



A Digital Prototyping Tool for Card Game Design

DGA GAMING FIELDLAB PROJECT

DE KRACHT VAN CO-PRODUCTIES,
20-2-2020

Karel Millenaar, FourceLabs



Amsterdam University
of Applied Sciences

CWI





Physical prototyping feels like work!



What kind of software tool can we design and develop which makes card game design more efficient and effective?





Who are we?



TEAM





RIEMER VAN ROZEN



domain-specific languages
automated game design
live programming



Amsterdam University
of Applied Sciences

CWI



ANDERS BOUWER



intelligent tutoring systems
automated game design



Amsterdam University
of Applied Sciences



PETER DE JONG



game development
card games
problem owner



KAREL MILLENAAR



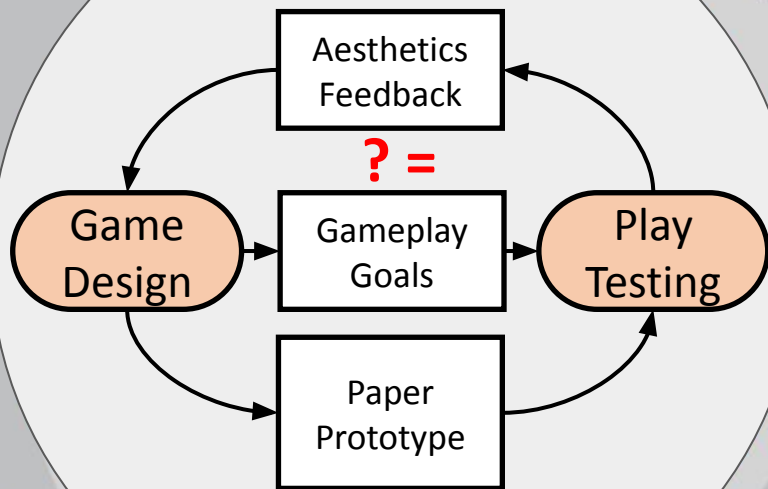
game design
(serious) games
Owner of problems



How are we doing
this?

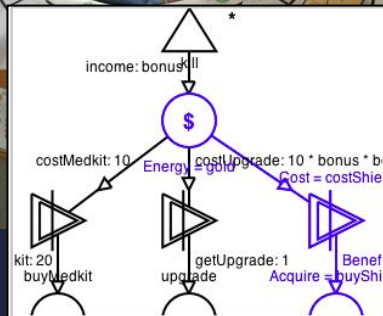


PROBLEM STATEMENT





SOLUTION SPACE



intent: Acquisition: Converter buyShield
costs 10 + shield resources from gold as spe
and yields 10 resources in shield as specifi
use when: Apply Acquisition for introducing a

MeDeA
Mechanics Design Assistant
Graph Options

Zoom: 88
Gap Size: 40

☐ Hide Names ☐ Show Pattern

Select Pattern: Acquisition

Acquisition Controls

Minimum Match Size: 5

Reset Analyze

Restrict Decisions

Decisions: 3 of 3
Displayed: 1 of 3

Property

Benefit

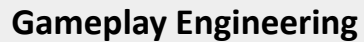
Acquire

Cost

Energy

Previous Next

Apply





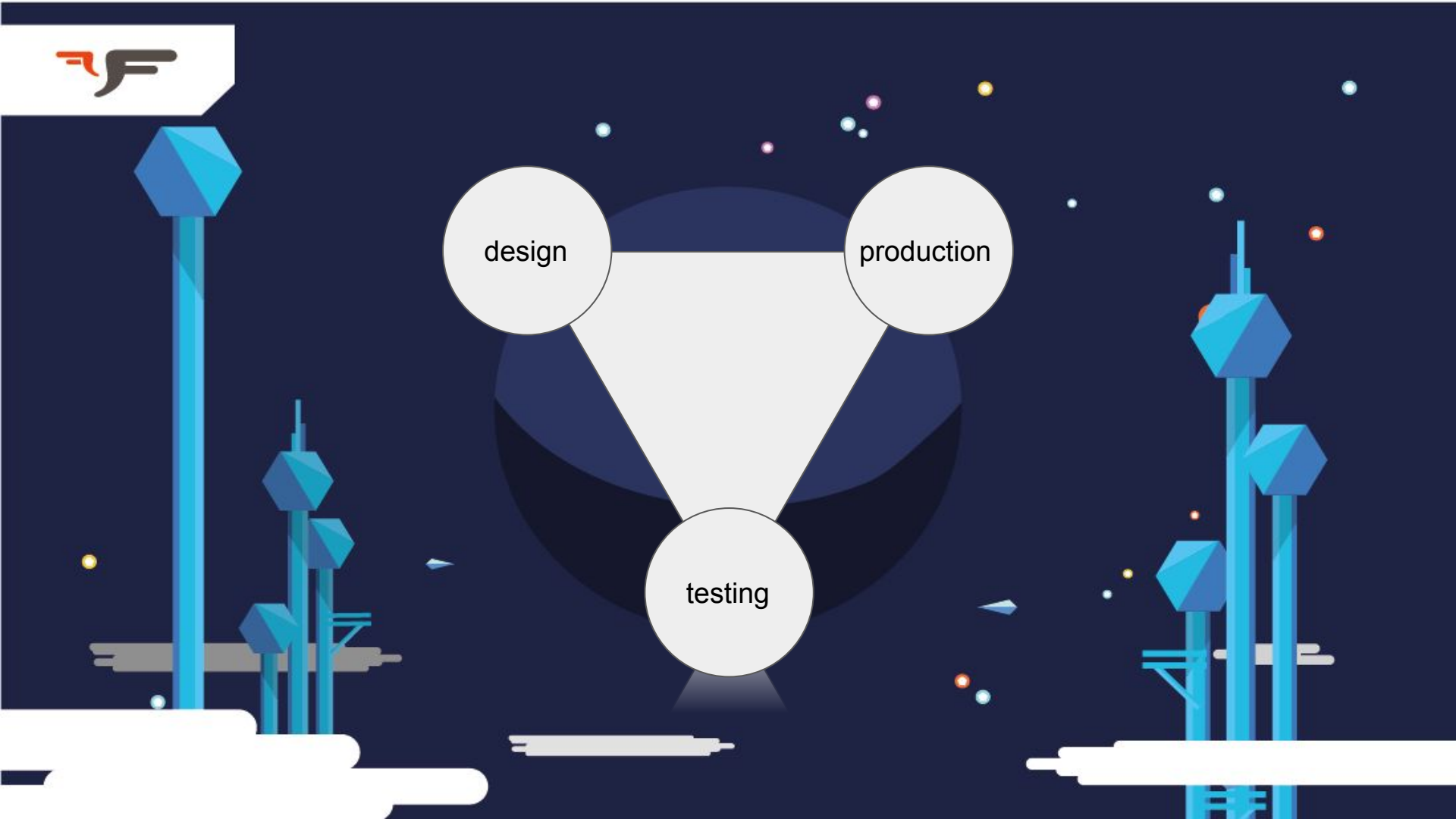
What have we done
so far?

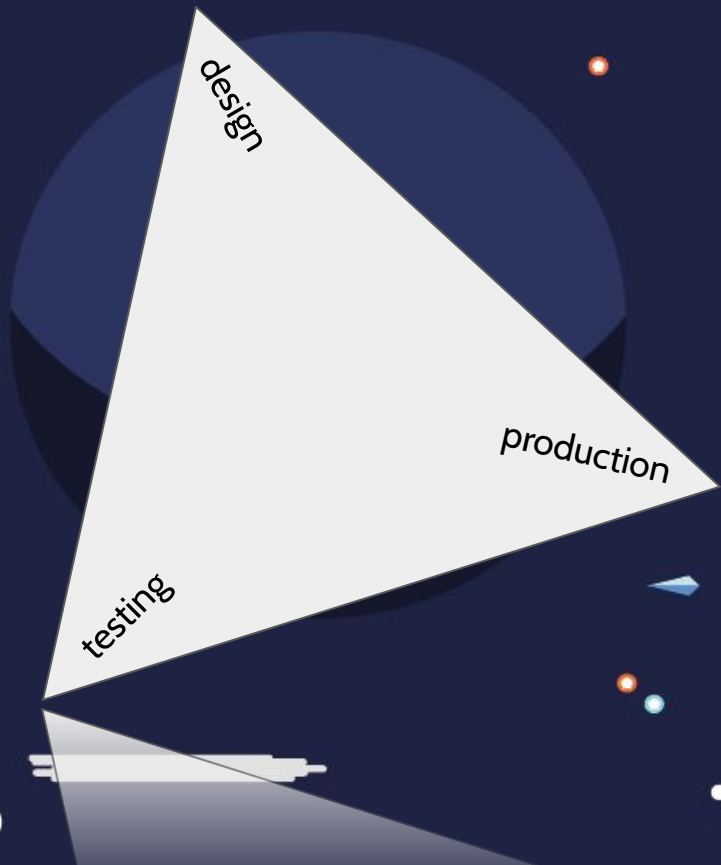


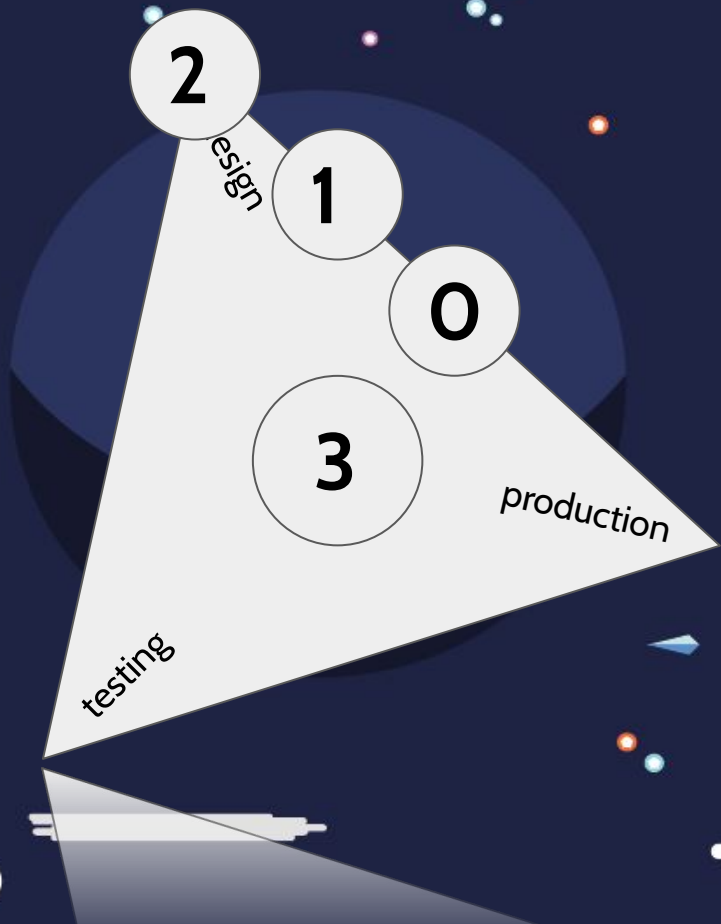
design

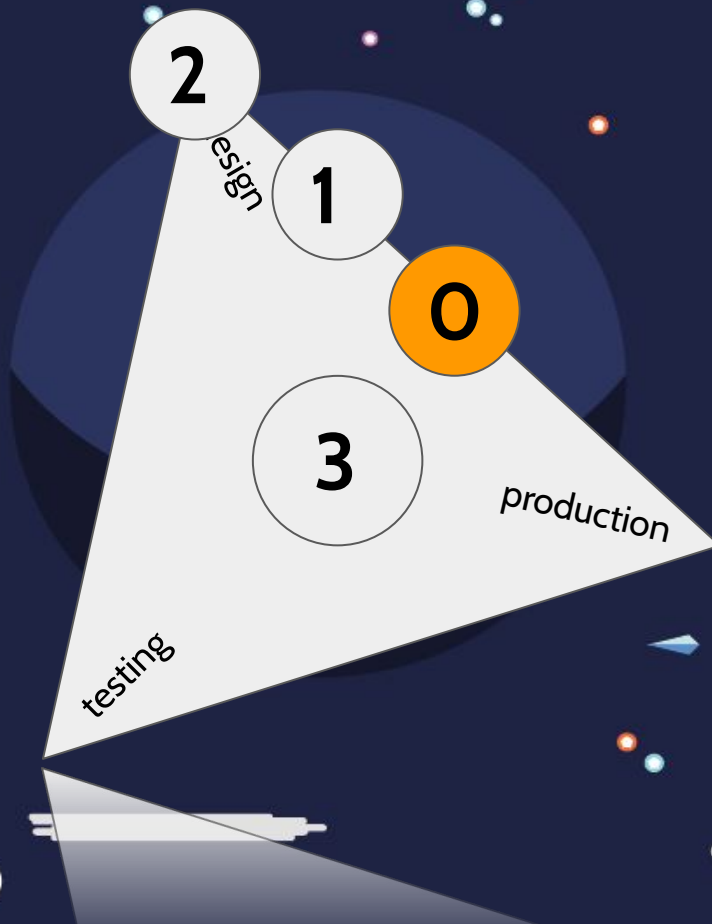
production

testing



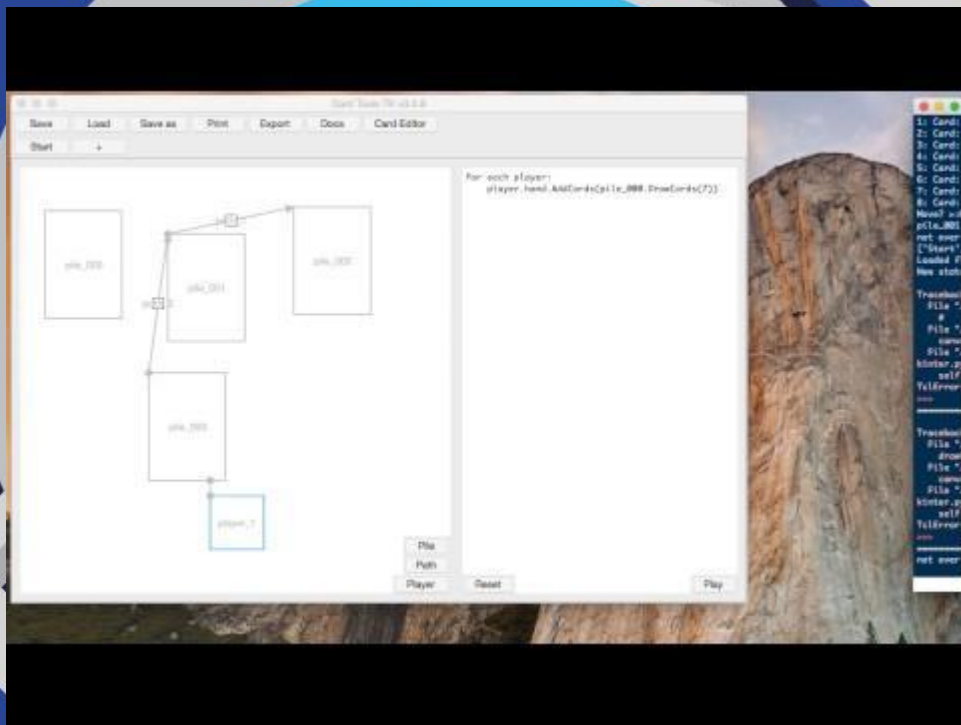






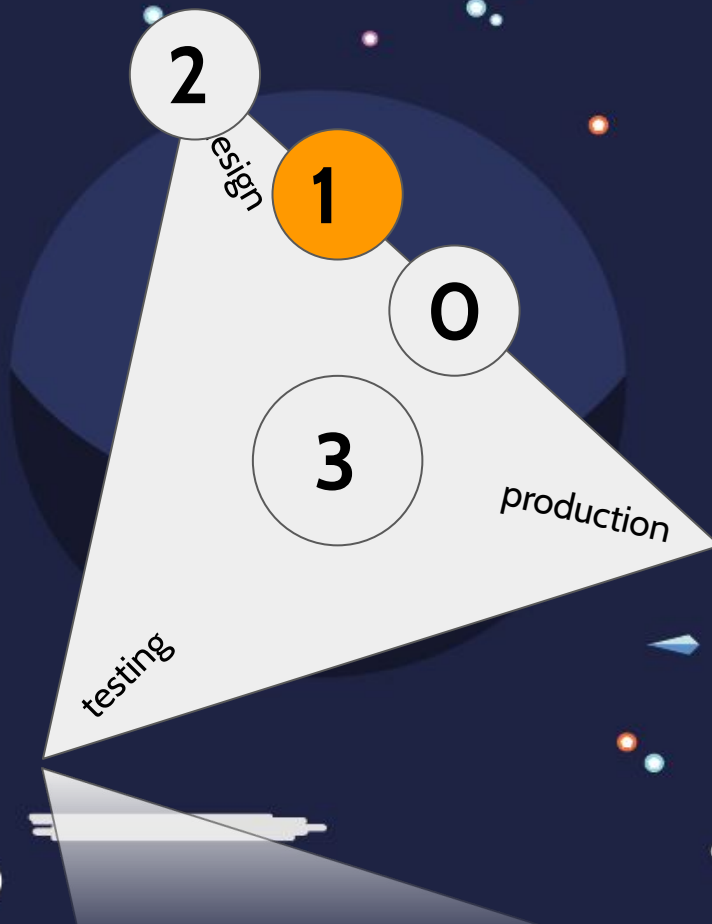


0. PROOF OF CONCEPT



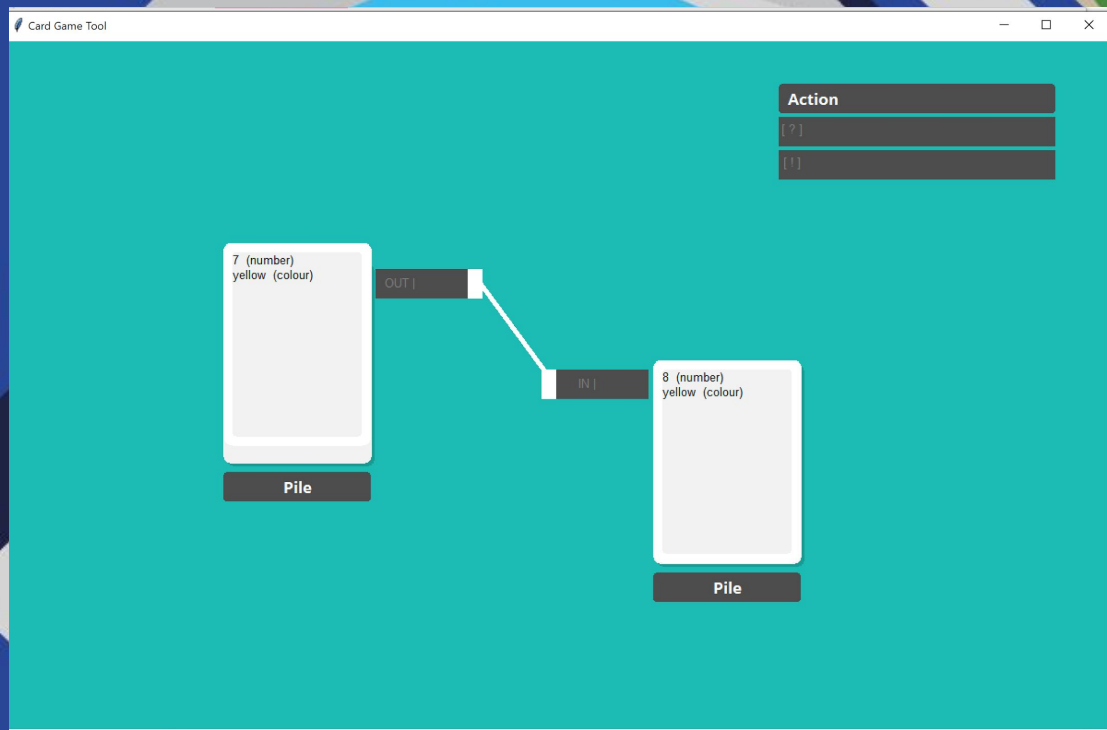
Rutger van Teutem

How can we formalize card games in a digital tool?



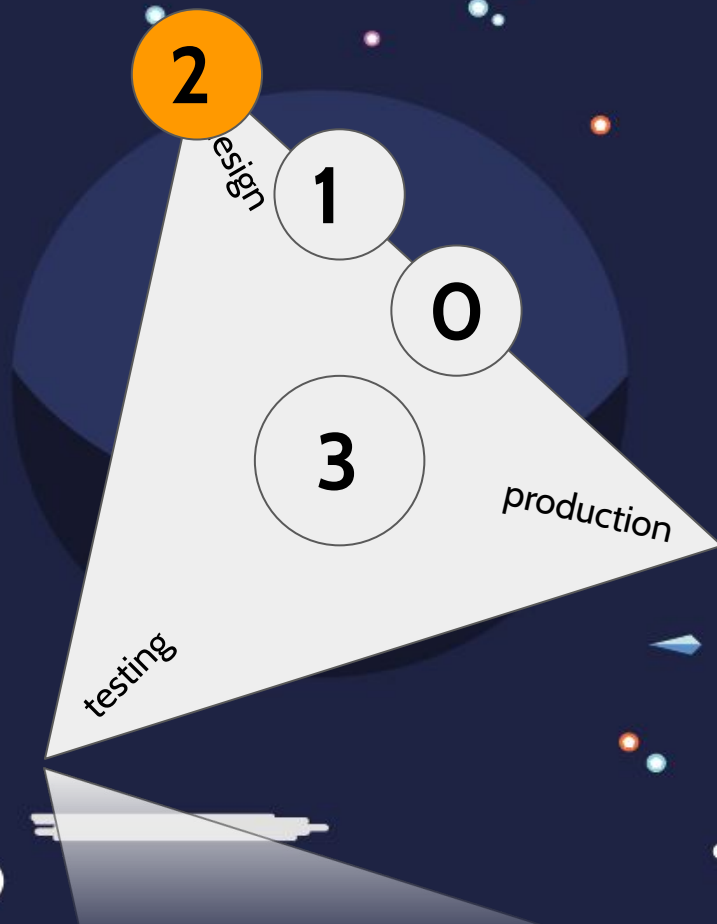


1. DESIGN TOOL



Midas Buitink

What should a digital card game prototype tool look like?





2. DESIGN LANGUAGE

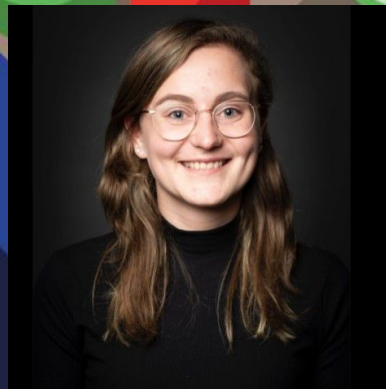
Researching Hanabi with CardScript

Analysing the rules of collaborative card games

Andrea van den Hooff

`Andrea.vandenhooff@student.uva.nl`

14 December 2019, 44 pages

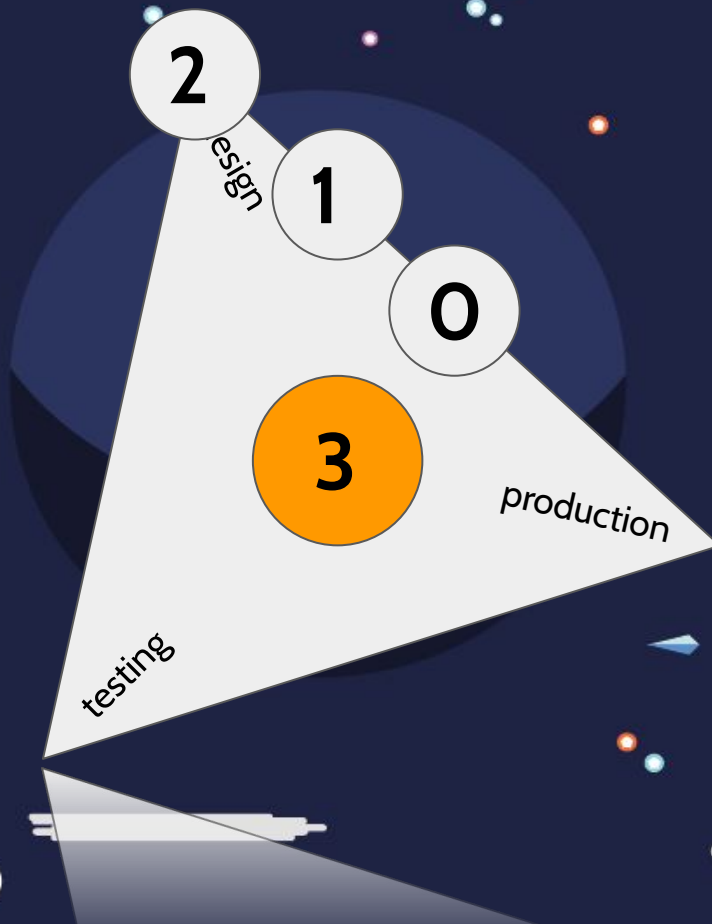


Andrea van den Hooff

How can a card game design language help design better games, collaborative games in particular?



So what now?





3. Card Game Design for Spellbenders



Midas Buitink

Which tool features could improve the card game design process for Codeglue?



The future

- Implementation of a version of the tool in real design processes
- Focus on quick wins in the production of card game prototypes and testing.
- Further formalizing card games into a digital space
- Design automation tools to help with design.



Questions?



karel@fourcelabs.com

www.fourcelabs.com