Building games with a purpose

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TUDelft

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serious games

- games with goals beyond just entertainment

- which goals/domains?
    - information
    - education
    - professional training
    - health
    - management
    - social/political
    - commercial
    - ...

serious games

- games with goals beyond just entertainment

- does it always work?!
  - **NO!!!**
  - watch out for *overstuffed* edutainment, gamification, anything without effort,...

IN4302TU - Building serious games

- campus-wide MSc course offered at TU Delft

- assignments commissioned by external company/end-user

- students with varying talents, backgrounds and perspectives

- do what none could do alone:
  design and implement a serious game prototype,
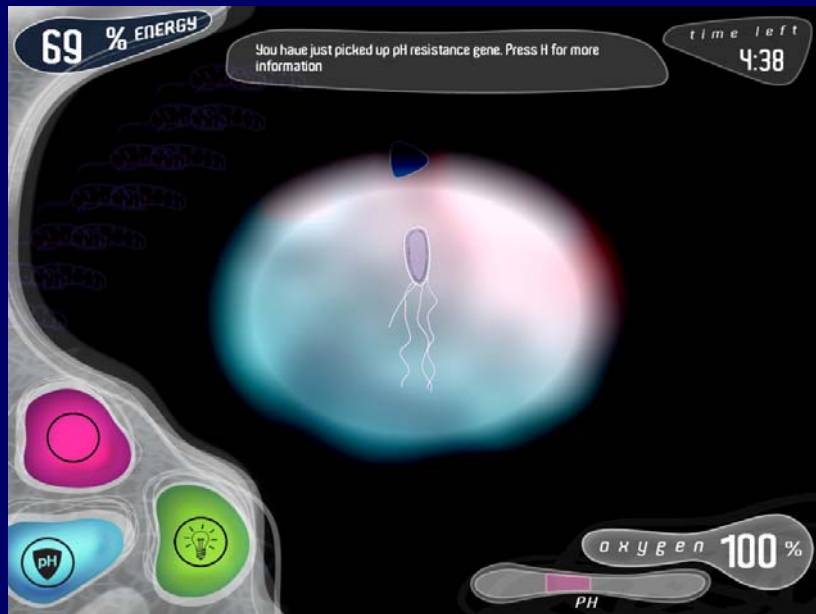 aimed at some application in a real-world setting

IN4302TU - Building serious games

- work as a small game studio: lead programmer, designer, artist, producer, gameplay testing, audio...

- deploy whatever game technology needed

- solve technical challenges
  while watching over fundamental requirements
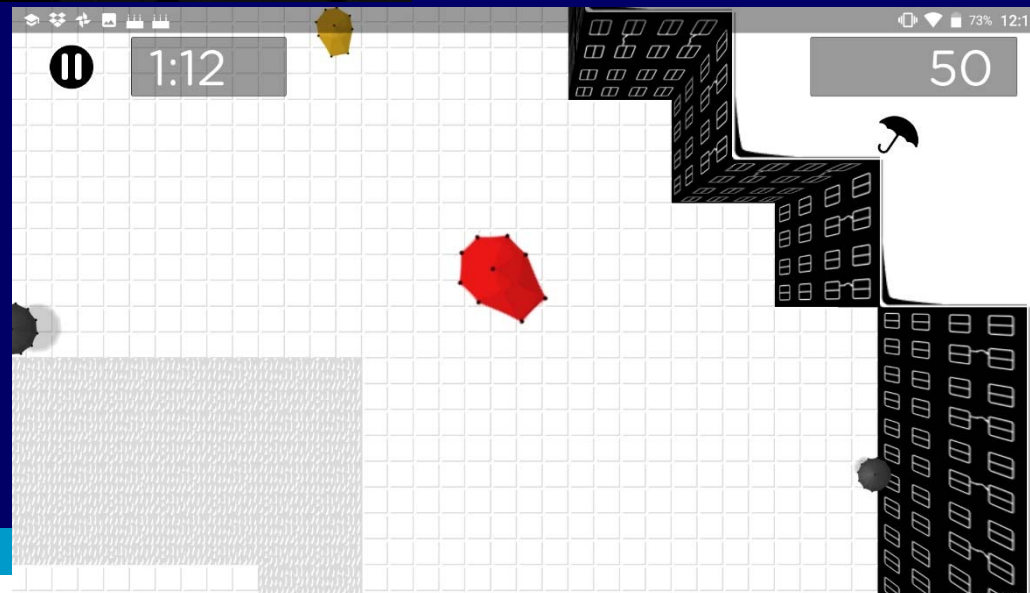
- always report to commissioner

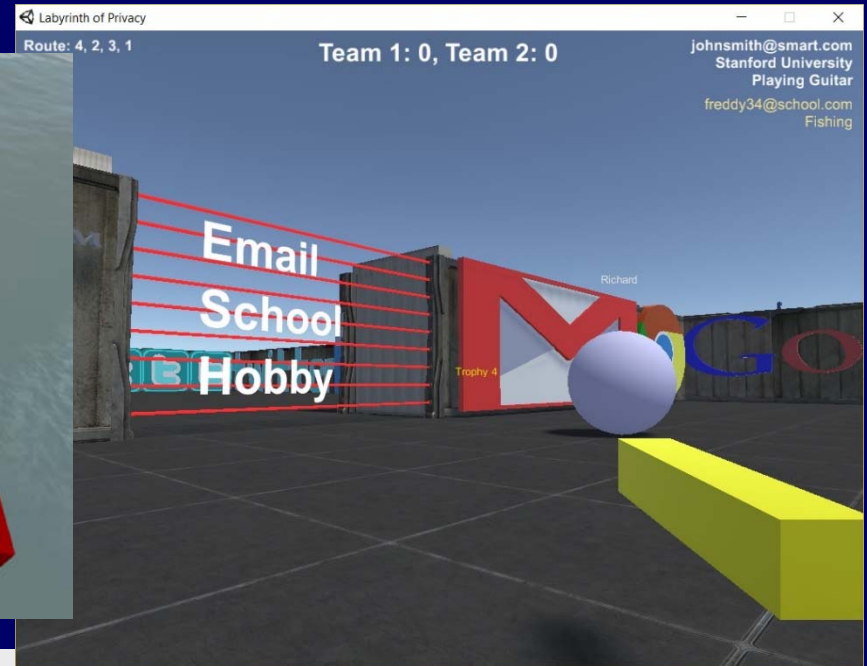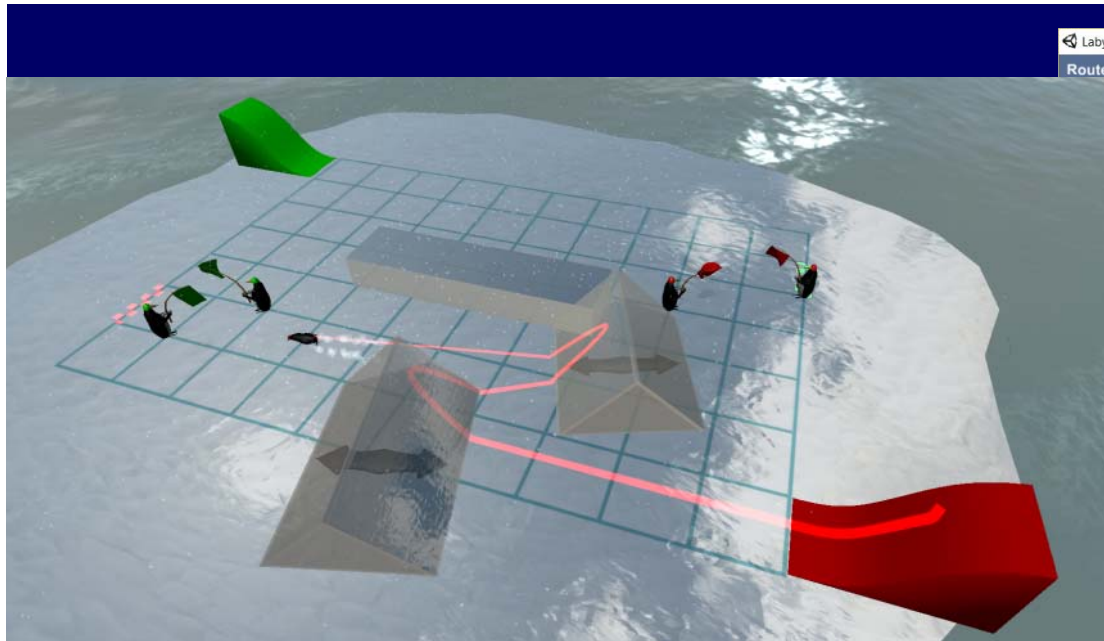# specific course highlights

- particular accent on team and soft skills:
  - roles and responsibilities
  - collaboration and proactivity
  - psychologic safety
  - communication

- interdisciplinarity as an enabler and a strong catalyst

- paper submission to SG-related conference

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Nuna evolution
@ Science Centre

Route: 4, 2, 3, 1

Team 1: 0, Team 2: 0

johnsmith@smart.com
Stanford University
Playing Guitar

freddy34@school.com
Fishing

Email
School
Hobby

Richard

Trophy 4

eco-house
my

This game is powered by Building Serious Games Group 1

BUDGET
€ 30340

Your score
This is your final mark, a score between 0 and 10. If your score is high you made a good
balance between the factors costs, environmental impact and maintenance costs.

3.7

Your footprint »

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Instrument Recognition
Missing Instruments

Which **instrument** only appears in **Track 1**?
Select an instrument by **tapping** it!

Drums

Acoustic Guitar

Bass Guitar

► TRACK 1   ► TRACK 2   ✓

14:54

Track   Station_Amsterdam
         Station_Longyearbyen

Durability: 70

Start: Longyearbyen
End: Paris

00:01   18

Madrid

Paris

Longyearbyen

Tramsterdam

Badhoevedorp

Transport Goal : 64   Passenger Happiness
Passengers transported : 42

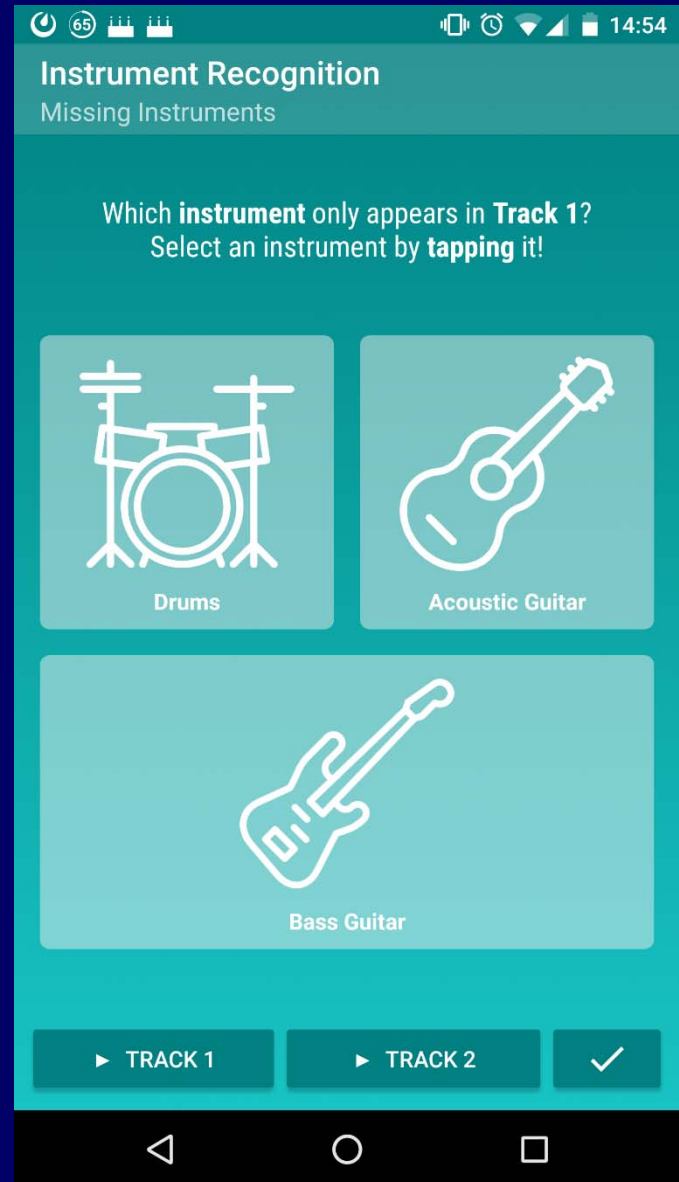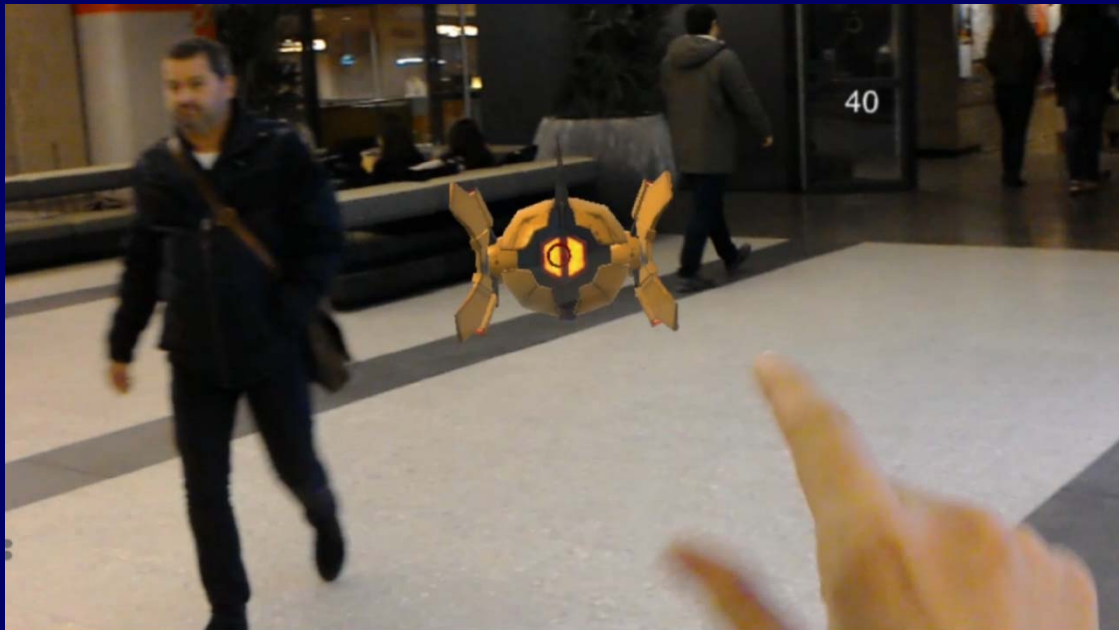TUDelft

conclusion

- building serious games provides a unique setting for our students:

    - solution to a real-world problem

    - interdisciplinary experience

    - soft skills

    - possibility to present their work internationally

so….

- send us your MSc students…

    …and possibly also your assignment…!

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summary and information

- IN4302TU - Building serious games
- MSc course, Q2, (5 ECTS)
- team size 5-6 students (from <u>any</u> faculty or study program)
- >1.5 days/week (intense schedule with deliverables)

- specific guidelines for commissioners
  (assignments, commitment, IP, etc...)

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bibliography

- Rafael Bidarra (2011) **Interdisciplinary game projects: opening the graphics (back) door with the soft skills key**. Proceedings of Eurographics 2011 - Education papers

- Rafael Bidarra (2009) **Experiencing the engineering challenges of game development.** Proceedings of 37th Engineering Education Conference SEFI 2009

- Rafael Bidarra, Jerke Boers, Jeroen Dobbe, Remco Huijser (2008) **The making of an interdisciplinary games project**. Journal of Game Development, 3(2) 7-25

- Rafael Bidarra, Jerke Boers, Jeroen Dobbe, Remco Huijser (2008) **Bringing a pioneer games project to the next level.** Proceedings of the 3rd Annual Academic Days on Game Development in Computer Science Education, pp.11-15

- Rafael Bidarra, Rogier van Dalen, Joris van Zwieten (2003) **A computer graphics pioneer project on computer games.** Proceedings of CGME 2003 - Workshop on Computer Graphics, Multimedia and Education, pp.61-65

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