VREVAL

Evaluation

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EVALUATION

Virtual Reality Evaluation (**VREVAL**) is a toolbox and evaluation framework to evaluate architecture and urban spaces.
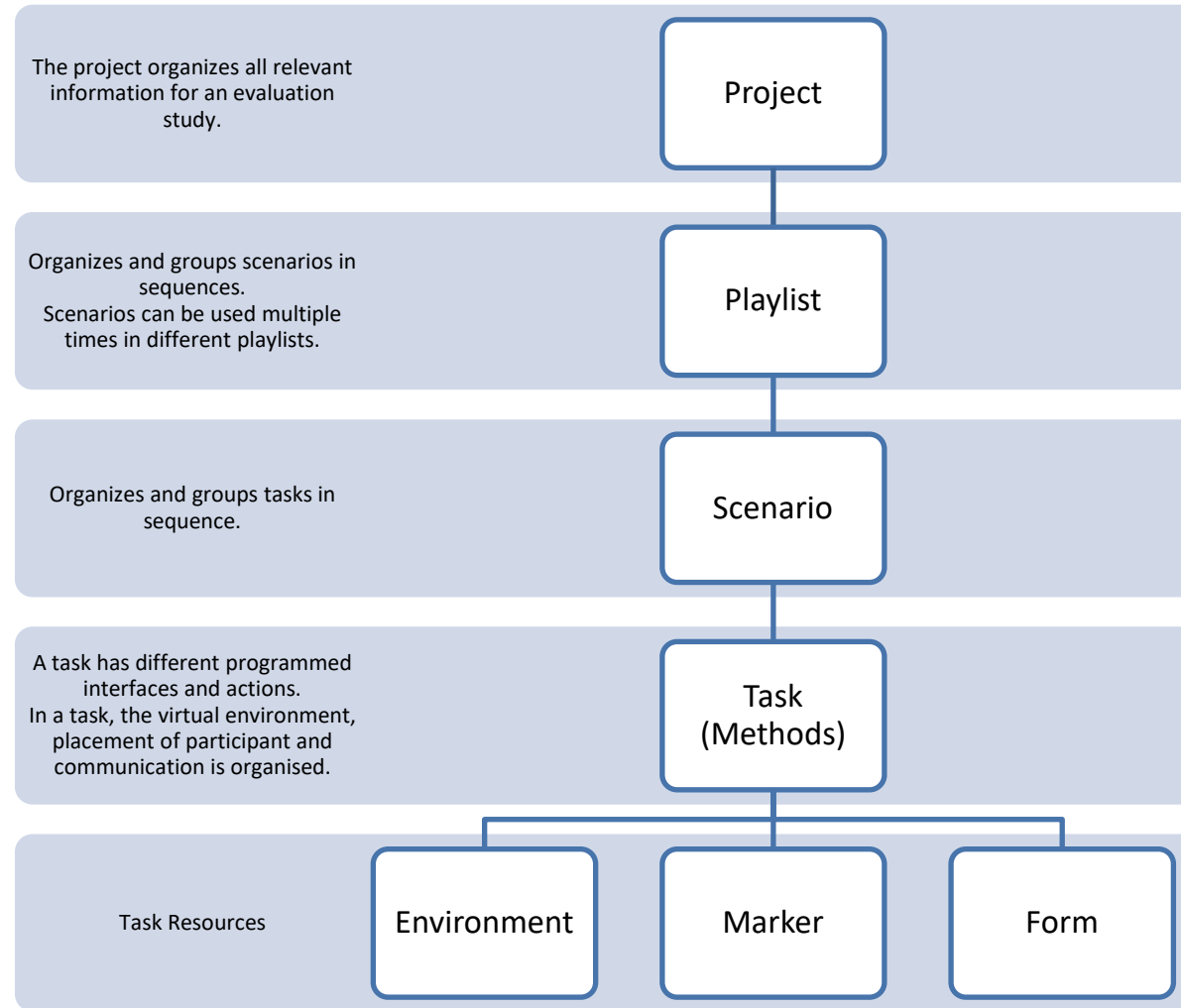
To run a pre-occupancy evaluations in virtual space in order to gather user behaviour data and user opinions a VREVAL project is needed.

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.

The project organizes all relevant information for an evaluation study.

Project

Organizes and groups scenarios in sequences.
Scenarios can be used multiple times in different playlists.

Playlist

Organizes and groups tasks in sequence.

Scenario

A task has different programmed interfaces and actions.
In a task, the virtual environment, placement of participant and communication is organised.

Task (Methods)

Task Resources

Environment　　**Marker**　　**Form**

1. CREATE AN EVALUATION

Before

The Project is prepared up to Playlists.

Step 1

Go to Evaluation and create a new Evaluation

Step 2

Give the evaluation a name. Optional write a description.

Select a project, which will be linked to the evaluation.
Create the 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.

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 taken.

Snapshots serve as documentation.

Old snapshots of the project can be downloaded and compared.

EVALUATION NAME

Tutorial

EVALUATION DESCRIPTION

(optional)

Evaluation settings

SETTINGS

EVALUATION ENDS ON

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 question (such as age range, gender, etc.) and evenly distribute the participants among each group. This is a method for ensuring that group assignment is not divided based on the demographics in question.

OPTION 2

no

ADD OPTION

ADD GROUP

BACK   **SAVE**

Create new Snapshot, if changes in Project are made.

Project Archive

TAKE A SNAPSHOT OF THE PROJECT <u>TUTORIAL</u>

NOTE

Write a note for this snapshot...

TAKE SNAPSHOT

Evaluation Archive

Create a project snapshot and some groups first

Current Snapshot

Current Project Snapshot (v2)   1 second ago

Archive Snapshot

Project Snapshot v1   2 minutes ago

3. CREATE EVALUATION GROUPS

Step 1

At least one group is required.

An evaluation group is defined by a sequence of playlists.

Between Subject Groups:

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

Within Subject Group:

The same participant tests all conditions corresponding to a variable.

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

SETTINGS

EVALUATION ENDS ON

27.07.2021 18:48

GROUP DISTRIBUTION QUESTION

Is your background in architecture?

The Group Distribution Question will poll the participants on a single question (such as age range, gender, etc.) and evenly distribute the participants among each group. This is a method for ensuring that group assignment is not divided based on the demographics in question.

OPTION 1

yes

OPTION 2

no

ADD OPTION

GROUP 1

GROUP NAME

A

AVAILABLE PLAYLISTS

Start

End

Scenario 1

Scenario 2

INCLUDED PLAYLISTS

⠿ Start   REMOVE

⠿ Scenario 1   REMOVE

⠿ End   REMOVE

Start

End

Scenario 1

Scenario 2

⠿ Start   REMOVE

⠿ Scenario 2   REMOVE

⠿ End   REMOVE

ADD GROUP

Scenario 1   End

BACK   SAVE

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.

	A	B
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

Step 2

Open the Evaluation, which is online.

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.

5. EVALUATION STATUS: ONLINE

Step 4

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

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.
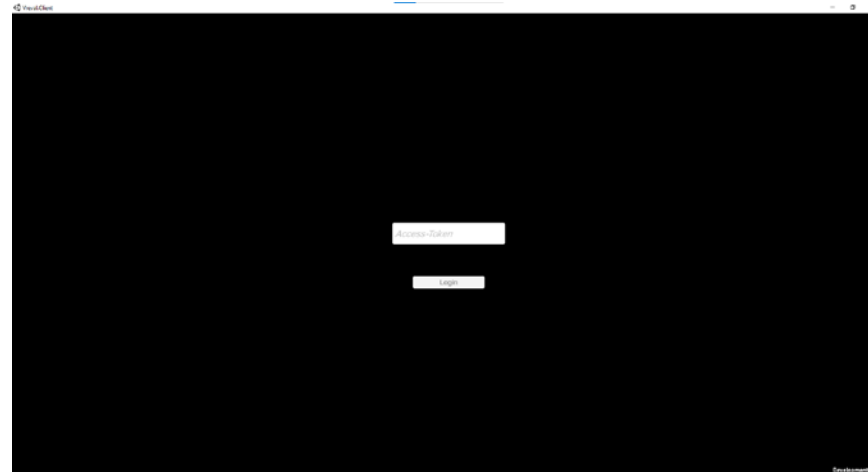
RUNNING THE VR EVALUATION

About

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

Step 1

Get the participant code.

Paste the Participant Code and Login.

Step 2

Follow the instruction on screen or in VR