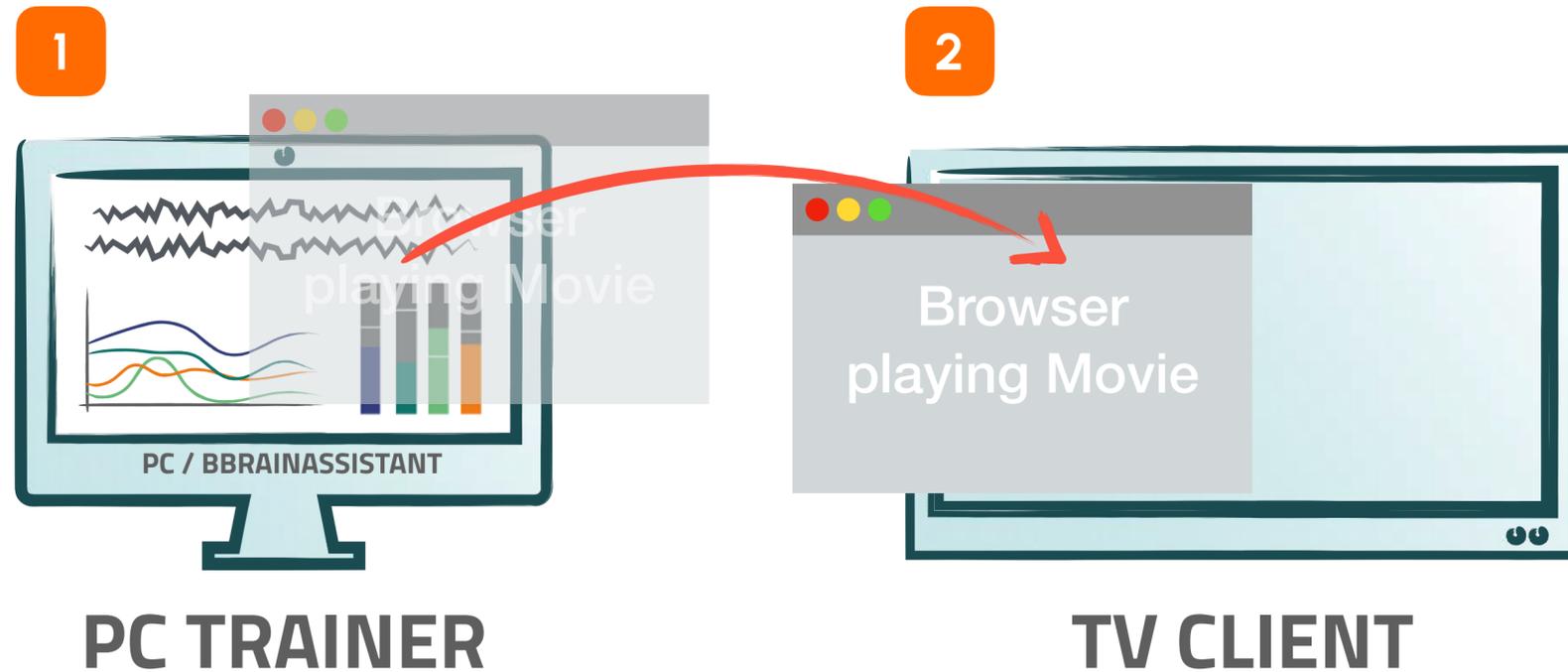


The **Media Center** is an application that allows you to transfer feedback to movies, PDFs, music, podcasts and much more.

Both the **brightness** of the screen and the overall **Windows system volume** can be **influenced**.

To select the Media Center, click on "**Applications**" in the top menu and select the "**Media Center**" application.

MEDIA CENTER - PREPARATION TO WATCH A MOVIE



Open a browser of your choice on your PC (e.g. Google Chrome, Microsoft Edge, Firefox, etc.)

Now open a streaming platform of your choice. If you do not have an account (e.g. with Netflix, Disney+, etc.), you can also use free platforms such as YouTube or public broadcasters.

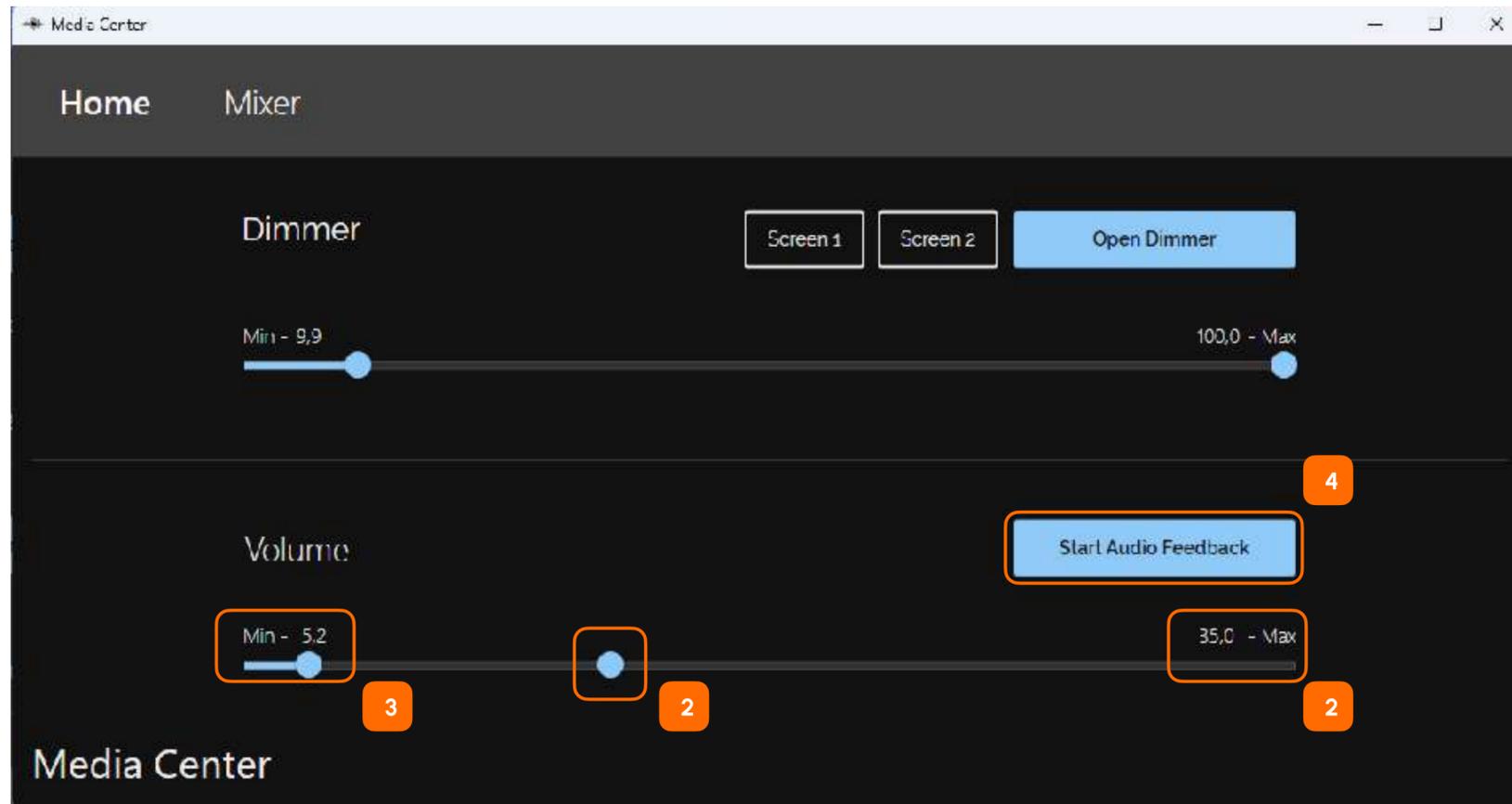
Drag the browser onto your client's screen. (From 1 to 2).

Now start the video and switch it to full screen. Your client will now see a regular movie on their screen.

You can now use the Media Center to influence the brightness and volume of the film.

This means that **any movie can be used for neurofeedback training** and the client receives both visual and auditory feedback.

MEDIA CENTER - VOLUME

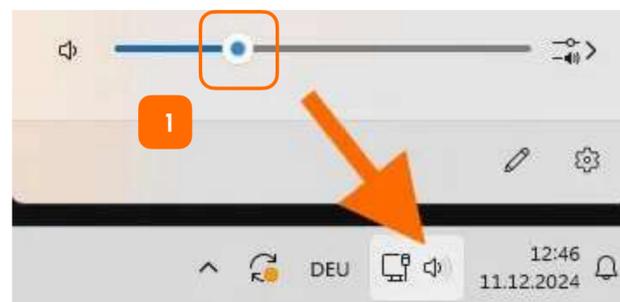


Once you started the Media Center, the following window opens. Here you can set the **maximum and minimum volume**.

The entire Windows system volume is affected by the Media Center.

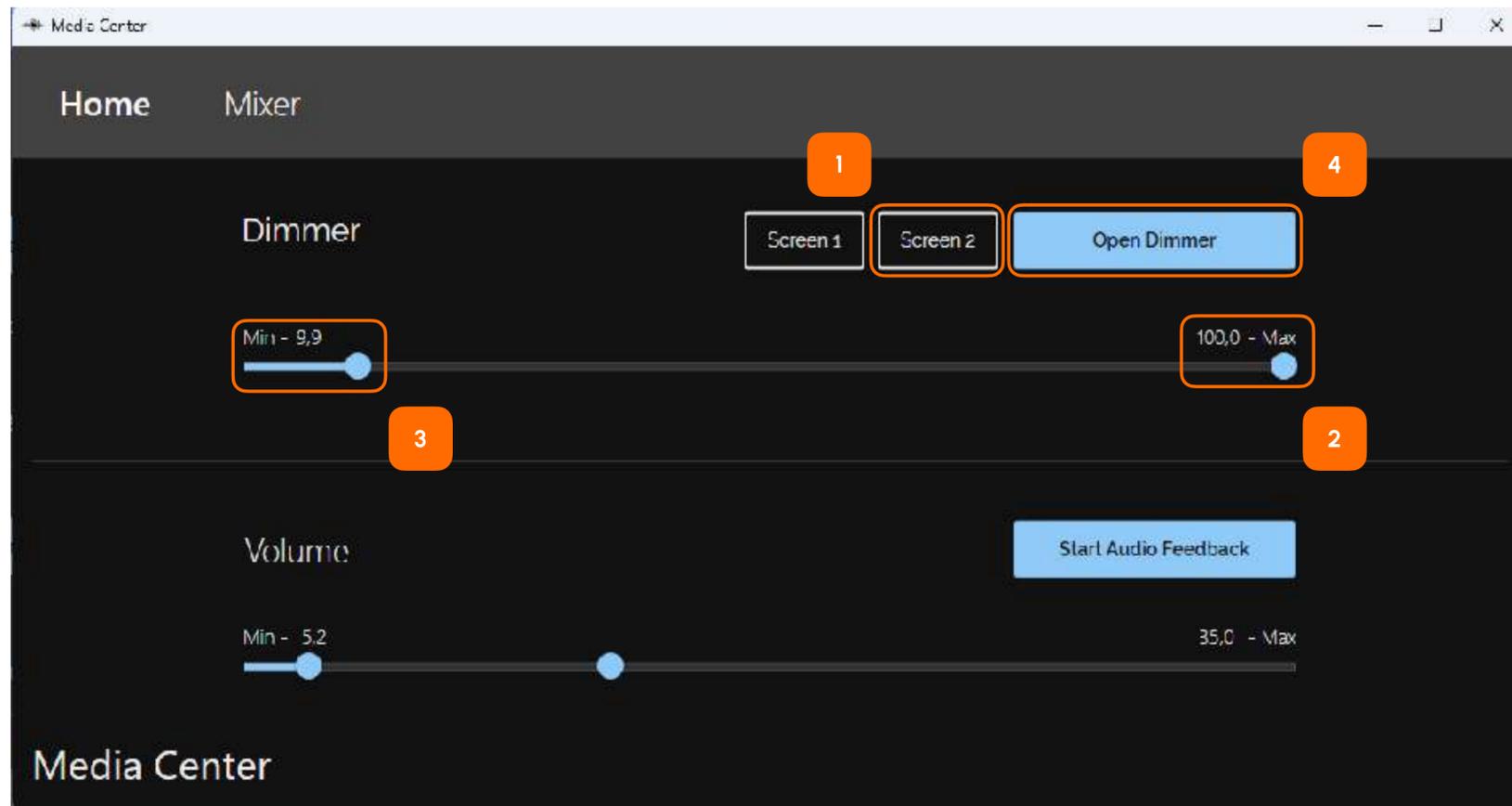
First adjust the **maximum volume to the system volume of your computer** (bottom right in the Windows task bar) (1).

Ask your client which volume is comfortable. Now set this volume (1) as the maximum volume in the Media Center. In this example 35 (2).



The minimum volume should be set at a level that the client still hears a little but not a lot (3). Activate the audio feedback by clicking "**Start Audio Feedback**" (4).

MEDIA CENTER - DIMMER



To activate the dimmer, **select the desired screen**. If you move the mouse over "**Screen 1**" or "**Screen 2**", you can see on which screen the dimmer will open. This ensures that the dimmer opens in full screen on the client's screen and not on yours (1).

Leave "**Max at 100**", this means with positive feedback the dimmer is 100% transparent (2).

We recommend not to set the minimum of the dimmer too low, this would mean that the person who is training sees a black screen (3).

! **Alternatively**, you can also activate the dimmer via "**Open Dimmer**" (4). This opens a black window that can be dragged onto the client's screen. Press the F key on your keyboard or use the bottom right-hand corner to adjust the size. To activate the dimmer, click on the "Start" button

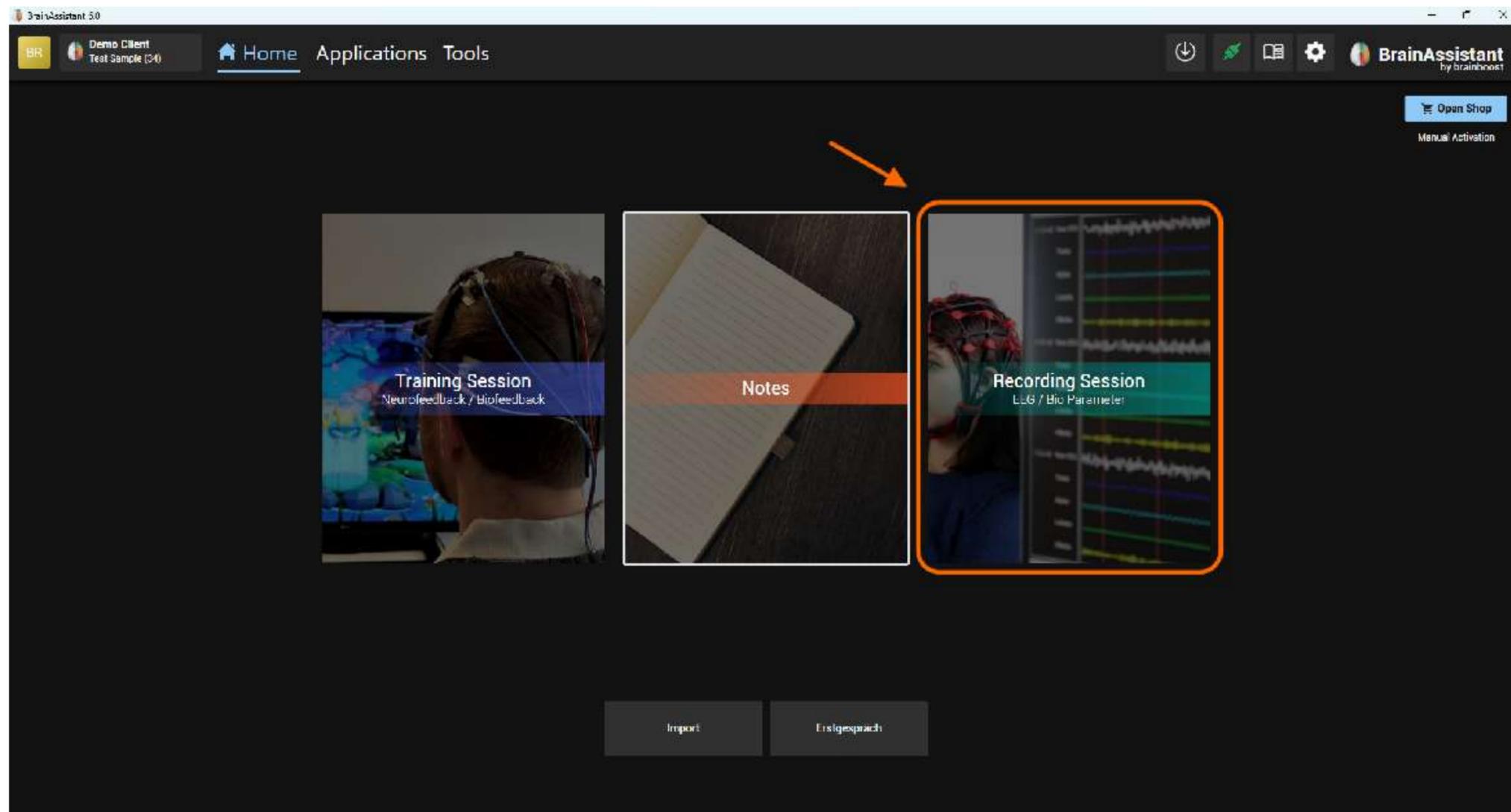
BrainAssistant

Quick Start

Recording Session

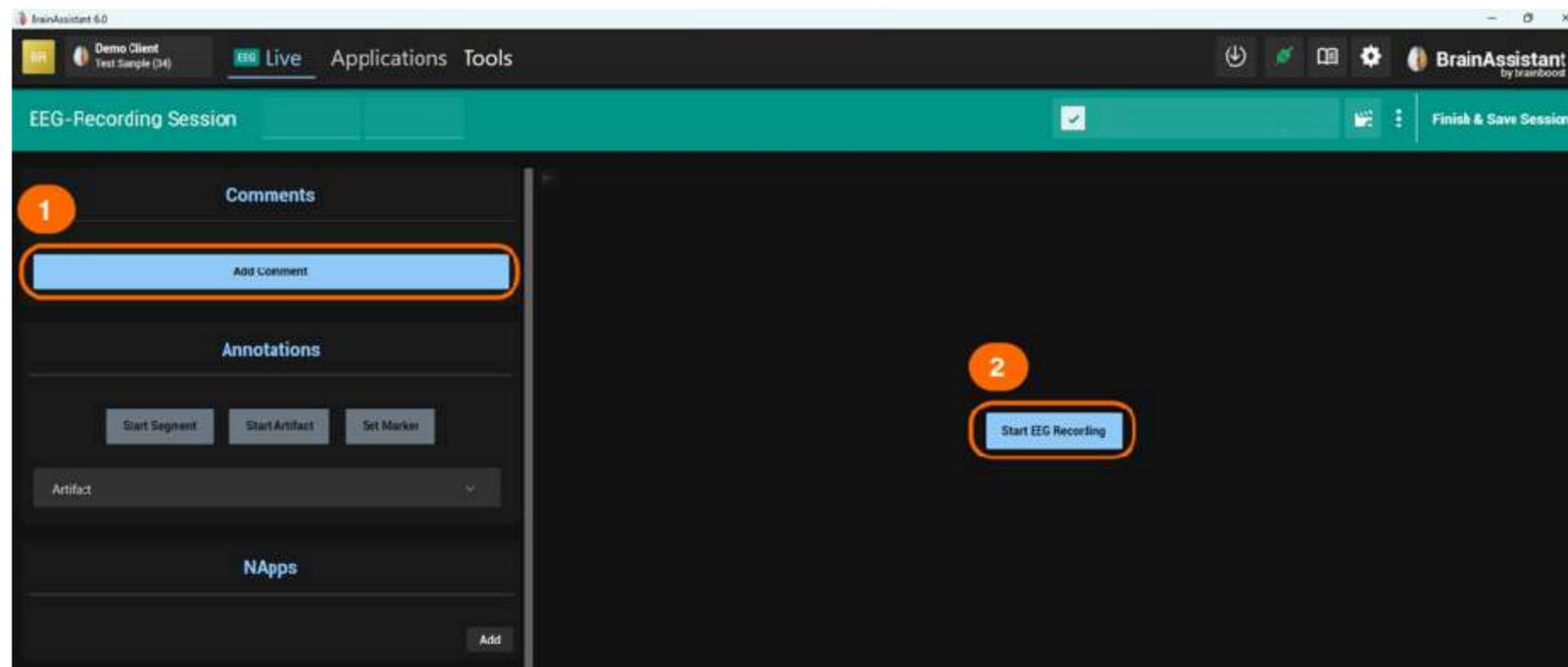


START A RECORDING



Select "**Recording session**" to start a qEEG recording.

BEFORE THE RECORDING

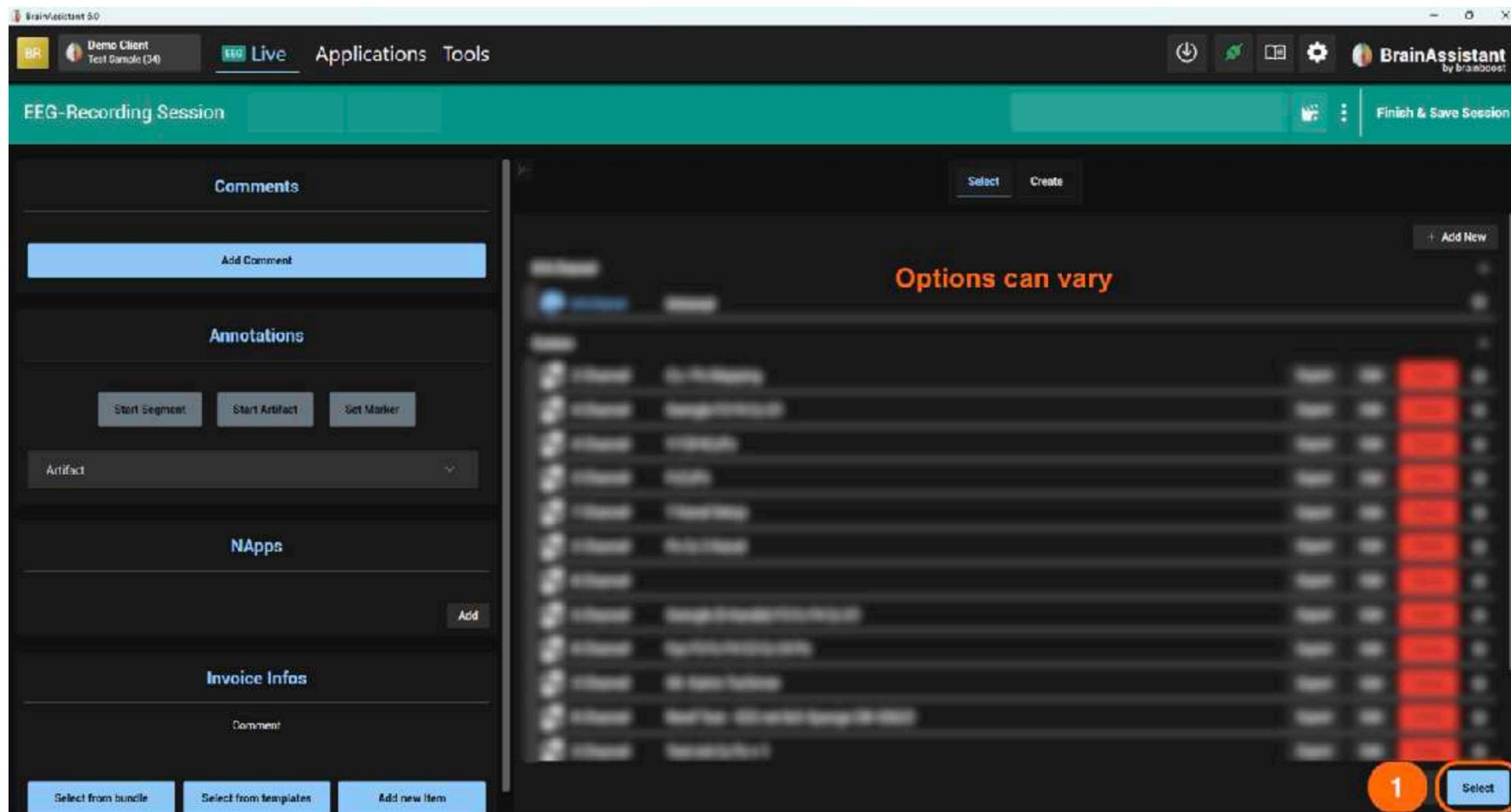


Click on the "**Add comments**" button to take notes before or during the qEEG recording (this function is useful for orientation when reviewing a recording; e.g. how the client behaves motorically, speaks or comments during the recording, etc.). This can help to create a report later).

You can also use a text template that you create yourself on the small blue + symbol. This symbol appears as soon as you have clicked on "Add comment" (1).

Click on the blue "**Start EEG recording**" button to start a recording (2).

CHOOSING THE RIGHT CAP / MAPPING

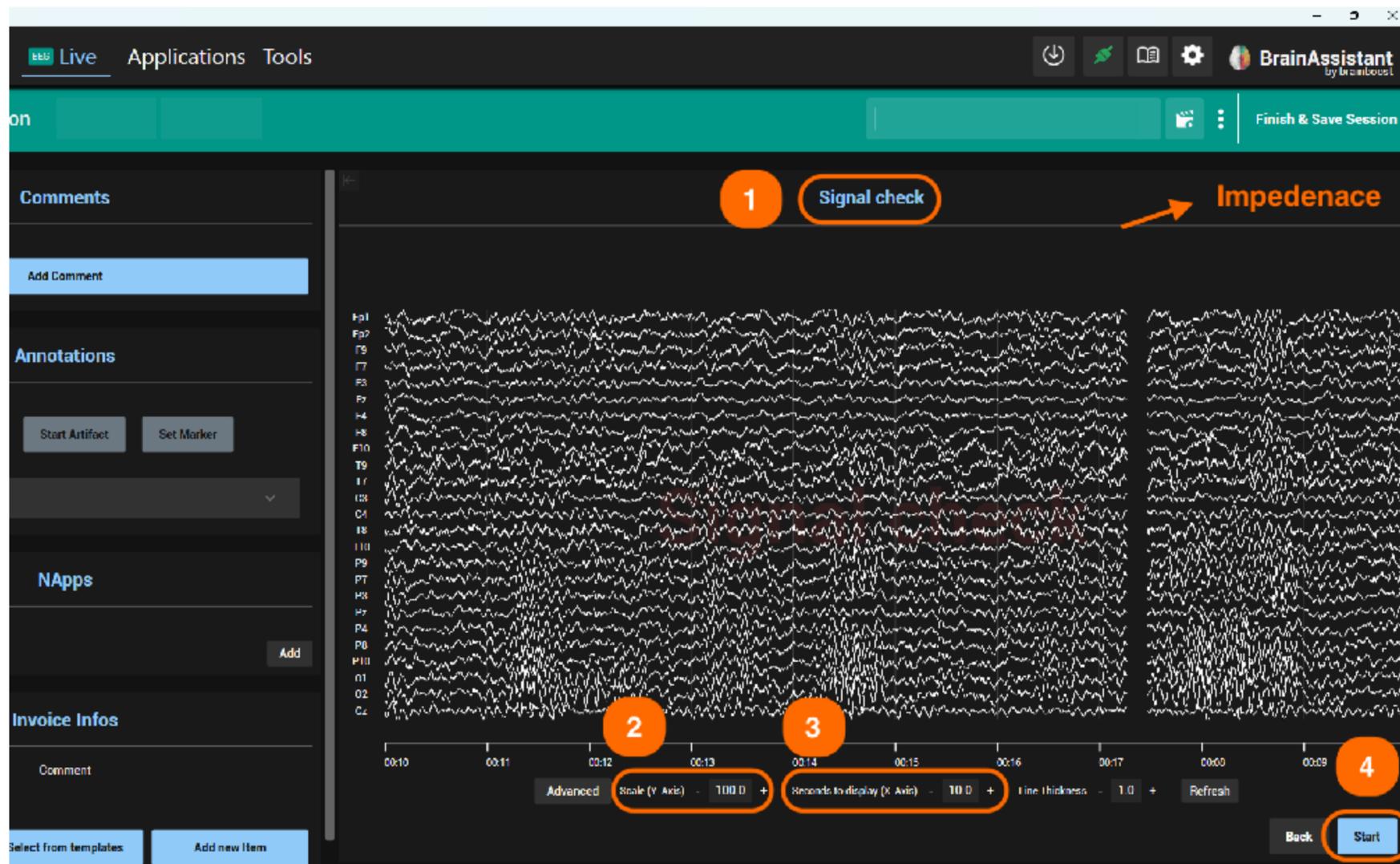


Select **the cap you are using or the individual channel setting**. The options may vary depending on the amplifier/device.

For amplifiers that do not have a pre-assembled cap (e.g. Neurobit Optima), you must create a "custom mapping". Further information can be found in our manual.

To continue, select the cap used and press the blue "**Select**" button at the bottom right (1).

SIGNAL CHECK & START

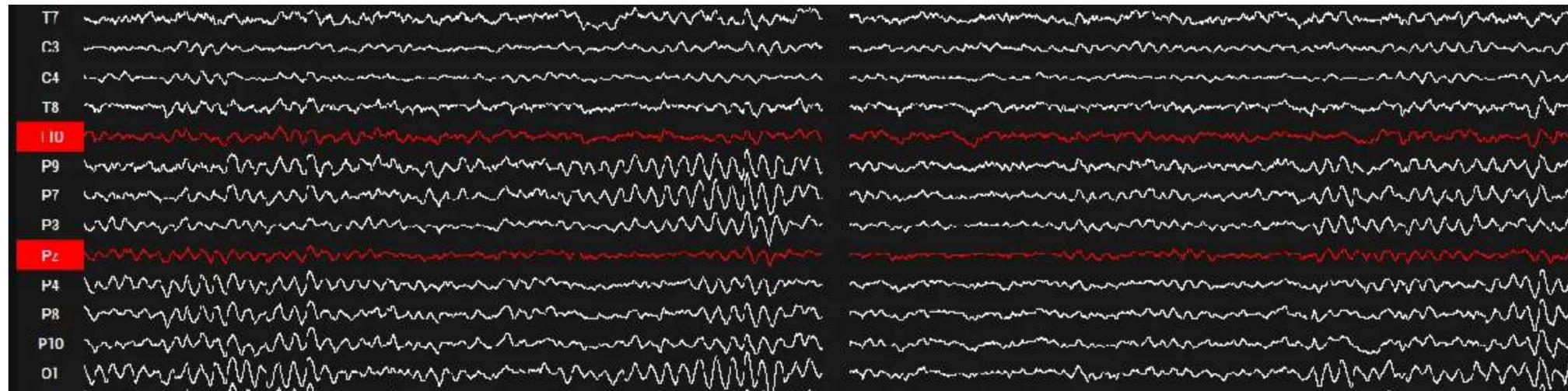


The first step for a qEEG-recording is the "**Signal Check**" (1) no recording has been started yet. This view is only used **to check the signal quality**. Both, the raw signal and the impedance, must be checked before starting the session. If your amplifier does not have an impedance function only check the signal via visual inspection.

You can change the scaling of the y-axis (2) (a value between 50 and 100 should normally be a good setting to get a nice data display) and scaling of the x-axis (3) (seconds displayed on the screen). We recommend between 5 - 10 seconds.

To start a recording, click on "**Start**" at the bottom right (4).

SIGNAL CHECK - SINGLE CHANNELS



Clicking on the **channel name** marks the channel (with the color that is selected). This **helps to identify channels** with poor signal quality during electrode preparation.

! Don't forget to click on "START" if you want to start the actual recording.

SEGMENTS AND FLOWS



Click on "**Start segment**" (1) to start a segment (at least 1 EO and 1 EC segment is required for an auto report).

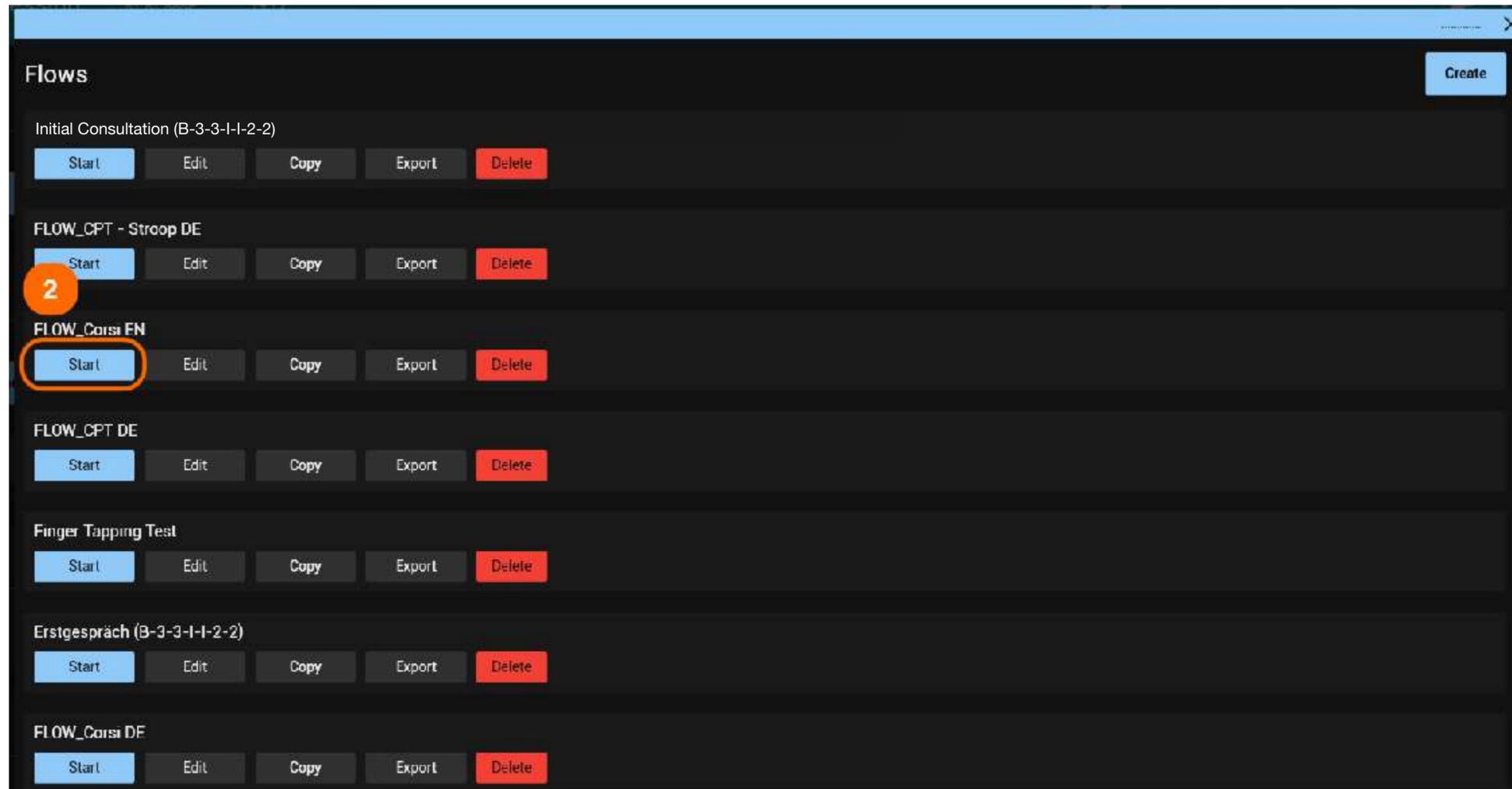
A click on "**Start artifact**" (2) marks a segment as an artifact. Artifacts can be marked automatically after the recording.

Click on "**Set marker**" (3) to mark a spontaneous event (the marker in the comment area of the marker can be renamed).

A marker only marks one moment in time, a segment marks a time span.

Click on the icon at the top right (4) to start a **FLOW**. We recommend using our FLOWS for recordings.

FLOW



A FLOW is an automatically running, predefined sequence of segments.

As soon as you click on the **FLOW button** (1), the FLOW overview opens.

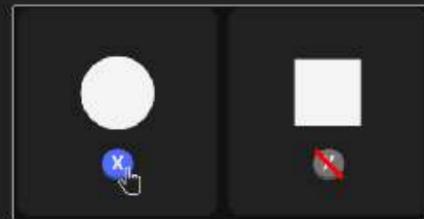
You can find all previously imported or self-created FLOWS and start one by clicking on the "**Start**" button (2).

If no FLOWS appear, **they must first be created or imported.**

You can find more information on FLOWS on our Youtube Channel.

COGNITIVE TESTS IN THE INITIAL CONSULTATION

Basic Square Circle CPT



In this test, you will see different shapes appearing on your screen. Your task is to press the 'X' button as quickly as possible when you see a circle. However, if you see a square, you should not press anything.

Y Test Run

A Start

Cognitive tests are particularly interesting in the first consultation as they gather **additional information about the client**.

For example, the **CPT** and the **Stroop** test can provide information about impulsive behavior and cognitive performance.

Stroop



In this test, a word will appear on your screen, and your task is to select the color of the word using the DPad on your Xbox controller. It is important to note that the word itself may be the name of a color that differs from the color of the text. Do not select the color named by the word, but instead choose the color that the word is actually printed in.

Use the DPad on the bottom left of your controller to make your selection.

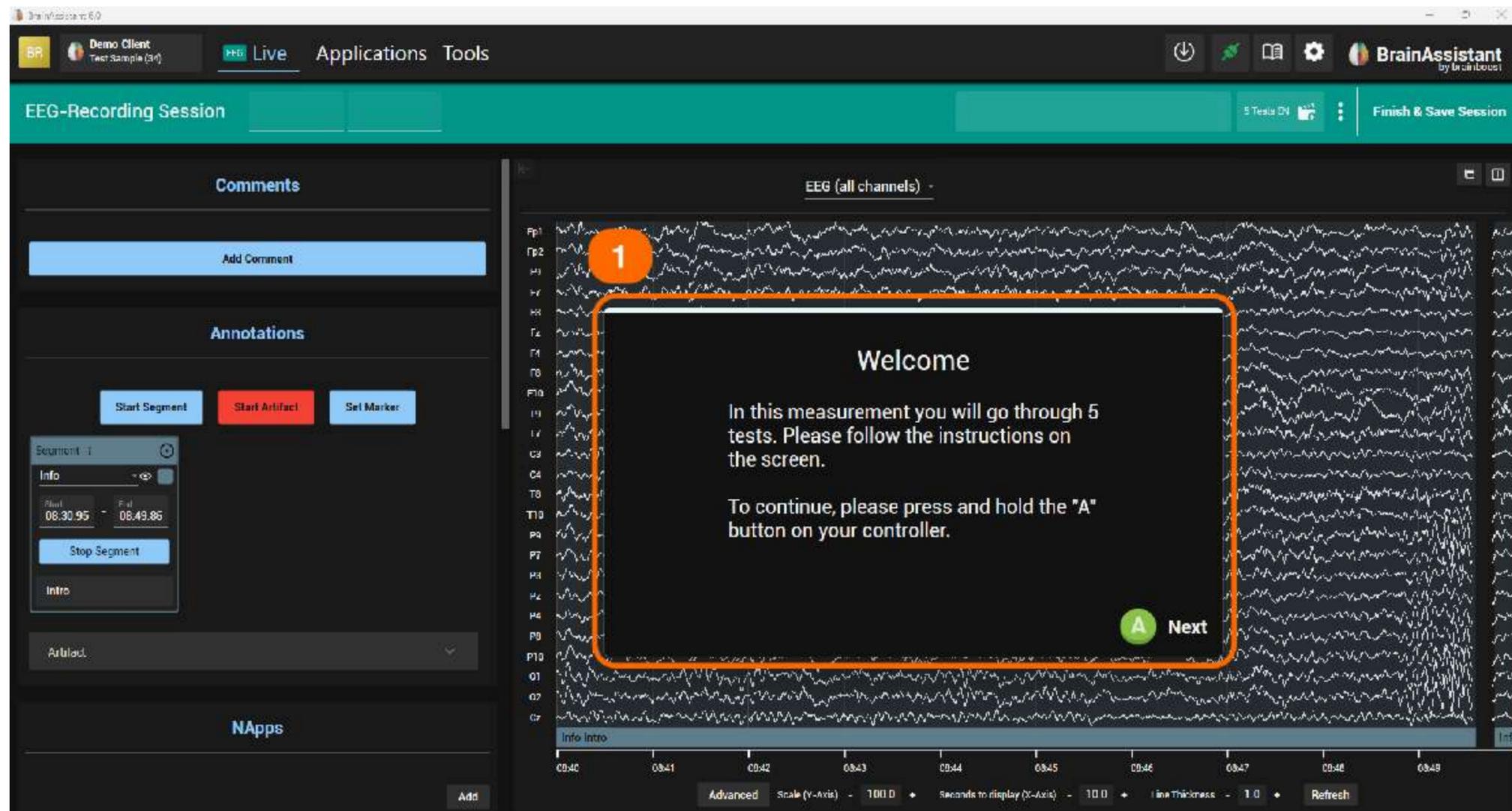
Y Test Run

A Start

Both tests are included in our FLOWs. You can add further cognitive tests that are included in our BrainAssistant when creating your own FLOWs.

The cognitive tests are controlled with a original Xbox Controller by the client.

CLIENT WINDOW FLOW



While a flow is running, a "FLOW client window" appears (1).

The **window** must **always be visible to the client**, as it gives instructions to the client. The window should open automatically on the second screen in full screen mode, but it can also be moved itself by double clicking on it and dragging it on the desired screen.

Instructions are given to the client in the client window. For most interactive FLOWS, the client needs an **Xbox controller** connected to the computer.

DURING THE RECORDING - WITHOUT FLOW

BrainAssistant 5.0

RR Demo Client Test Sample (24) EEG Live Applications Tools

EEG-Recording Session Histogram (B-3-3-1-1-2-2) Finish & Save Session

Comments

Add Comment

Annotations

Start Segment Start Artifact Set Marker

Segment : undefined

Segment : undefined

Comment

Baseline

EO

EC

Baseline

Training

Relax

Intervention

Artifact

Application

Info

NApps

Add

EEG (all channels)

Fp1 Fp2 F7 F8 F3 F4 F7 F8 F10 F9 F1 C3 T8 T9 P9 PT P8 P2 P4 P8 P10 I11 I11 I11 O2 C7

Baseline

10:10 10:11 10:12 10:13 10:04 10:05 10:06 10:07 10:08 10:09

Advanced Scale (Y Axis) - 100.0 + Seconds to display (X Axis) - 10.0 + Line thickness - 1.0 + Refresh

Click on "**Start segment**" (1) to start a segment **if you are not using a FLOW**.

By clicking on the segment, a drop-down menu (2) where you can choose between different predefined segments will show off. The most common is **EO for eyes open** and **EC for eyes closed**.

If undefined is selected (3), the segment can be named in the comment area. Predefined segments can also be commented on (e.g. select EC segment and comment if the client shows strong eye movements).

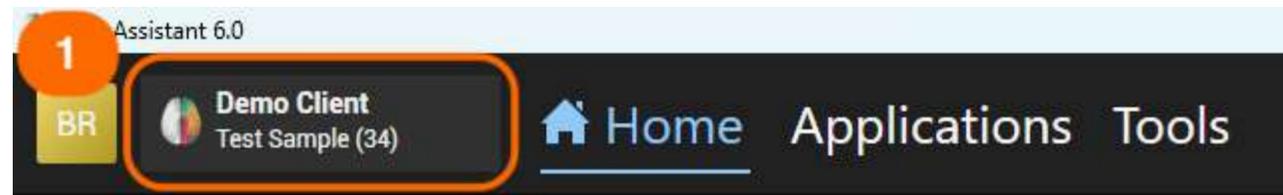
FINISH AND SAVE A RECORDING

Click on "**Stop segment**" (1) to end a segment.

If you are using a FLOW, this happens automatically.

Click on "**Finish and Save**" in the top right corner (2) to save all data and stop the recording.

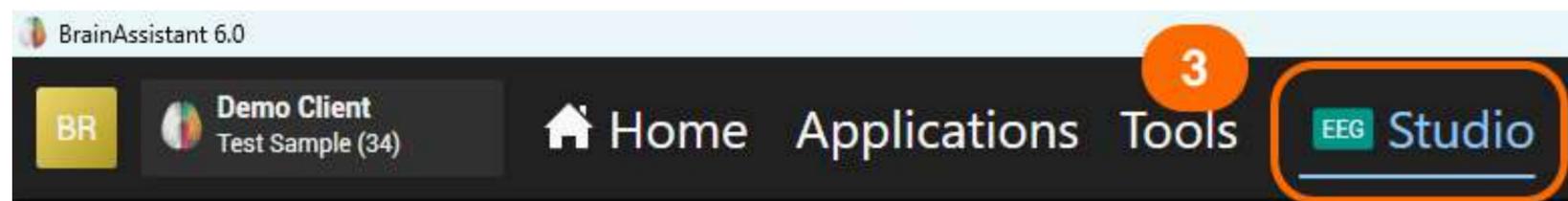
VIEW RECORDINGS AND CREATE A REPORT



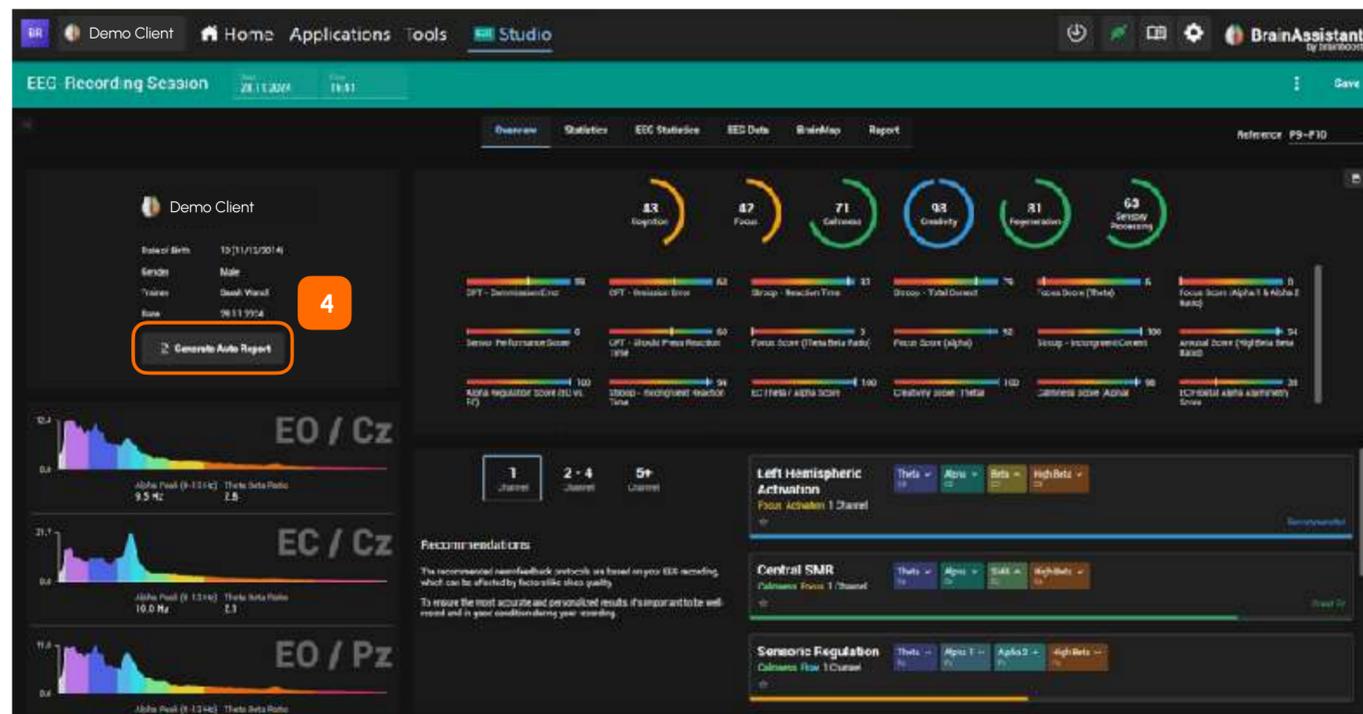
To open the desired session, **click on the client name** (1).



A list of all training and recording sessions appears. Click on "**Show details**" (2) next to the desired session.



A training session is highlighted in blue and a recording session in green.



You are now in the **EEG studio** (3), where you can view the details of the session.

You can create the Auto Report with one click by pressing "**Generate Auto Report**"(4).

You can import report templates in the main menu using the gray "Import" button. This way various templates can be added.

Contact

Training, Certification, Supervision

www.brainboost.academy.de

BrainAssistant

www.brainassistant.de

Equipment/Shop

www.neuro-store.com

Praxis

www.praxis-heiler.de

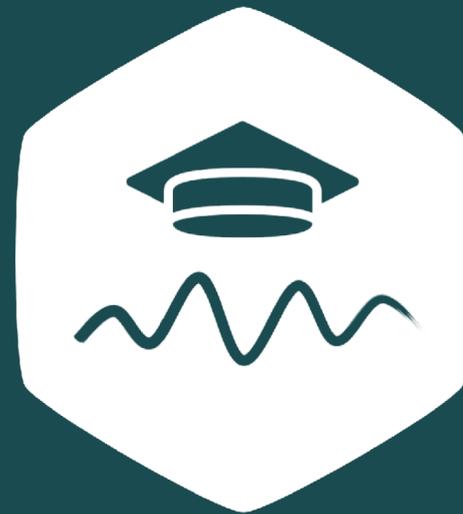
Corporate health management

www.corporatehealth.brainboost.de



brainboost
ACADEMY
THE PLACE FOR NEUROFEEDBACK PROFESSIONALS

Contact



+49 89 1893 1244



academy@brainboost.de

Pestalozzistr. 15 | 80469 Munich