Modular JASMIN-on-LOTUS Task (MJOLT)

Run a Study Online via a LOTUS Template for an Online Cross-sectional Study Featuring one JASMIN Task and a Couple of Questionnaires.

Thomas Pronk, <u>pronkthomas@gmail.com</u>, version 1.5, 2019-10-20

LAB, University of Amsterdam, https://labs.psychologie.uva.nl/

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Introduction

LOTUS, JASMIN, and Qualtrics are software packages for collecting behavioral data online and automatically. Qualtrics is for questionnaires, JASMIN for cognitive tasks, and LOTUS for overarching logic (e.g. administering a sequence of questionnaires and tasks). These software packages are powerful, but the learning curve for configuring them and connecting them together can be a bit steep. LAB has developed two templates that serve as scaffolds for either a repeated-measures design or a cross-sectional design. The templates aim to (1) make it easier to configure simple studies, (2) provide standard solutions for standard problems, and (3) provide a basis that is robust and extensible.

This manual is about MJOLT, which is the template for cross-sectional designs. Out of the box, MJOLT supports the following procedure:

- (optional). A **screening** questionnaire, which collects information that determines whether a participant is eligible for taking part in the study.
- (optional). A **before** questionnaire. A development version of MJOLT offers the possibility to have task stimuli setup via this questionnaire.
- (required). A cognitive task. Demos of JASMIN tasks: https://thomaspronk.com/jasmin2
- (optional). An after questionnaire.
- (optional). A **quota** system, in which MJOLT tracks completions across different strata (e.g., women above 25), refusing a participant if a quota is met for their stratum.
- (optional). A panel system for connecting MJOLT to an online participant panel.

Getting Started

Get your own copy of MJOLT

If you've never used MJOLT before, send an e-mail to TOP web-support requesting a copy of the LOTUS and Qualtrics projects. You'll need to provide a url_suffix, which a bit of text that will be visible to participants in their browser address bar. The url_suffix should start with a letter and may only contain letters, numbers, and underscores (_).

Publishing your study

Your copy of the MJOLT template will be available at this URL:

https://lab.uva.nl/lotus/<url_suffix>/event/start

By visiting this URL a participant takes part in your study. Depending on how MJOLT is configured, the participant starts either with the screening questionnaire, before questionnaire, or task.

Configuring MJOLT

MJOLT can be configured via LOTUS at https://www.lab.uva.nl/lotus. All parameters below are LOTUS Project Parameters, which can be found in LOTUS -> Your Project -> Define Project -> General; look for a table named "Custom Parameters" at the bottom-right of the screen.

General Settings

Parameter	Explanation
MJ_debug	If true, the participant log contains all kinds of additional information that your technician uses when testing MJOLT. Set MJ_debug to false when launching your study.
MJ_error_message	This message is shown to a participant if something goes wrong
MJ_qualtrics_username	Required when using the MJOLT quota or setting up stimuli via a questionnaire; username of the owner of the Qualtrics projects.
MJ_qualtrics_token	Required when using the MJOLT quota or setting up stimuli via a questionnaire; the API token of the owner of the Qualtrics projects.

Screening Questionnaire

Parameter	Explanation
MJ_quota_qn	The URL of a Qualtrics project. If this parameter is empty, then MJOLT skips this
	questionnaire and goes straight to the task.

Before Questionnaire

Parameter	Explanation
MJ_before_qn	The URL of a Qualtrics project. If this parameter is empty, then MJOLT skips this
	questionnaire and goes straight to the task.

Task

Parameter	Explanation
MJ_task_type	Type of JASMIN2 task to administer
MJ_task_config	A JASMIN2 task configuration, which can be downloaded for the website below. To export a configuration for MJOLT, go to Save & Load and select Configuration -> Save to File (raw). These configurations can be obtained via the website below. https://thomaspronk.com/jasmin2

After Questionnaire

Parameter	Explanation
MJ_after_qn	The URL of a Qualtrics project. If this parameter is empty, then MJOLT skips this
	questionnaire and immediately completes the participation.

Panel integration

Parameter	Explanation
MJ_success_url	Once the participant has completed the MJOLT study, they are sent to this URL. For
	example https://labwebsite.com
MJ_panel_enabled	If true, then MJOLT expects study_id (sid) and participant_id (pid) parameters delivered
	<pre>via the URL, as follows: https://lab.uva.nl/lotus/<url_suffix>/event/start?sid=123&pid=456</url_suffix></pre>
	These parameters will be appended to any URL used to leave MJOLT again. For
	<pre>example https://panelcompany.com/success?sid=123&pid=456</pre>

Quota System

Parameter	Explanation
MJ_quota_state	If this parameter is empty, then MJOLT assumes the quota system is not used and sends the participant on to the before questionnaire or task. If this parameter is a valid JSON object, then MJOLT assumes a quota system is in place and assumes all parameters below to be defined as well. Reset the
	quota_state with this value: {}
MJ_quota_mapper	Recodes Qualtrics answers from numeric values to labels. For example, to map
	1, 2, 3, 4 to m, f, y, o: [[1, "m"], [2, "f"], [3, "y"], [4, "o"]]
MJ_quota_qn	The URL of a Qualtrics questionnaire featuring the screening questionnaire. See
	below for an explanation on how to configure this questionnaire.
MJ_quota_threshold	The number of participants required in each stratum to meet the quota.
MJ_quota_full	If the quota is full for the stratum of the current participant, then the participant is sent to the quota_full URL.

Configuring your Qualtrics Projects

The example questionnaires are named MJOLT_v3_screening, MJOLT_v3_before, and MJOLT_v3_after. You can edit these to set them up as you see fit.

Managing MJOLT

Participant Overview

Basic management can be conducted via the LOTUS participant overview. Go to LOTUS -> Your Project -> View Participant. You'll see a table with one row for each participant with each column representing a participant variable tracked by LOTUS. Via the **Export** button, you can get an overview of all participants in a spreadsheet format. The table below lists the most important participant variables.

Parameter	Explanation
uid	Participant ID; use this variable to join Qualtrics data with JASMIN data per
	participant.
Session	The current session of a participant or the last session they were in before
	leaving the study.
State	When a participant completed the full study, then their State is
	ProjectCompleted.
MJ_error	If an error was detected while a participant took part, then this variable contains
	an error report. Errors that took place during the JASMIN task start with {"from": "window.onerror"
MJ_cid	Panel cid
MJ_pid	Panel pid
MJ_quota_stratum	The stratum this participant belongs to (for tracking and updating the quota)

Providing Technical Support

A participant that requests technical support can often be served by a couple of general tips, such as trying a different browser. If their issue is more complicated, then it is important to obtain the right information for finding out what went wrong. Some tech support tips a bug report guidelines are available here: https://thomaspronk.com/pdf/Tech_Support_and_Bug_Report_Guidelines%20v1.3.pdf

Further Reading

- Explanations of each variable logged in each JASMIN2 task: https://thomaspronk.com/pdf/JASMIN2 Data Manual.v1.3.pdf
- A manual for providing technical support to participants:
 https://thomaspronk.com/pdf/Tech_Support_and_Bug_Report_Guidelines%20v1.3.pdf
- A manual on passing information to and from Qualtrics via the URL:
 https://www.qualtrics.com/support/integrations/api-integration/passing-information-through-query-strings/
- A manual for the template for longitudinal studies MUM: https://thomaspronk.com/pdf/MUM_Manual.v2.1.pdf

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Version History

• 1.5. Streamlined text and added section on Managing MJOLT.