



Interactive experiments in the online classroom part II

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Bard College Berlin & University of Passau

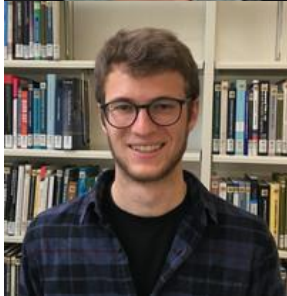
Webinar January 27th 2021

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People

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Webinar series

Bard College Berlin
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- Part Ia: Run experiments with classEx
January 20th 2021 4pm
Recording available at classEx.de/webinars
- Part Ib: Experiments for teaching macroeconomics
February 3rd 2021 4pm
Additional topic webinars possible in the future
- **Part II: Develop own experiments**
January 27th 2021 4pm
Recording made available at classEx.de/webinars

All information can be found at classEx.de/webinars

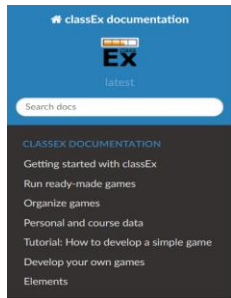


Building own experiments





Resources



Docs » classEx documentation [Edit on GitHub](#)

classEx documentation



Welcome to the documentation of classEx. In this documentation you can find all information on how

classEx Documentation

<https://classEx.de/documentation>

Extensive documentation of classEx

classEx - Help and Discussion Forum 30 Mitglieder

Dear classEx user,

In this forum you can post questions, report bugs or ask for support. You can also answer to questions of other user. The help asap. If you have any questions, please write to classEx@uni-passau.de.

- n...@u... Florian Ka... 5 Resetting all variables when a player restarts a game — Hi Florian, Thanks for your
- prof_geo..., simonmu... 4 Nachfragekurve — Thanks a lot Simon, this is a great group. I already received help
- simonmu..., m.gia...@... 3 Assigning and Matching participants in later stages — Dear Marcus, it is mentione
- Achim ..., m.gia...@be... 4 Problem with getting everybody logged on to the sysem — Dear Achim, in classEx i
- simonmu..., m.gia...@... 2 Automatic start(wait for all) does not forward players if group is not full — Dear Sin

Help and Discussion Forum

<https://classEx.de/forum>

Google group for Q&A

repository

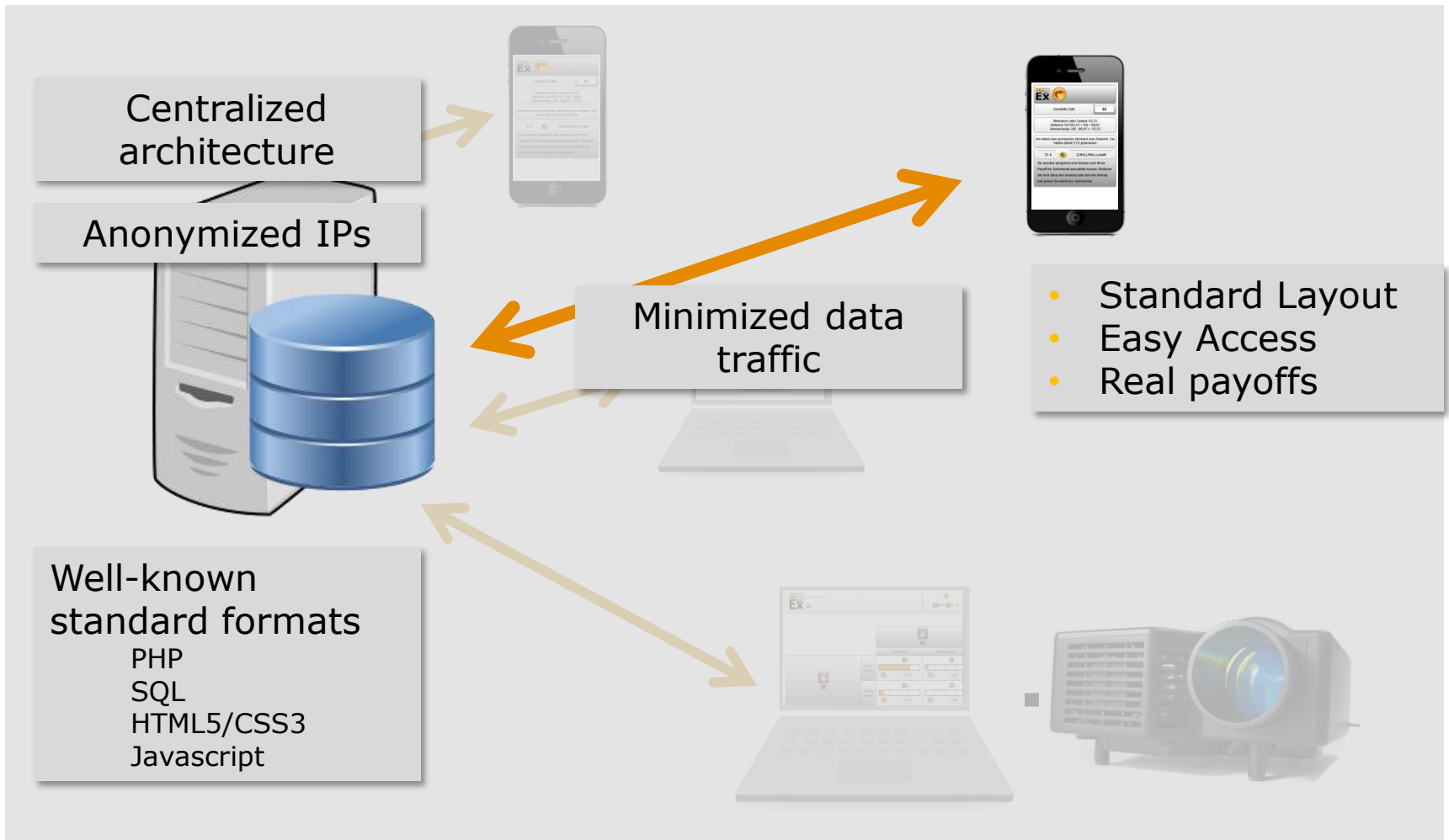
The repository contains all experiments which have been set public by different users. They can be in different stage of development or of curated experiments, see the ready-made experiments in the overview.

title Show 10 entries

language	title	language	number of player	created by	created	last edit	in:
	Externalities	EN ES	3861.0	Llavador Humberto	2017-10-20	2017-10-21	Ur
	Warm-Up v.1						Pe ES

Copy existing experiments

Ready-made games and repository in classEx

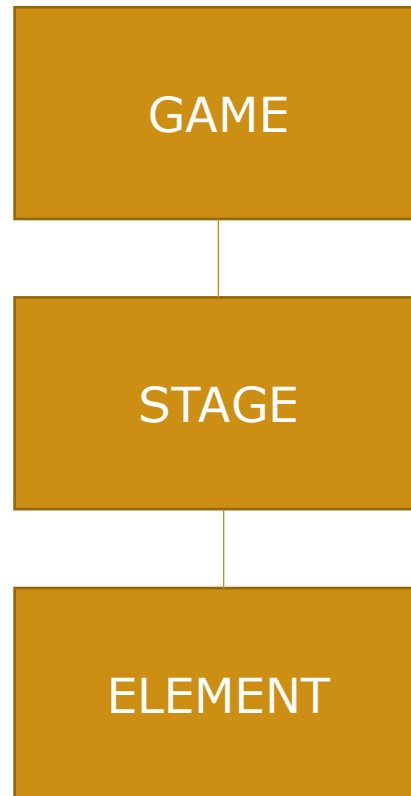






Nomenclature

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Element types



participant



experimenter

OUTPUT



text box



text box



Histogram

Pie Chart

Line Chart

Matrix

INPUT



Discrete choice

Numeric input

Text input

Slider/Radioline

Contracts



Discrete choice

CONTROL



Start button

Automatic start

CALC



subjects program (PHP)

Additional javascript



globals program (PHP)



Backend system

Ultimatum Game



participant

add new element

E1 program code (subjects) for all roles

```
$max = 10;  
$endow = 10;
```

E2 input element

#1 type of input field variable names

Numeric Input Field \$ keep

only role 1

text

role2.png erhält:

role2.png gets

minimum maximum decimal place

unit default required output only

€

#2 type of input field variable names

Numeric Input Field \$ send

only role 1

experimenter

add new element

E1 text box

display only if stage is activated no update

Sie spielen mit einem anderen Teilnehmer hier im Hörsaal. role1.png macht den Vorschlag für die Aufteilung von 10€. role2.png kann diesem Vorschlag annehmen oder ablehnen. Lehnt er ab, erhalten beide nichts.

You play with another participant here in the lecture hall. role1.png decides how to divide 10€ between role1.png and role2.png. Then role2.png can decide to accept or reject the proposal. If role2.png rejects the proposal, both players get nothing.

E2 start button

button label feature confirmation message round

Start start no display



Start a stage

- Normally on each stage the lecturer has a start button.
 - Start button is on the stage which has to be started.
 - Result elements automatically have a start button.
- Automatic Forwarding also possible.
 - Forwarding by the lecturer (if possible/wait for all)

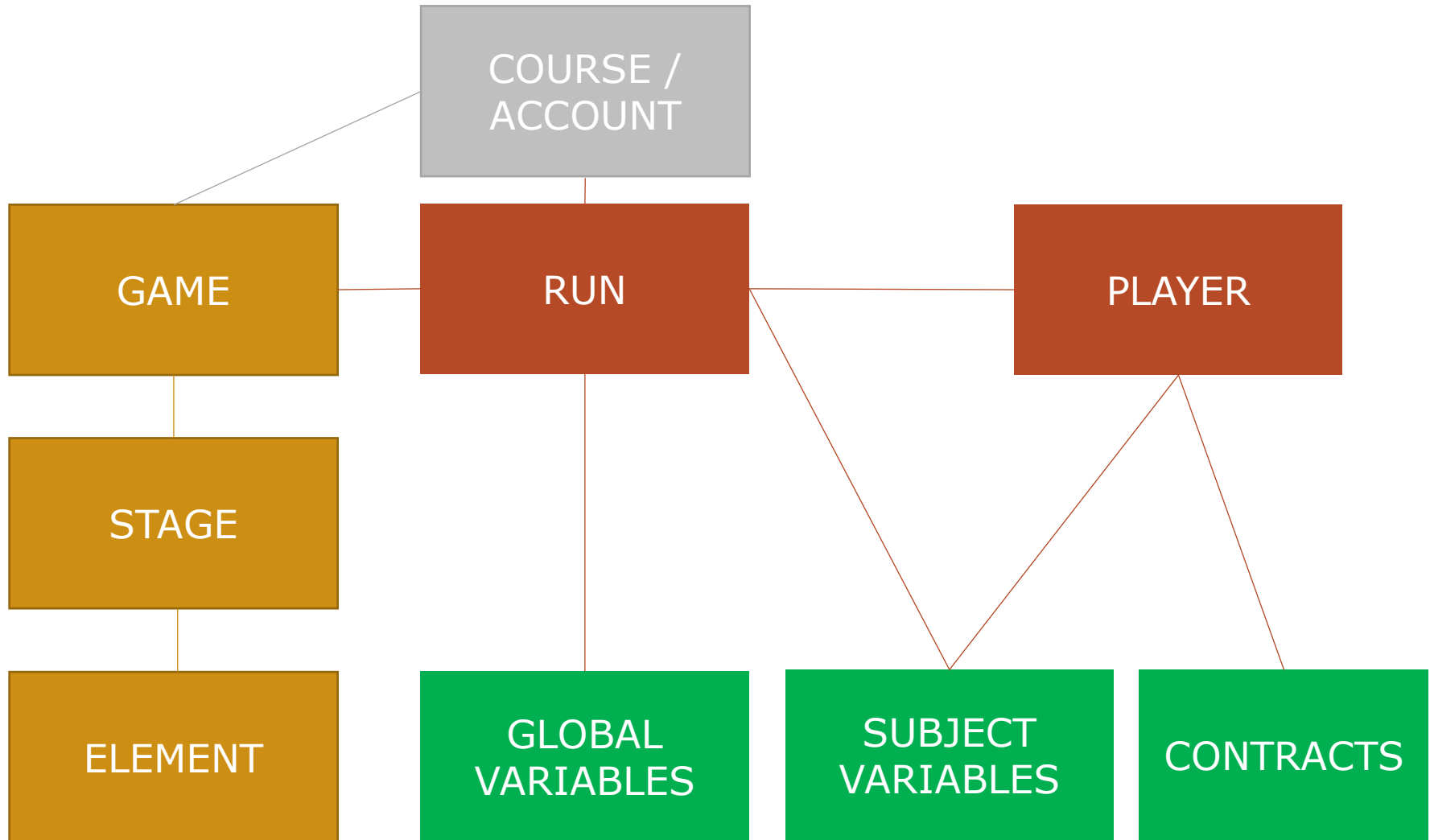


How many stages?

- Stages are, first of all, synchronisation points.
- All decisions have to be made before the next stage can be started.
- Stages can also be used for different screens.



Data model





Stored decisions

- Decisions are stored as subject variables (and available through the whole game).
- In a text box variables can be displayed with: `$variablename`; e.g. You have chosen answer `$choice`;
- Program elements can be used to modify variables.
- Decisions (and globals) are stored automatically, Other variables have to be stored with `$save(„variablename“, $value)`;

SUBJECT
VARIABLES



Player IDs

- 3 type of player Ids
 - Internal unique playerId (all classEx, re-used)
 - Subject ID (unique in one game, 1-...)
 - External ID (ticket)
 - can be provided at login or via URL

SUBJECT
VARIABLES

\$id
\$subject
\$tic

- On-the-fly
- First come – first serve
- First stage of game

- *Treatments*
- *Roles*
- *Groups*



SUBJECT
VARIABLES

\$treatment
\$role
\$group



Matching

matching

matching:
 rematching:
 treatments:
 roles:
 group size:

participant 1	participant 2	participant 3	participant 4	participant 5	participant 6
role 1	role 2	role 3	role 4	role 5	role 6

display options

show participant ID
 show role

display condition



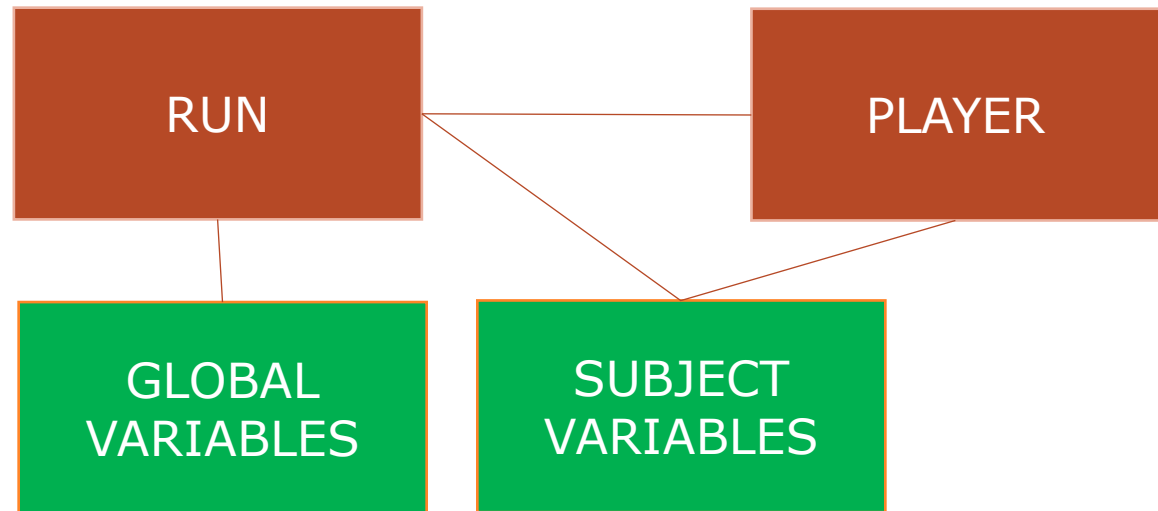
- for all treatme... ▲
- for all treatments
- only treatment 1
- only treatment 2

**SUBJECT
VARIABLES**

\$treatment
\$role
\$group



Variables



- Same namespace (overwriting!!)
- Global variables are written first and always available (same for each player)
- Subject variables are specific to player



Thanks for your attention!

More information can be found at
classEx.de

For questions use the forum or email to
classEx@uni-passau.de

