

# Evaluation

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### **EVALUATION**

Virtual Reality Evaluation (**VREVAL**) is a toolbox and evaluation framework to evaluate architecture and urban spaces.

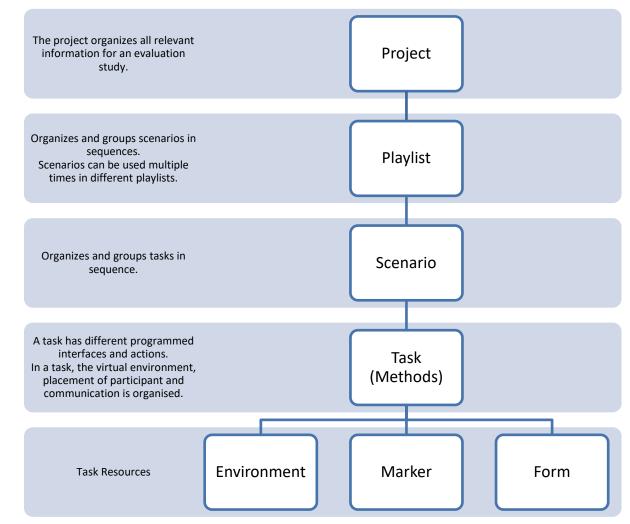
To run a pre-occupancy evaluations in virtual space in order to gather user behaviour data and user opinions a VREVAL project is needed.

The Evaluation section will manage an evaluation from preparing to conducting a VR Evaluation.

### **VREVAL – PREPARE AN EVALUATION**

After the VREVAL Project is set up, the next step will be to create the Evaluation.

So far, in playlists are scenarios defined. And in scenarios are task defined with environments, checkpoints and forms.



# **1. CREATE AN EVALUATION**

#### Before

#### The Project is prepared up to Playlists.

VREVAL Dashboard	Projects Evaluations				0	)laf 🗸	VREVAL Dasht
C Edit Project							<ul> <li>List Evaluatio</li> </ul>
		(ف)	+				Name
				BACK	S/	WE	user tutorial test
PROJECT NAME					-		
Tutorial							Step 2
PROJECT DESCRIPTION							Give the eva
(optional)							Give the eva
							<ul> <li>Create Evaluat</li> </ul>
Project settings							Tutorial Description (optional)
CREATE ACCESS-TOKEN Playlists Click to collapse/e3							Description (optional)
Name	Updated at		Created at	Actions			PROJECT
Scenario 2	4 seconds ago		Jul 13, 2021		ľ	Ŧ	Tutorial
Scenario 1	15 seconds ago		Jul 13, 2021		ľ	W	
End	34 seconds ago		Jul 13, 2021		ľ	Ŧ	Select a pro
Start	45 seconds ago		Jul 13, 2021		ľ	Ŧ	Create the e
					CREAT	E	

### Step 1

#### Go to Evaluation and create a new Evaluation

List Evaluations				
List Evaluations	5			
Name	Project	My role	Status	Actions

aluation a name. Optional write a description.

#### tion

Tutorial	
Description (optional)	
PROJECT	
Tutorial	×
	BAC

pject, which will be linked to the evaluation. evaluation.

# **2. TAKE A SNAPSHOT OF THE PROJECT**

### Step 1

Create a Snapshot of the project.

A snapshot will take a copy of all settings of the projects.

< Edit Evaluation			
		BACK	SAVE
EVALUATION NAME		DACK	SAVE
Tutorial			
EVALUATION DESCRIPTION			
(optional)			
Evaluation settings			
Project Archive	Evaluation Archive		
TAKE A SNAPSHOT OF THE PROJECT <u>TUTORIAL</u>	Create a project snapshot and some groups first		
Write a note for this snapshot           TAKE SNAPSHOT			

#### Note

A snapshots work as an archive. Changes can be tracked.

If changes in the project are made, a new snapshot can be taken and used in the Evaluation.

Only the latest taken snapshot will be used in an Evaluation.

# **2. RETAKEN A SNAPSHOT OF THE PROJECT**

### Step 1

After changes are made in VREVAL Project, a new snapshot can be taker

Snapshots serve as documentation.

Old snapshots of the project can be downloaded and compared.

	EVALUATION NAME	
ade in VREVAL	Tutorial	
hot can be taken.	EVALUATION DESCRIPTION	
	(optional)	
documentation.		
e project can be mpared.	Evaluation settings	
•	SETTINGS	
	EVALUATION ENDS ON	
	27.07.2021 18:48	1
	GROUP DISTRIBUTION QUESTION	OPTION 1
	Is your background in architecture?	yes
	The Group Distribution Question will poll the participants on a single question	OPTION 2
	(such as age range, gender, etc.) and evenly distribute the participants among	no
	each group. This is a method for ensuring that group assignment is not divided based on the demographics in question.	ADD OPTION
	ADD GROUP	BACK
e new Snapshot, if	Project Archive	Evaluation Archive
Project are made.	TAKE A SNAPSHOT OF THE PROJECT <u>TUTORIAL</u>	Create a project snapshot and some groups first
	Write a note for this snapshot	
	TAKE SNAPSHOT	
Current Snapshot	Current Project Snapshot (v2) 1 second ago	
Archivo Spanshot		<b>i</b>
Archive Snapshot	Project Snapshot v1 2 minutes ago	

Create new Snapshot, changes in Project are mad

# **3. CREATE EVALUATION GROUPS**

Evaluation settings

### Step 1

At least one group is required.

An evaluation group is defined by a sequence of playlists.

			Between
SETTINGS			Different p
27.07.2021 18:48			different co variable.
GROUP DISTRIBUTION QUESTION	OPTION 1		variable.
Is your background in architecture?	yes		CROUP 1 CROUP NAME
The Group Distribution Question will poll the participants on a single question	OPTION 2		A annuaria Playupts
(such as age range, gender, etc.) and evenly distribute the participants among	no		Start
each group. This is a method for ensuring that group assignment is not divided based on the demographics in question.	ADD OPTION		End Scenario 1
			Scenario 2
			GROUP 2 GROUP MAKE
GROUP 1		Ŧ	B avea, apr.E PLAYUSTS
GROUP NAME			Start
А			End Scenario 1
AVAILABLE PLAYLISTS	INCLUDED PLAYLISTS		Scenario 2
Start	II Start	REMOVE	Within Sul
End	II Scenario 1	REMOVE	The same
Scenario 1	II End	REMOVE	correspon
Scenario 2			CROUP 1 sh(set same) A
			ANNUARE PLANETS
			Start
ADD GROUP			End
			Scerario 1

Between Subject Groups:

Different participants will be assigned to lifferent conditions corresponding to a variable.

R0UP1		1
IDUP NAME		
A		
INNUARLE PLAYUSTS	INCLUDED PLATURITS	
Start	# Start	824241
End	ii Scenario 1	ani-ere's
Scenario 1	3 End	apapat
Scenario 2		
ROUP 2		
ROUP NAME		
в		
VALABLE PLAYLISTS	INCLUDED PLAYLISTS	
Start	8 Start	20424
	8 Scenario 2	anisatisk
End		
	# End	albelog.

#### Within Subject Group:

*The same participant tests all conditions corresponding to a variable.* 

280UP 1		
CROUP NAME		
A.		
AVAILABLE PLAYLIETS	INCLUDED PLAPLISTS	
Start	I Sat	and the second
End	II Scenario 1	REAL
Scenario 1	I Scenario 2	80.1475-19
Scenario 2	I End	10404

Mixed Subject Groups: ... mix of Between and Within Subject Group.

# 4. DISTRIBUTION SETTINGS FOR EVALUATION GROUPS

### Step 1

One distribution question can be asked to poll the participants in one or more groups.

A poll question topic can be:

- Gender
- Age
- Occupation
- Interest
- ...

Step 2 Save the groups and settings.

#### **Evaluation settings**

27.07.2021 18:48		
GROUP DISTRIBUTION QUESTION	OPTION 1	
Is your background in architecture?	yes	
The Group Distribution Question will poll the participants on a single quest	tion OPTION 2	
such as age range, gender, etc.) and evenly distribute the participants amo	ng no	
each group. This is a method for ensuring that group assignment is not divi pased on the demographics in question.	ADD OPTION	
SROUP 1		Ĩ
GROUP NAME		
A		
AVAILABLE PLAYLISTS	INCLUDED PLAYLISTS	
Start	II Start	REMOVE
End	II Scenario 1	REMOVE
Scenario 1	II End	
Start	ii Start	REMOVE
End	II Scenario 2	REMOVE
Scenario 1	II End	REMOVE
Scenario 2		
ADD GROUP		

Example:

The question is, if the participant has an architecture background.

The answer can be **yes** or **no**.

Two Groups are created with the name **A** and **B**.

10 people participated. The order is as followed:

1: y, 2: y, 3: n, 4: y, 5: n, 6: y, 7: n, 8: y, 9: y, 10: y

The system would assign the participant as followed.

	А	В
yes	1, 4, 8, 10	3, 7
no	2, 6, 9	5

### **5. EVALUATION STATUS: ONLINE**

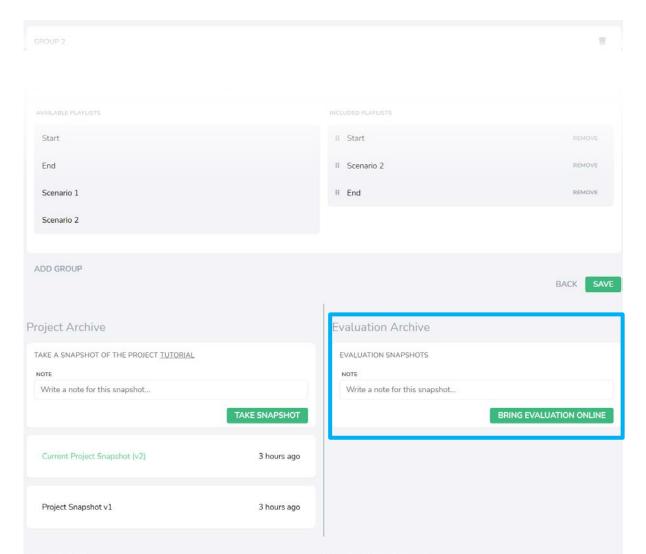
#### Step 1

Next to the Project Archive, the Evaluation Archive got activated.

The Evaluation Archive works as a documentation as well. The group and evaluation settings are saved.

Optional, write a note. Press the button "Bring Evaluation online" to lock the settings.

Participant Codes will be created.



### **5. EVALUATION STATUS: ONLINE**

VREVAL

Dashboard

Show online Evaluation

Projects

Evaluations

#### Step 2

Open the Evaluation, which is online.

VREVAL Dashboard Projects Evaluations List Evaluations Name Project My role Status Actions online until Jul 27, 2021 18:48 Tutorial Owner 0 Tutorial VREVAL Tutorial User Member online until Jul 26, 2021 15:06 0 user tutorial test

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#### Step 3

The participant codes can be downloaded to start the Evaluation with the VREVAL APP.

Each gathered evaluation result will be saved under the participant code.

untouched, 0 cc	ompleted)			
untouched	89NW-Z675-46EU	untouched	69EM-ZK75-ABMR	untouched
untouched	AEKU-Z275-6CNZ	untouched	26AW-MJ75-EPQT	untouched
untouched	ENVW-7875-379H	untouched	236Z-TU75-9MRX	untouched
untouched	FHRX-8675-BTUX	untouched		
untouched	4CEN-AA75-EKWX	untouched		
untouched	ARVZ-4375-269G	untouched		
	untouched untouched untouched untouched	untouched AEKU-Z275-6CNZ untouched ENVW-7875-379H untouched FHRX-8675-BTUX	untouched     89NW-Z675-46EU     untouched       untouched     AEKU-Z275-6CNZ     untouched       untouched     ENVW-7875-379H     untouched       untouched     FHRX-8675-BTUX     untouched	untouched     89NW-Z675-46EU     untouched     69EM-ZK75-ABMR       untouched     AEKU-Z275-6CNZ     untouched     26AW-MJ75-EPQT       untouched     ENVW-7875-379H     untouched     236Z-TU75-9MRX       untouched     FHRX-8675-BTUX     untouched     Comparison

# **5. EVALUATION STATUS: ONLINE**

### Step 4

Under Evaluation Archive, current stats of the evaluation can be looked up.

46DU-GT75-ADVY 48CF-2H75-37JP untouched 4CEN-AA75-EKWX untouched FJKP-JU75-378R untouched ARVZ-4375-269G untouched DOWNLOAD PARTICIPANT CODES **Project Archive Evaluation** Archive CURRENT EVALUATION SNAPSHOT (V2) CURRENT PROJECT SNAPSHOT (V2) Timeframe Evaluation will conclude on Jul 27, 2021 18:48. PROJECT SNAPSHOT V1 Evaluation has been underway for 3 seconds **Classification Question** Is your background in architecture? O yes (\$0) O no (20) Groups 😫 A (0) 😫 B (0) TAKE EVALUATION OFFLINE PROJECT SNAPSHOT V1

untouched

untouched FHRX-8675-BTUX

Step 5

The evaluation can be taken offline.

After the evaluation is offline, a new snapshot of changes of a project can be taken and the evaluation can be again brought online.

### **RUNNING THE VR EVALUATION**

About

Step 1

The VR Evaluation can be conducted in a desktop or VR mode.

Get the participant code.

Paste the Participant Code and Login.

Step 2 Follow the instruction on screen or in VR

