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THE DOUBLE-EFFECT APPROACH TO SERIOUS GAMES IN HIGHER EDUCATION:

STUDENTS DESIGNING AND DEVELOPING SERIOUS GAMES FOR OTHER STUDENTS

BRILLIANCRM

brillian ICM

Peter Mayr, Harald Bendl and Frauke Moerike

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AGENDA

- IMBIT @ DHBW Cooperative State University
- The Double-Effect Approach to SG Design
- The Project: 30 students /12 weeks / 50 hours
- Review: Application, Outcomes & Learnings
- Follow-up Projects

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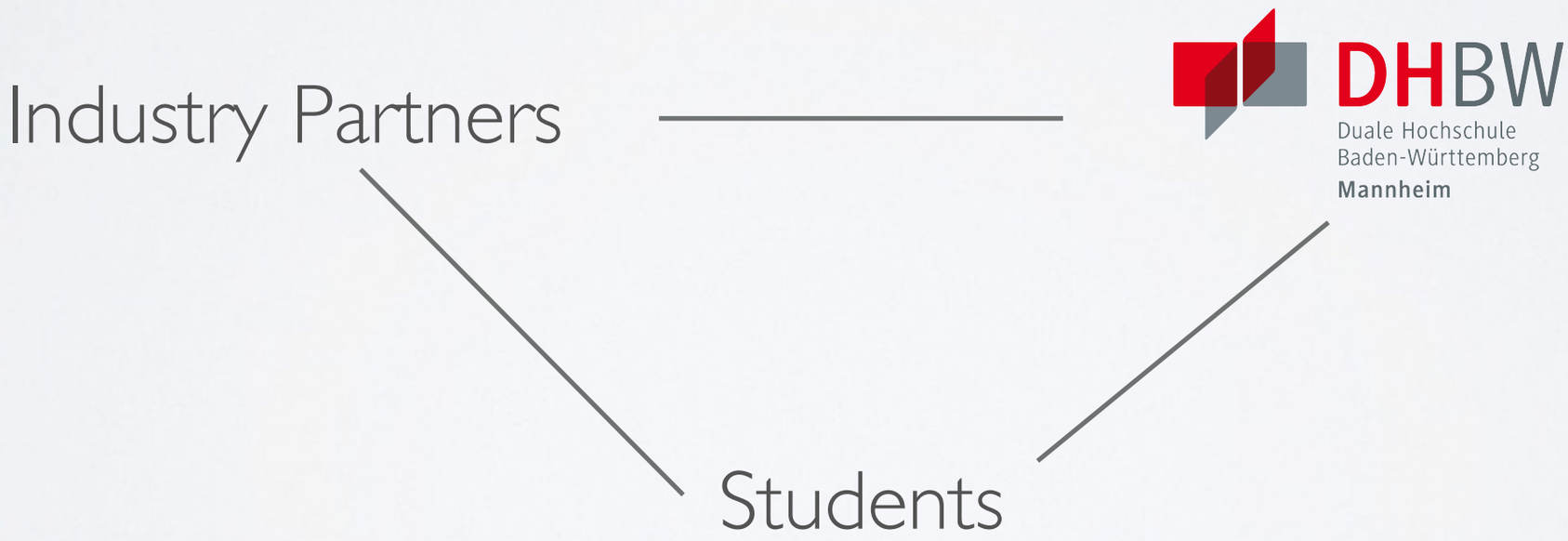
Dual Study Concept



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Industry Partners

IBM, accenture, hp, DB SCHENKER, Springer, e·on, ERNST & YOUNG, EVONIK INDUSTRIES, Atos, Lufthansa

Students

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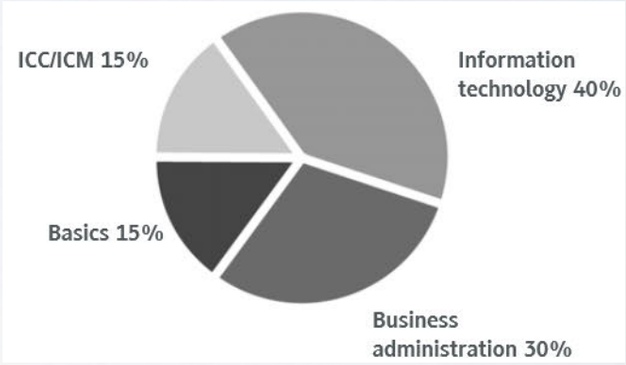

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THE DOUBLE-EFFECT APPROACH TO SG DESIGN

students as users

Serious Game

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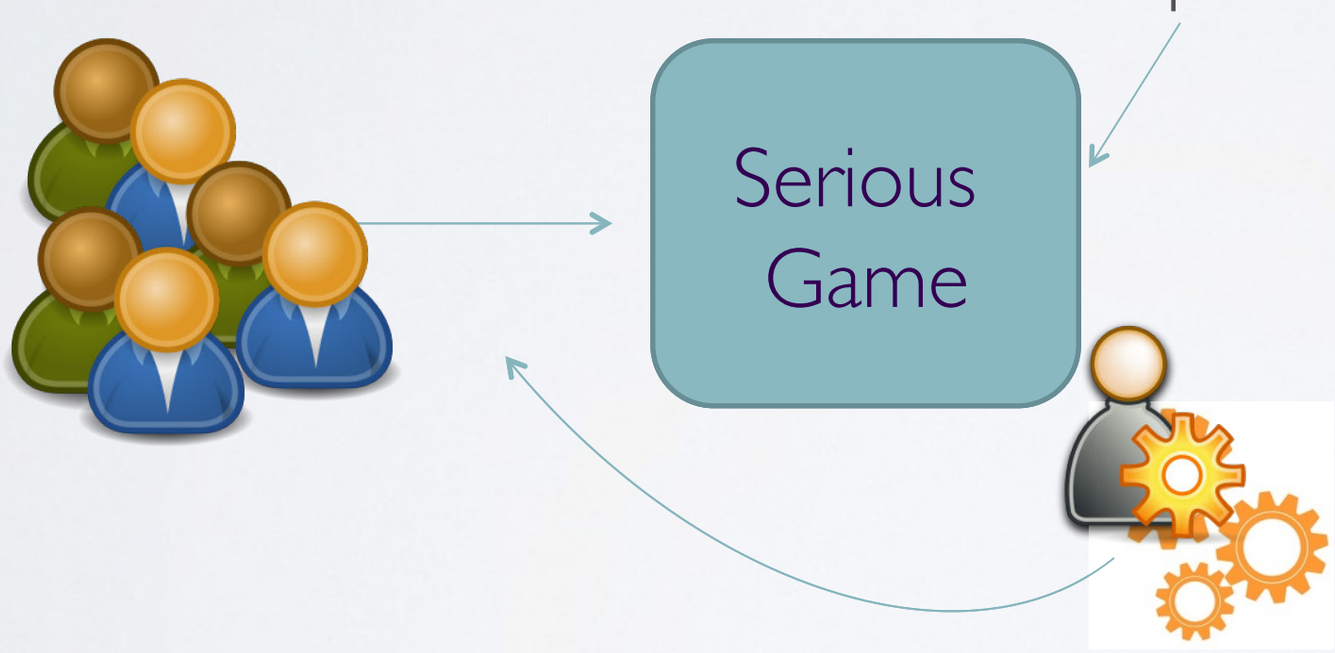
THE DOUBLE-EFFECT APPROACH TO SG DESIGN

students as users

implementation



develop program to act as a user

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THE DOUBLE-EFFECT APPROACH TO SG DESIGN

students as users

Serious Game

development

- plot / content
- design
- technical realization

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THE PROJECT:
30 STUDENTS /12 WEEKS / 50 HOURS

Challenge: Develop a SG „brillianCRM“

Project management of a global CRM implementation

Industry example provided: „Shark world“

Conditions:

12 weeks time to present a running SG prototype providing…

… accurate und interesting content on project mangement tasks, specifics on CRM projects and challenges intercultural collaboration

… a browser-based UI running on mobile multi touch devices

… user administration and reporting environment for lecturers

… marketing material for the product launch of the SG

… low budget handling (<50EUR/student)

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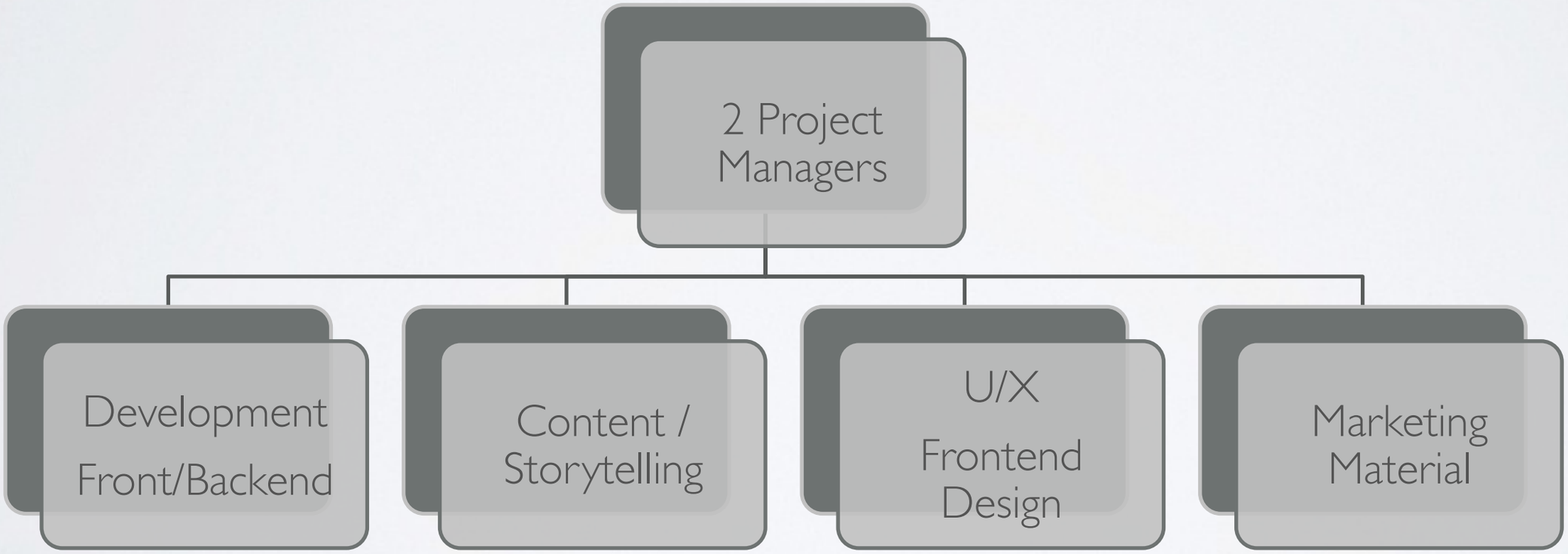
THE PROJECT:
30 STUDENTS /12 WEEKS / 50 HOURS

Set Up:

Lecturers Peter Mayr & Harald Bendl as client/sponsors

Student‘s self-organized structure:



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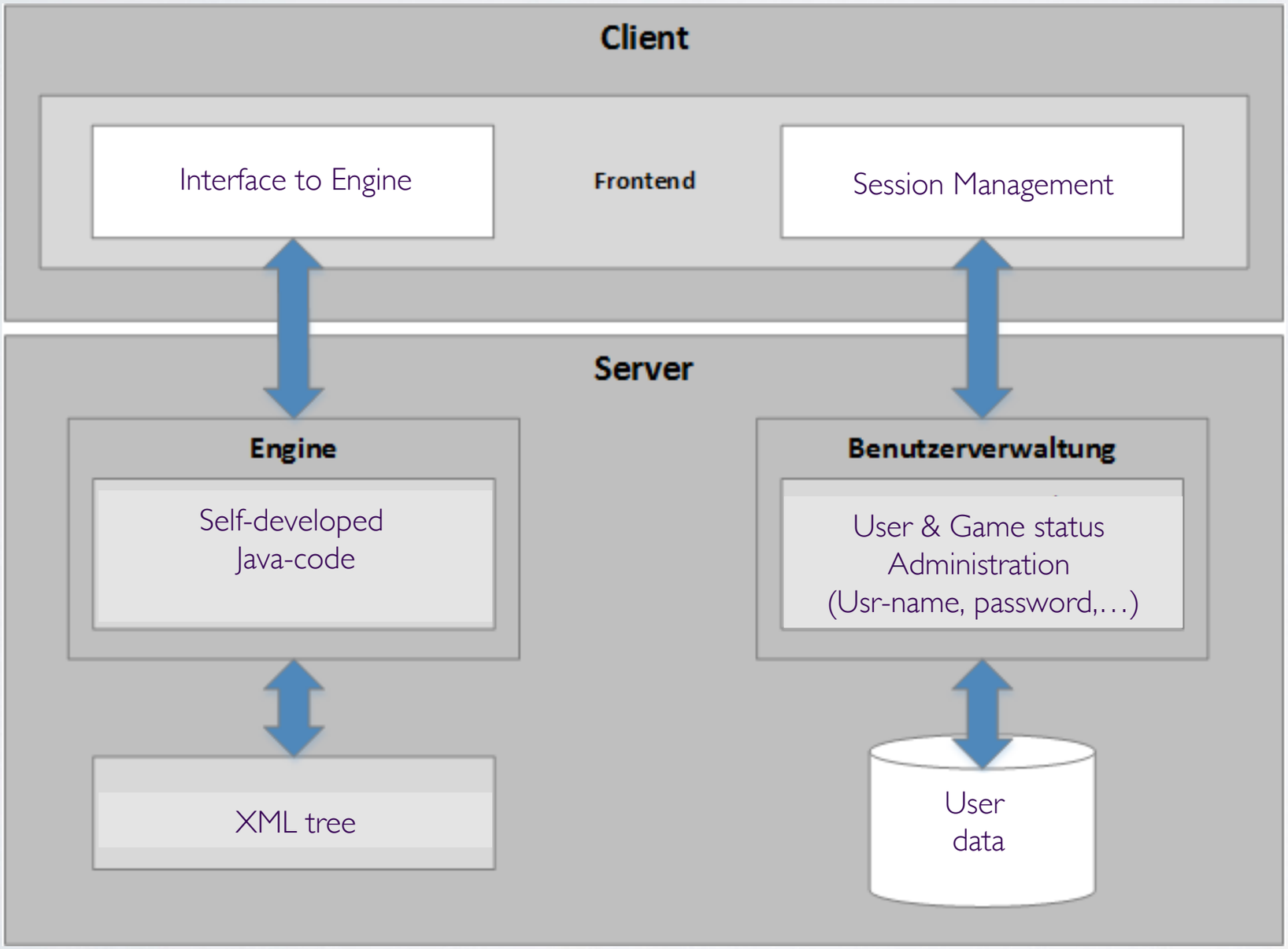
THE PROJECT:
30 STUDENTS /12 WEEKS / 50 HOURS

Technical realization:

agile development approach



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THE PROJECT:
30 STUDENTS /12 WEEKS / 50 HOURS

SG content:

CRM Project Management Challenges

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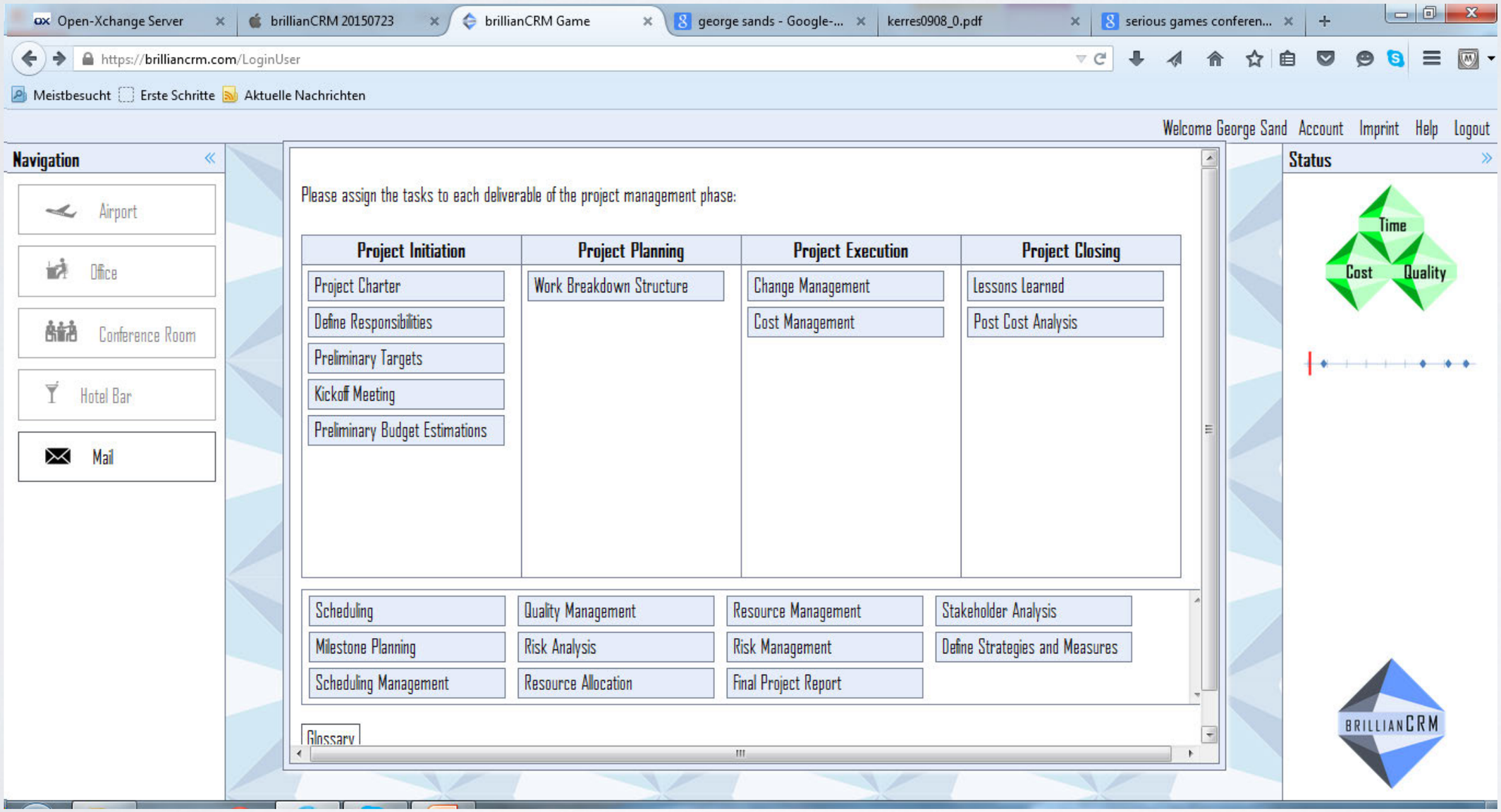
THE PROJECT:
30 STUDENTS /12 WEEKS / 50 HOURS

SG content:

CRM Project Management Challenges



BRILLIANCRM

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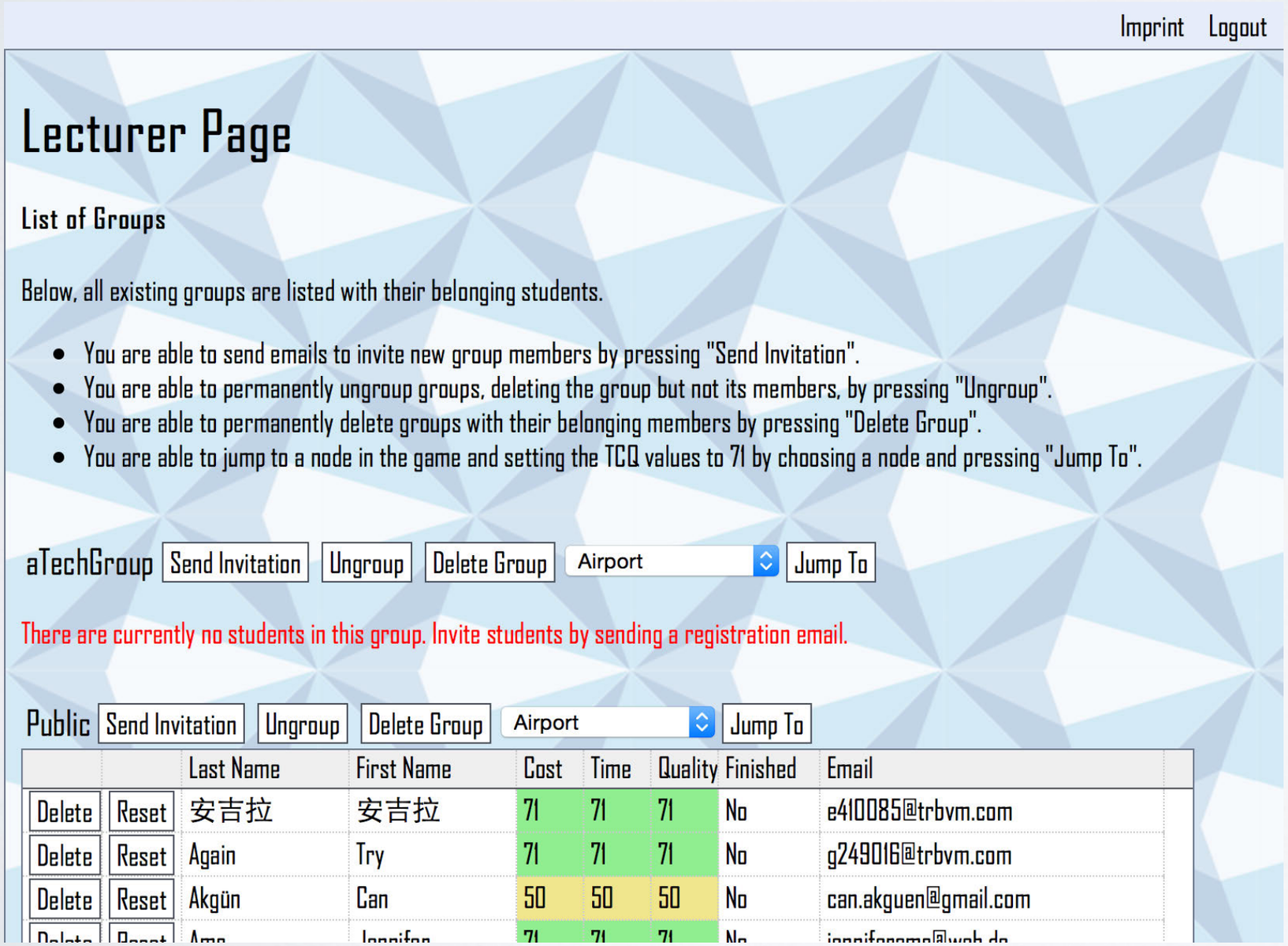
THE PROJECT:
30 STUDENTS /10 WEEKS / 50 HOURS

SG content:

Lecturer‘s administration & Reporting



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THE PROJECT:
30 STUDENTS /12 WEEKS / 50 HOURS

SG Marketing Concept

Product name: brillianCRM

Logo, Claim, CI/CD

Video-Trailer

Poster

Facebook-Page

www.brillianCRM.com

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APPLICATION, OUTCOMES & LEARNINGS

Application of the SG in Project Management Lectures

SG brillianCRM incorporated into

- 2nd year lectures
- Master degree courses

- activation method & repetition excercise
- Student feedback as users: input for next SG development

Critical:

- SG use mainly dependent on lecturer‘s awareness

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APPLICATION, OUTCOMES & LEARNINGS

SG Design by Students for Students

- Tailormade teaching and learning contents
- Marginal costs
- Peer-to-peer learning: student‘s view for appropriate complexity

Critical:

- Limited scope of the SG

APPLICATION, OUTCOMES & LEARNINGS

Game-development-based Learning as a Method

- multi-dimensonal skillset required
- immediate results visible
- Students showed high dedication & engagement
- Segmented structure of SG design: individual contribution traceable

Critical:

- Students‘ tendency to focus on most familiar tasks
- homogeneous learning results achievable?

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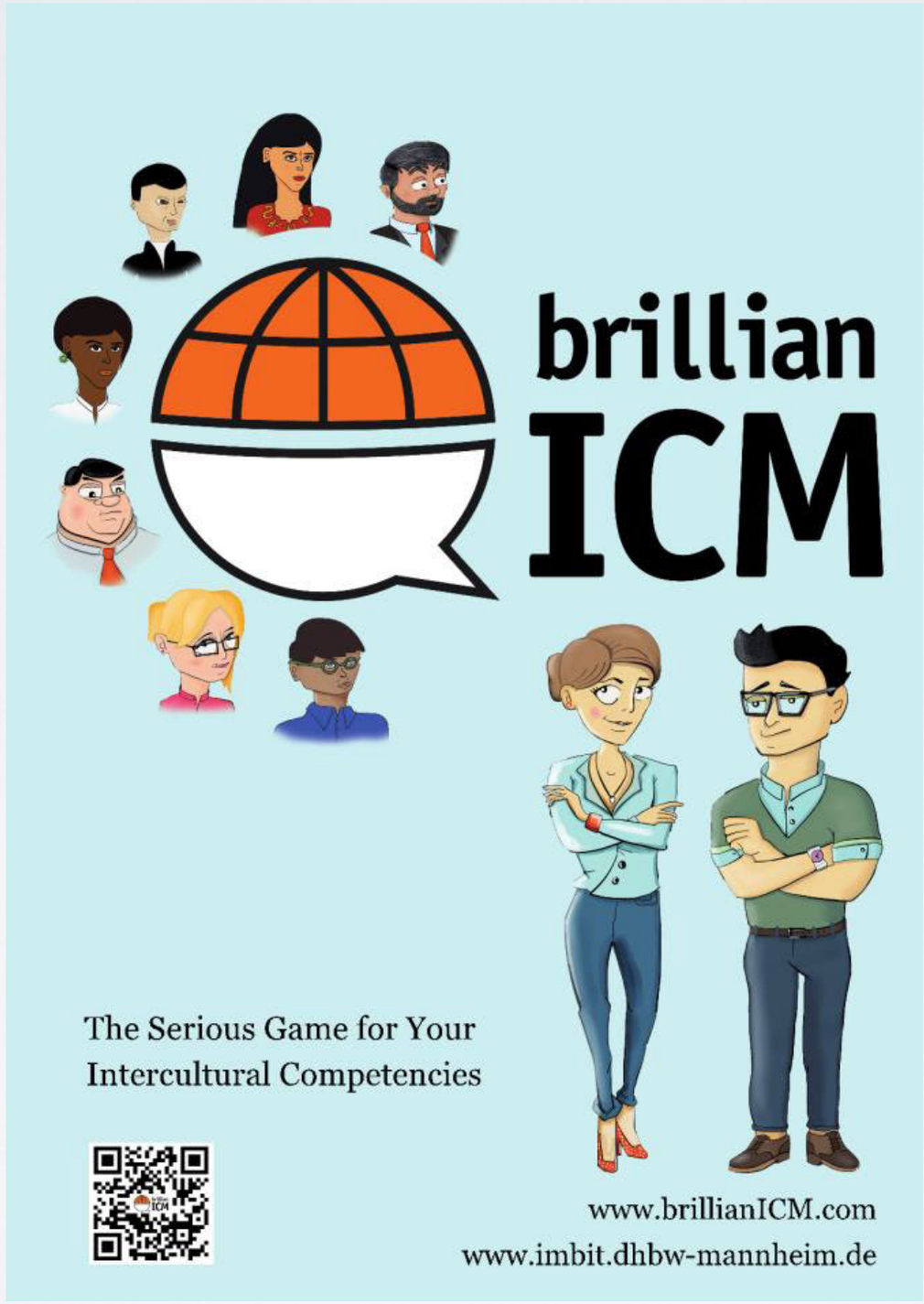
THE NEXT SG PROJECT



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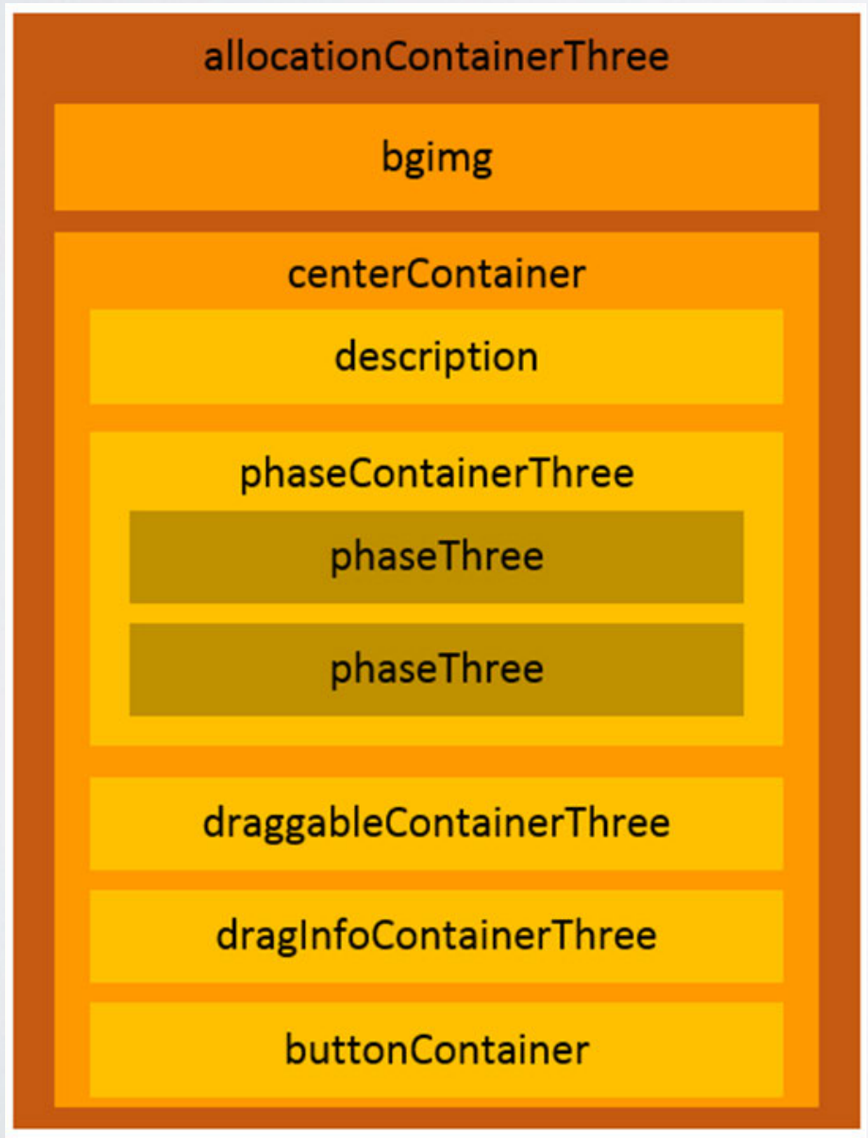
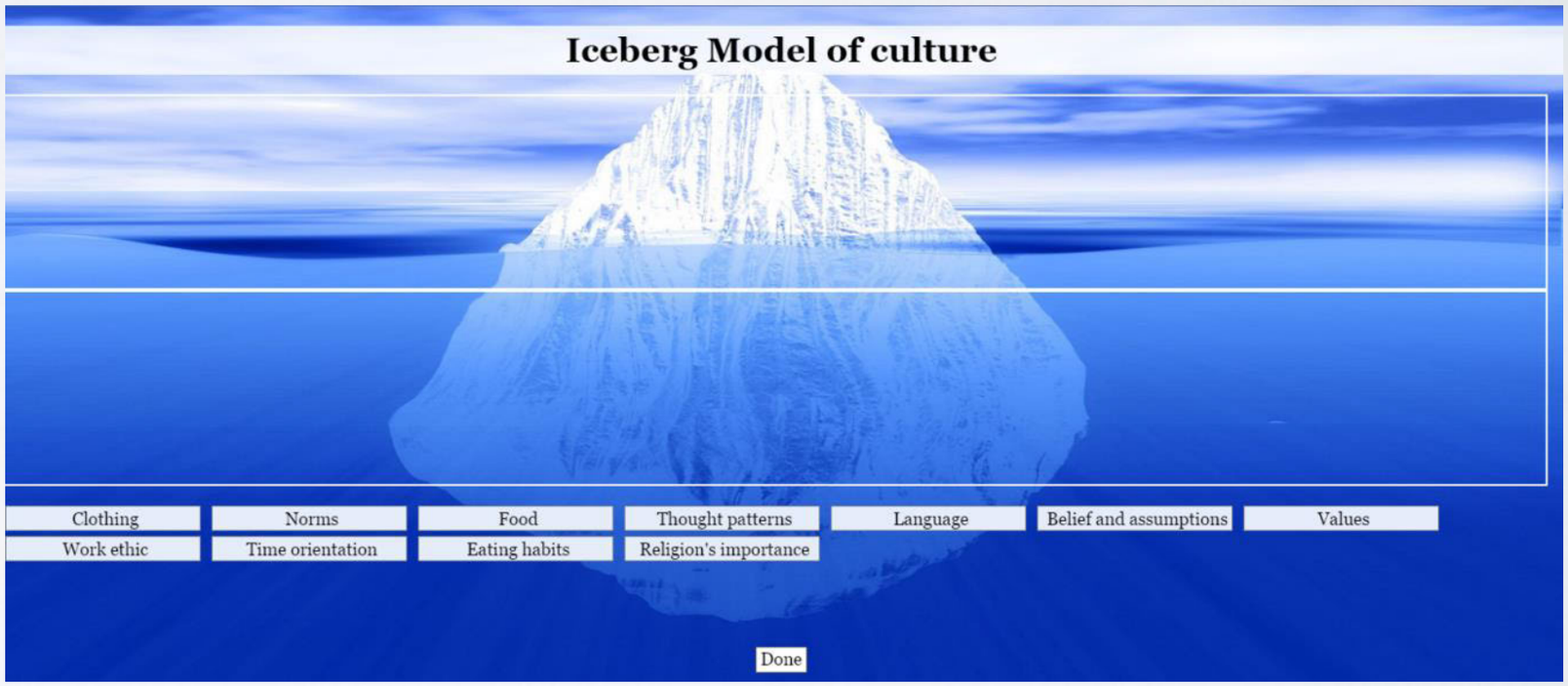
THE NEXT SG PROJECT





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THE NEXT SG PROJECT

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THE NEXT PROJECT… YOURS?

Open platform – invitation for further developments

- New Contents
- Enhancements to the Game Engine
- Extension of the lecturer‘s frontent

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Thank you for your attention!

Questions?

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