IDEAL-GAME –
The Management Kick-off-Conference
08th- 10th of December 2020, Germany

Co-funded by the
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of the European Union

First Insights into the IDEAL-GAME Serious Game Creator Approach

Universität Paderborn,
Chair Business and Human Resources Education II
Prof. Dr. Marc Beutner

ERASMUS+ Programme
Strategic Partnership for Higher Education
Agreement No.
2020-1-DE01-KA203-005682

IDEAL-GAME
Improving didactics, education and learning in higher education with the Online Serious Game Creator

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From where? - What I played in the past:

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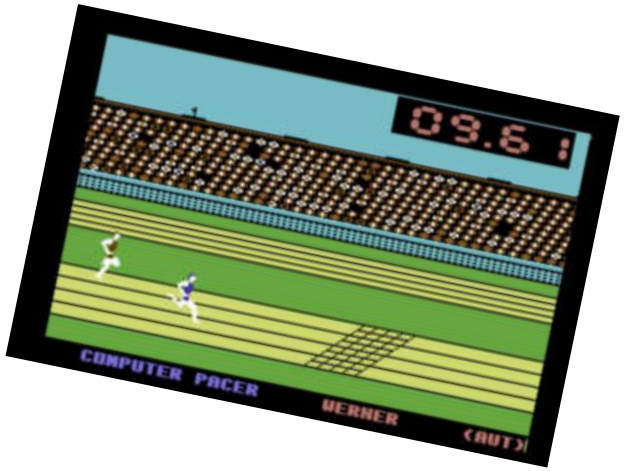

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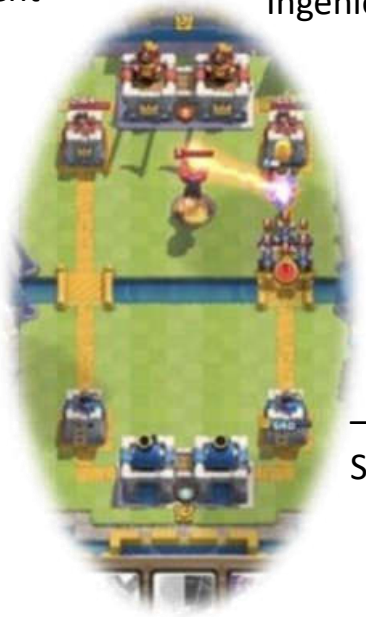
To where? What is sometimes played today:

– Farm Heroes Saga –
King

– World of Warcraft –
Blizzard Entertainment

– Fair Project –
Ingenious Knowledge / UPB

– Copy Job–
Ingenious Knowledge / UPB



– Clash Royale –
Supercell

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Gamification

Rank	Name

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Achievements

Badges

Problem

Lernprozess

reward

Gamification

Gaming Elements

Anerkennung

Solution

Leaderboards

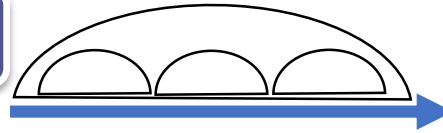
Levels

Quests

Scores

Trophies

Story



Kollaboration

Wettbewerb

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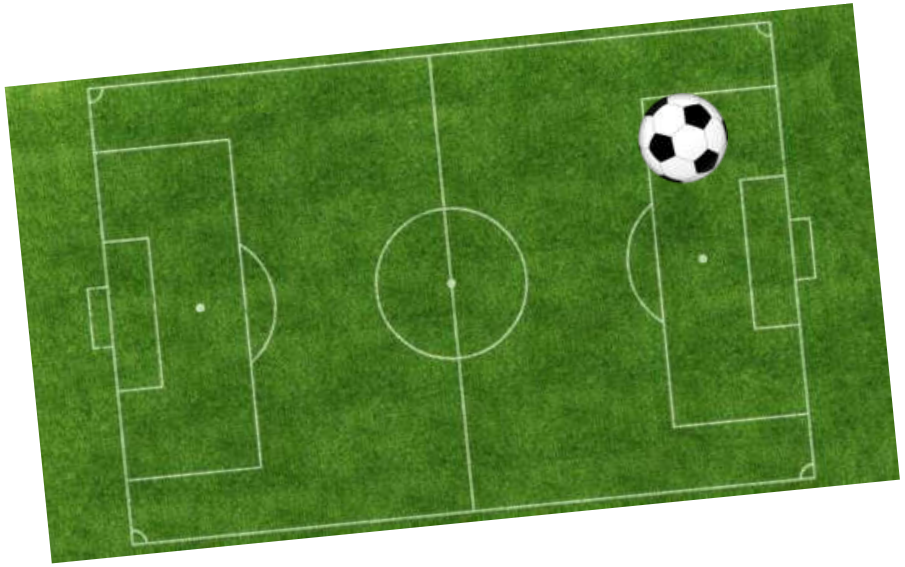
Simple Gamification:

Technical term or posting phrase soccer with powerpoint or on the blackboard



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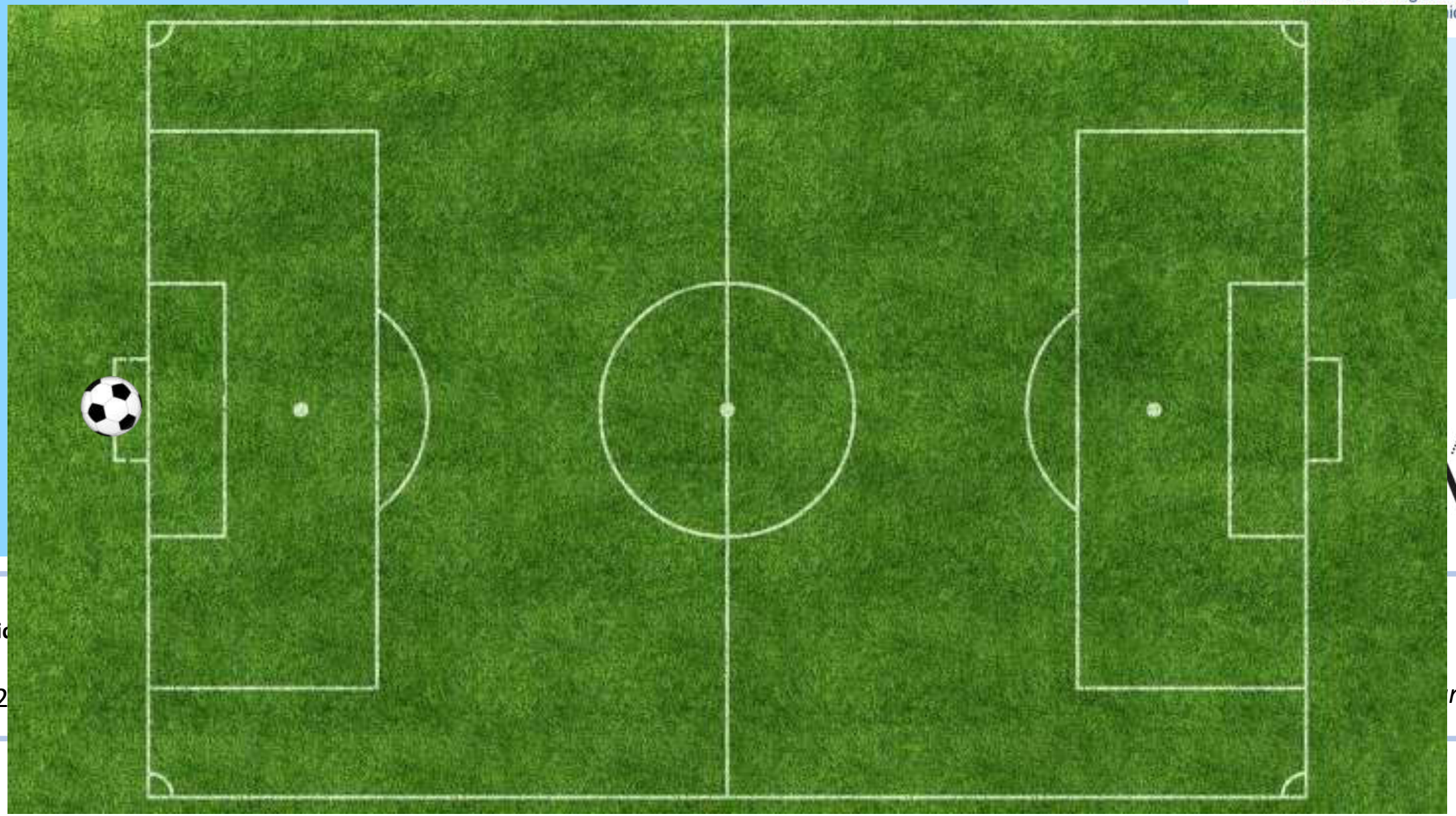

AL
ME

Strategi

202 *me Creator*

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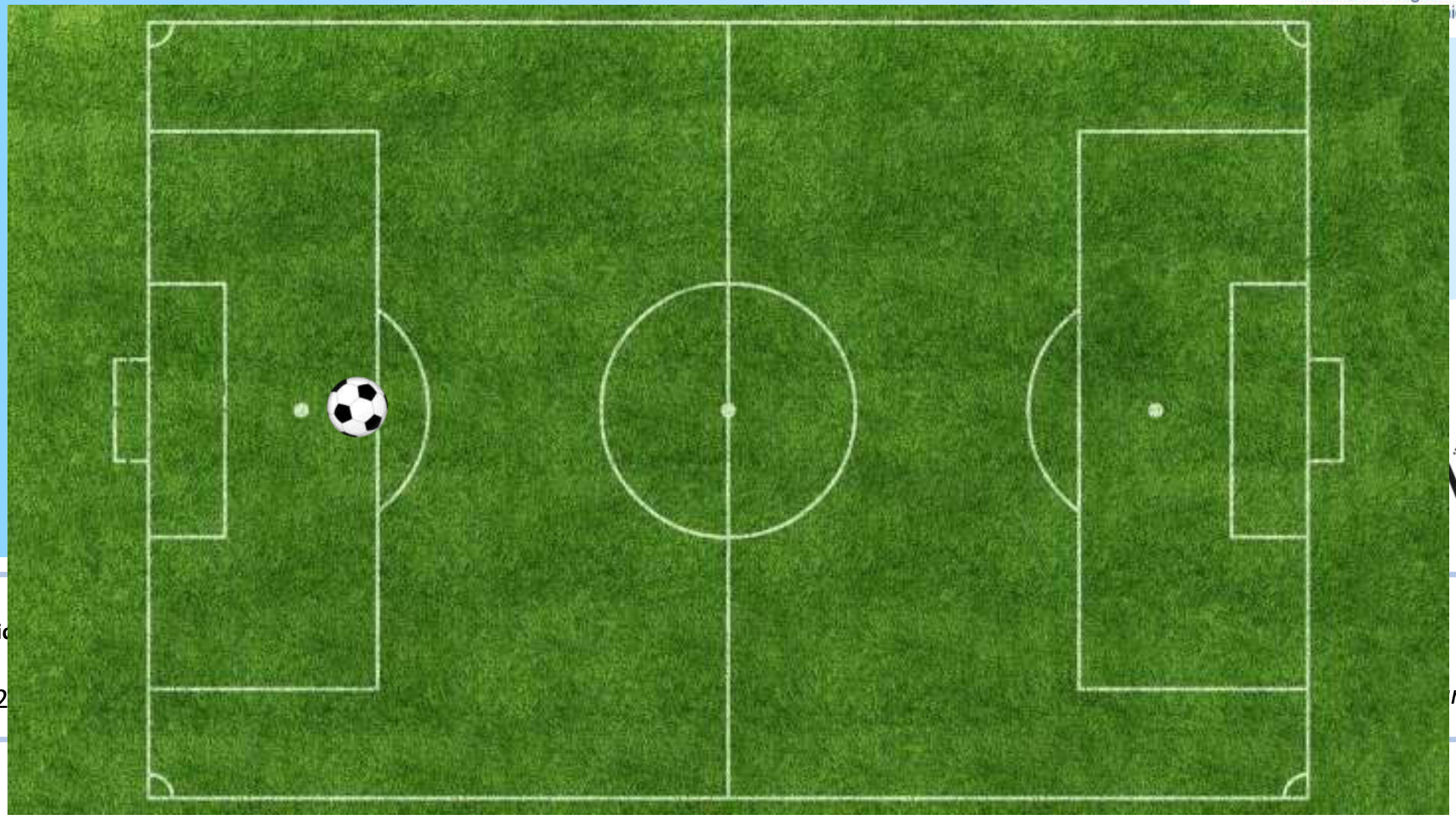

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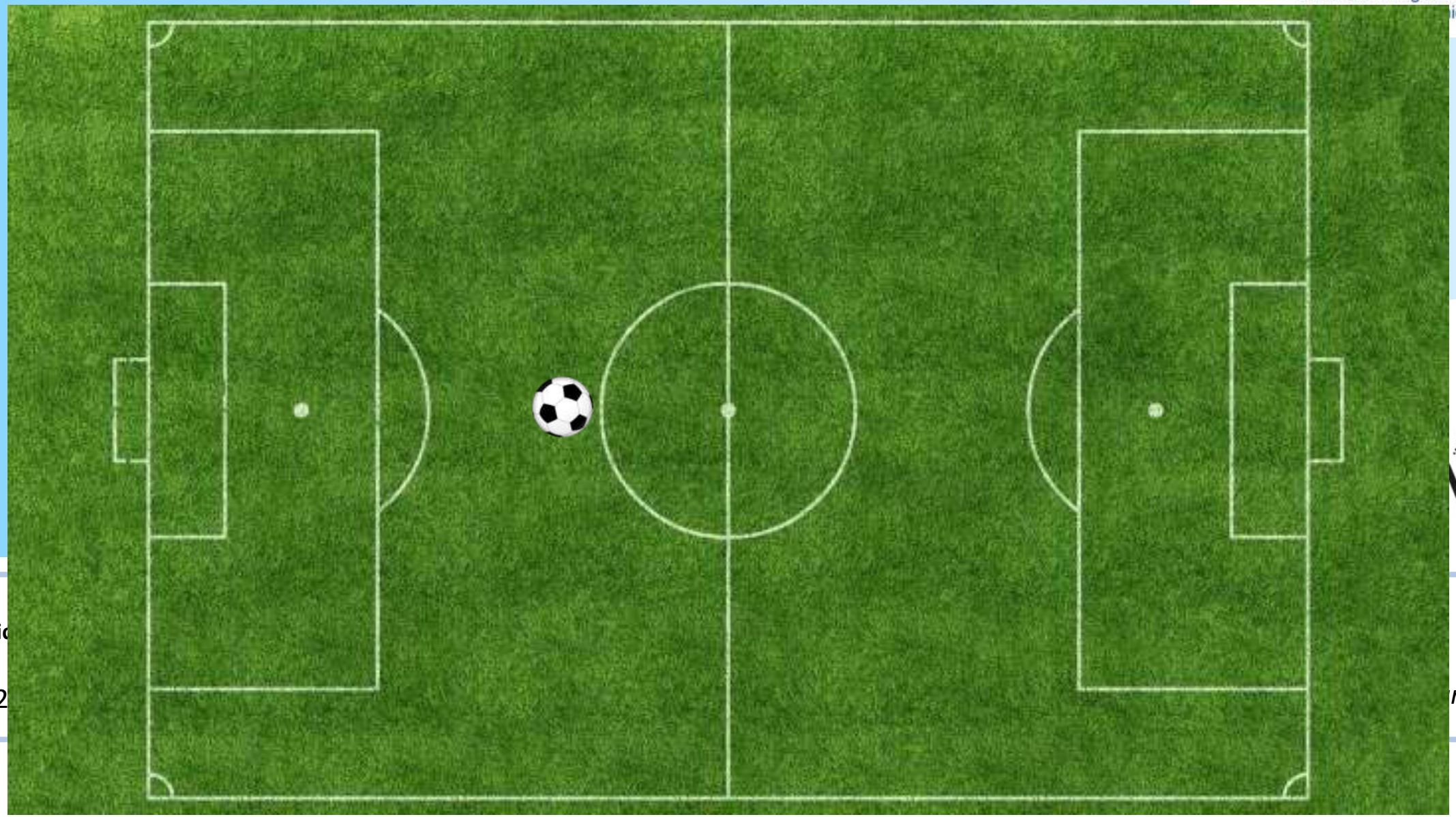

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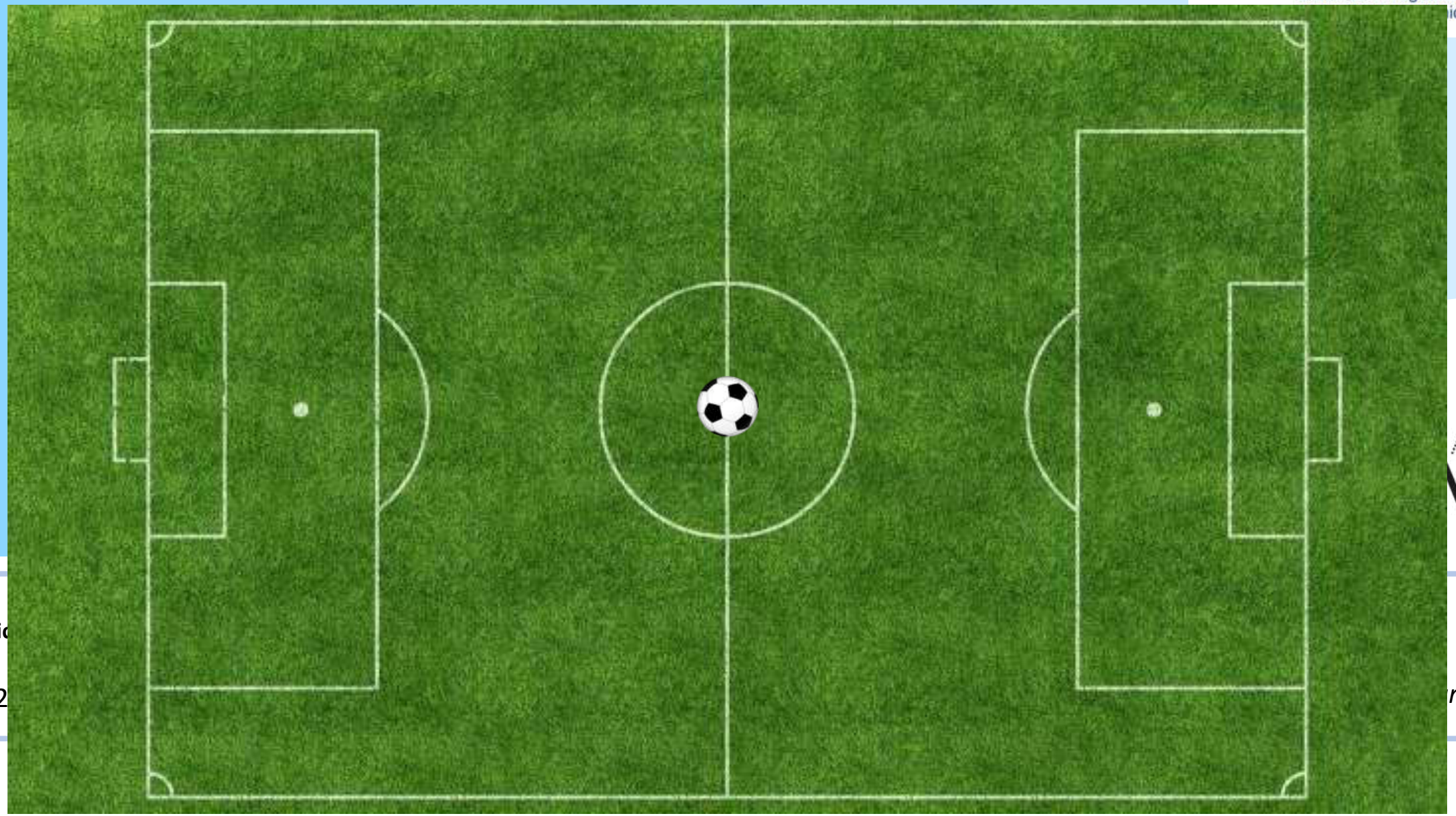

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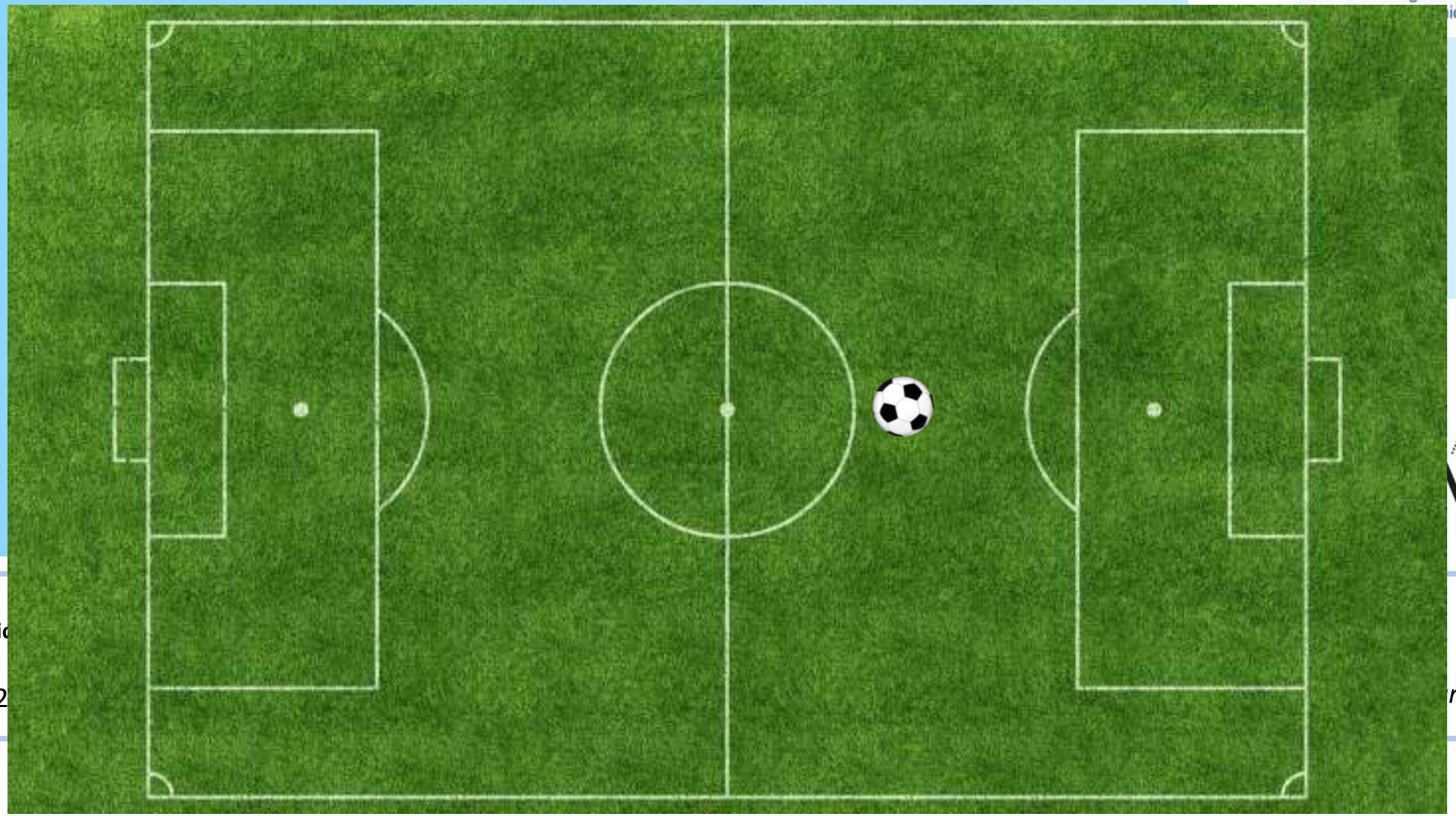

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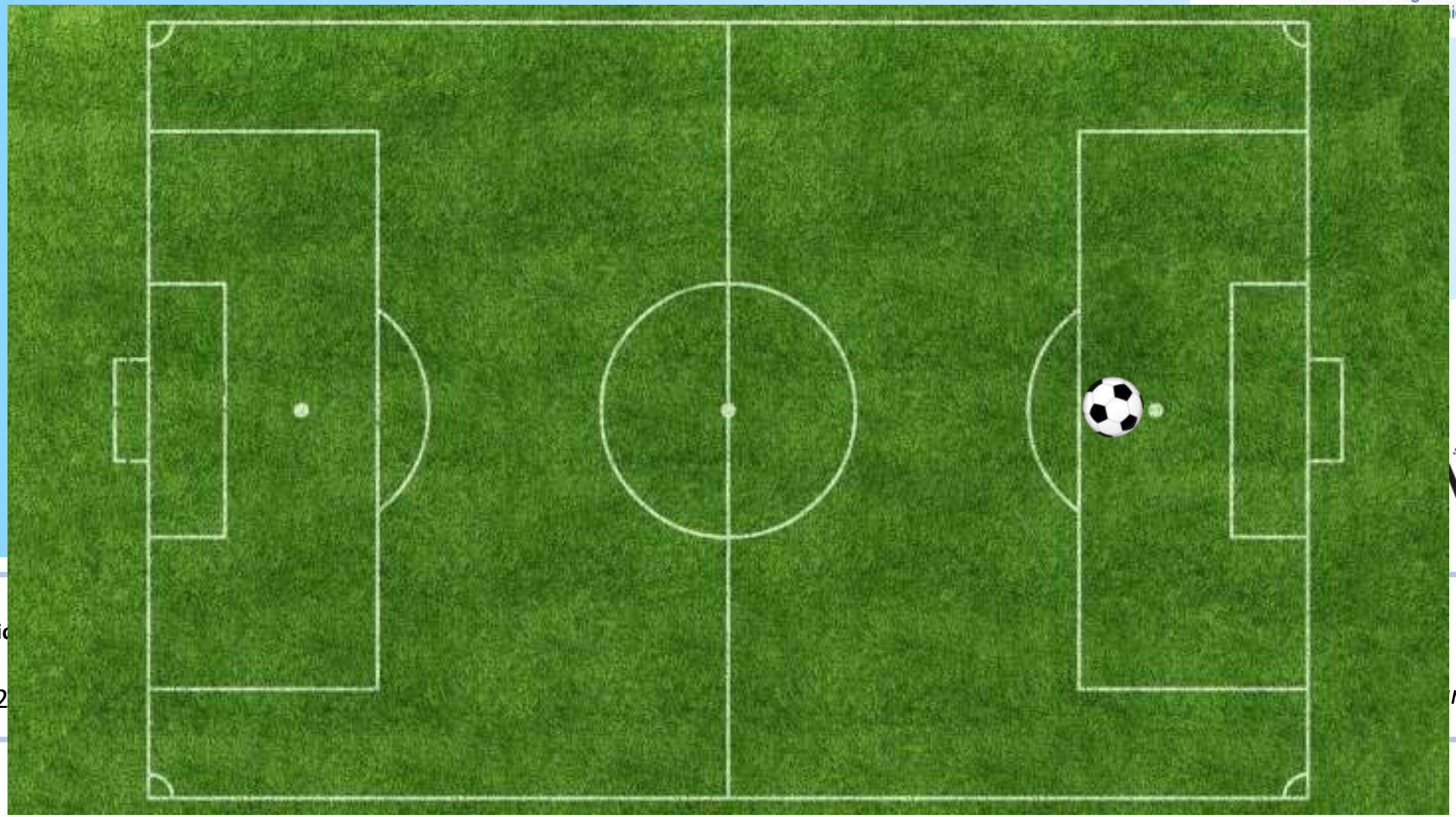

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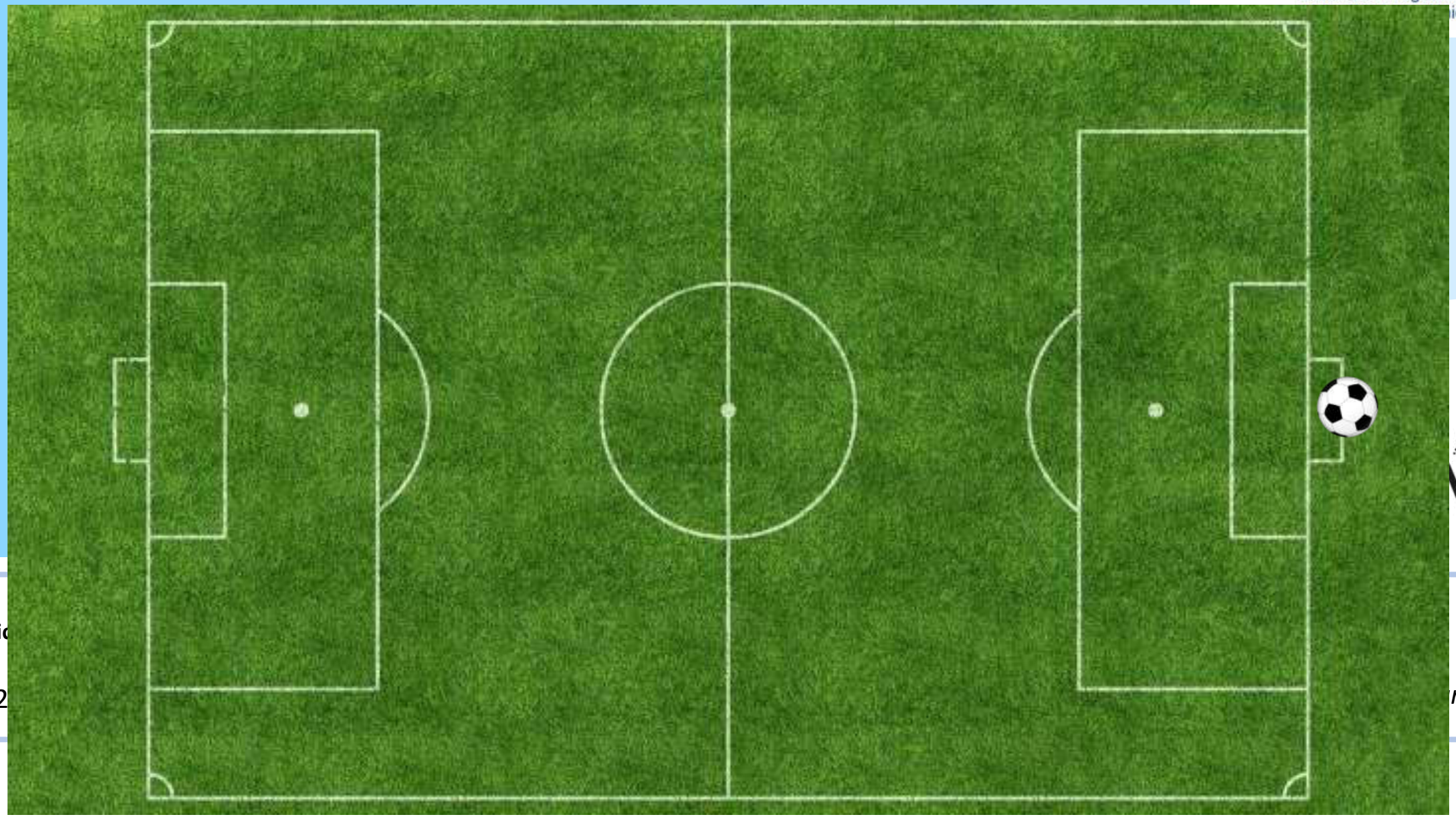

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Badges - Gamification with regard to good work in lectures and concerning homework

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Print out badges and hand them over to learners
or post badges on a pin board

Posts in a Chat etc.

Badges erstellen z.B. unter:
http://www.onlinebadgemaker.com/3d-badge-maker/

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Leaderboards

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Course Champions

1.	Daniel	14 Courses	14.02.2020
2.	Jana	12 Courses	02.02.2020
3.	Charlotte	12 Course	13.02.2020
4.	Martin	10 Courses	06.02.2020
5.	Nina	10 Courses	14.02.2020
6.	Matthias	9 Courses	01.02.2020
7.	Vanessa	8 Courses	03.02.2020
8.	Florian	8 Courses	27.01.2020
9.	Yannis	7 Courses	29.01.2020
10.	Kaya	3 Courses	02.02.2020

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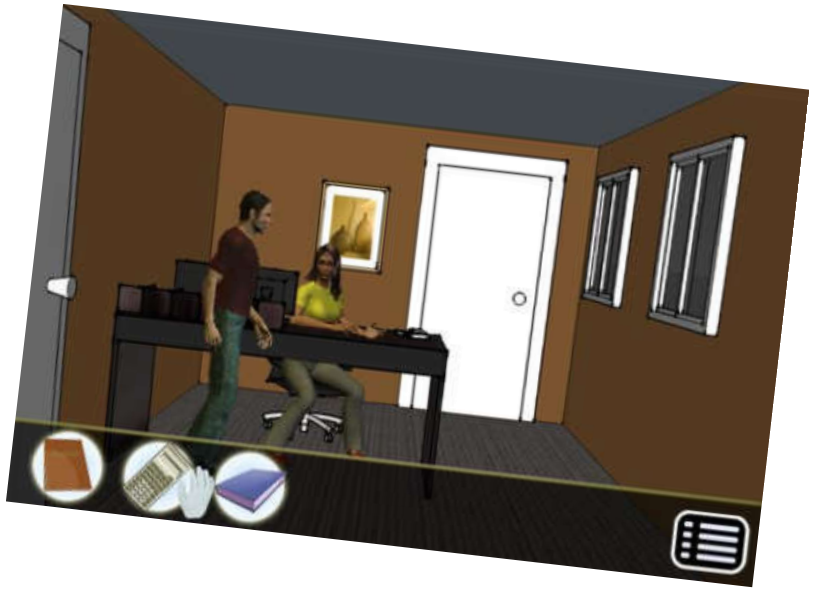
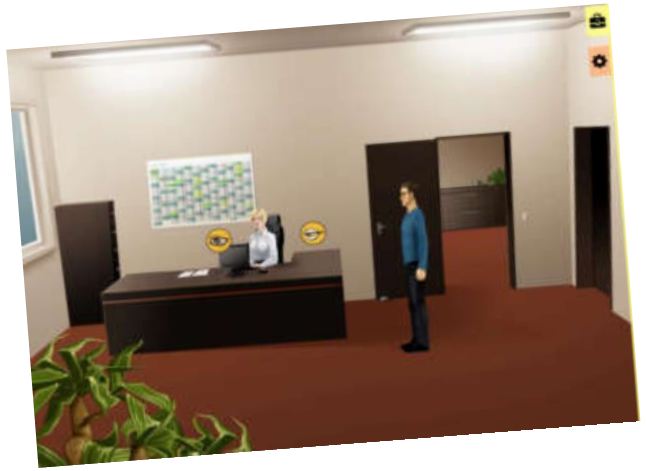
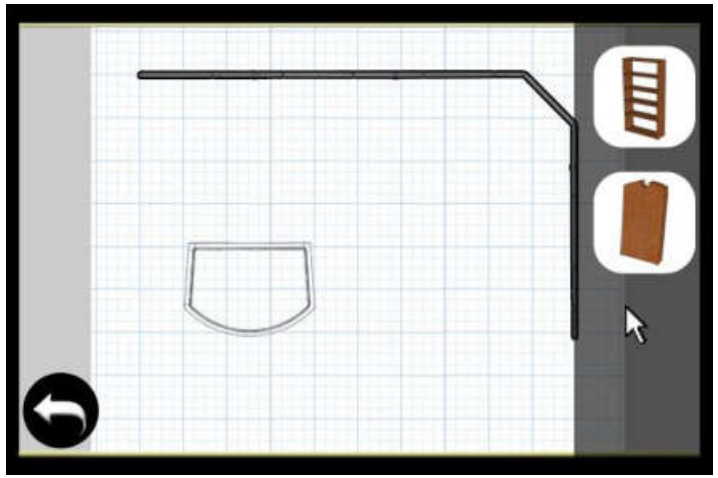
Examples of Serious Games – Fair Project







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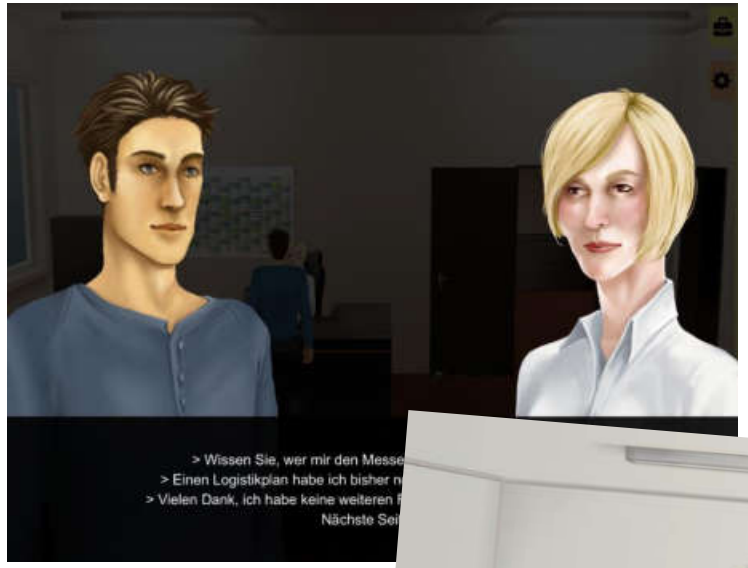
SEARCH – FIND – USE – E.G. FAIR PROJECT



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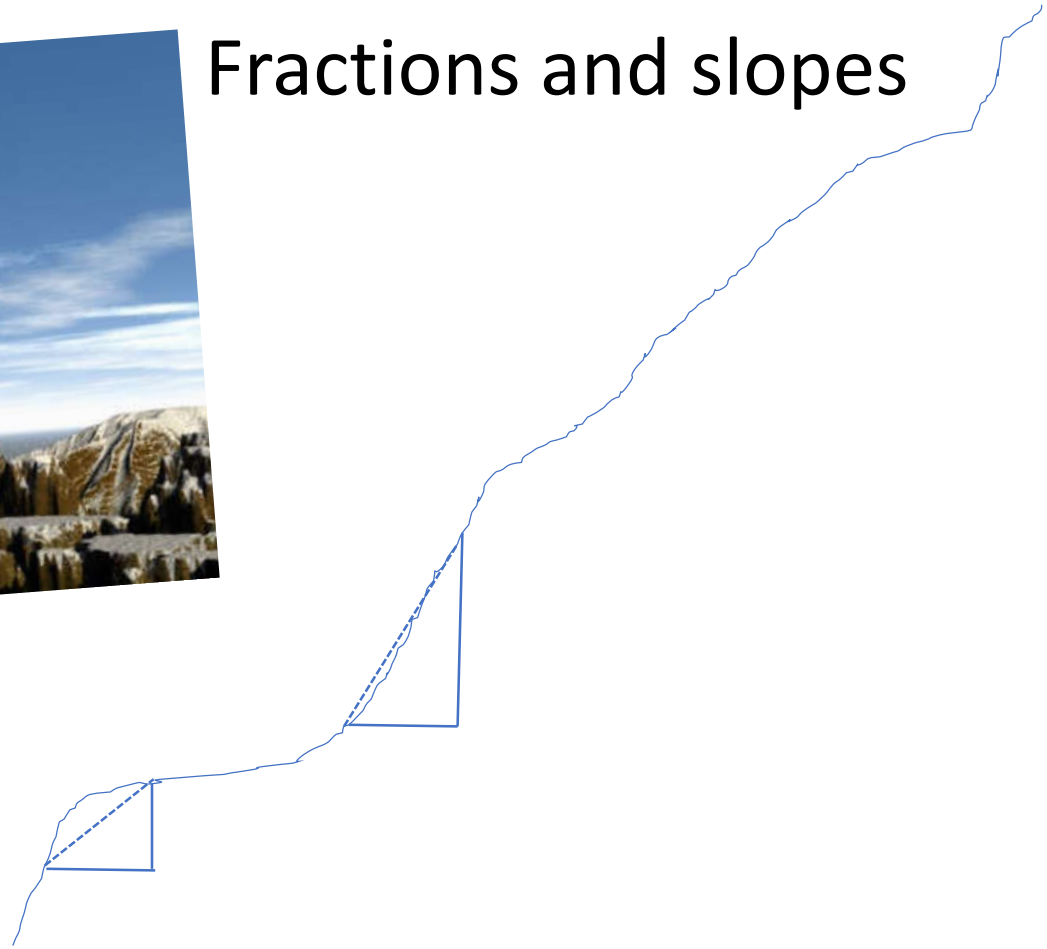
Examples of Serious Games – MATH

MATH – Mountains of absolutely terrifying height

Fractions and slopes



$\frac{8}{12}$ $\frac{2}{3}$

Examples of Serious Games – MATH

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Serious Games

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Serious Games

Serious games enable the principle of teaching, training and awareness-raising in an entertaining way.
(vgl. Wong et al., 2007)

Learning

Serious games include an educational component.
(vgl. Thom et al. 2012)

Game

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Serious Games …

„ Serious Games is called

- a special form of e-learning, those using the perception from entertainment software development,
- which fosters competencies for the living environment and
- include them in authentic situations within the game,
- They create and mantain fun and motivation via intrinsic creativity elements and motivational elements.
- Moreover, they integrate such elements in a didactic-pedagogical context that is chracterised by learning through learner activation as well as action and process-oriented learning.““

Similar Beutner, M. (2013): Aktuelles Stichwort: Serious Games- Aktuelles E-Learning und Bezüge zur beruflichen Bildung. In: Kölner Zeitschrift für Wirtschaft und Pädagogik. 26 Jg., Heft 50, Köln 2011, S. 111.

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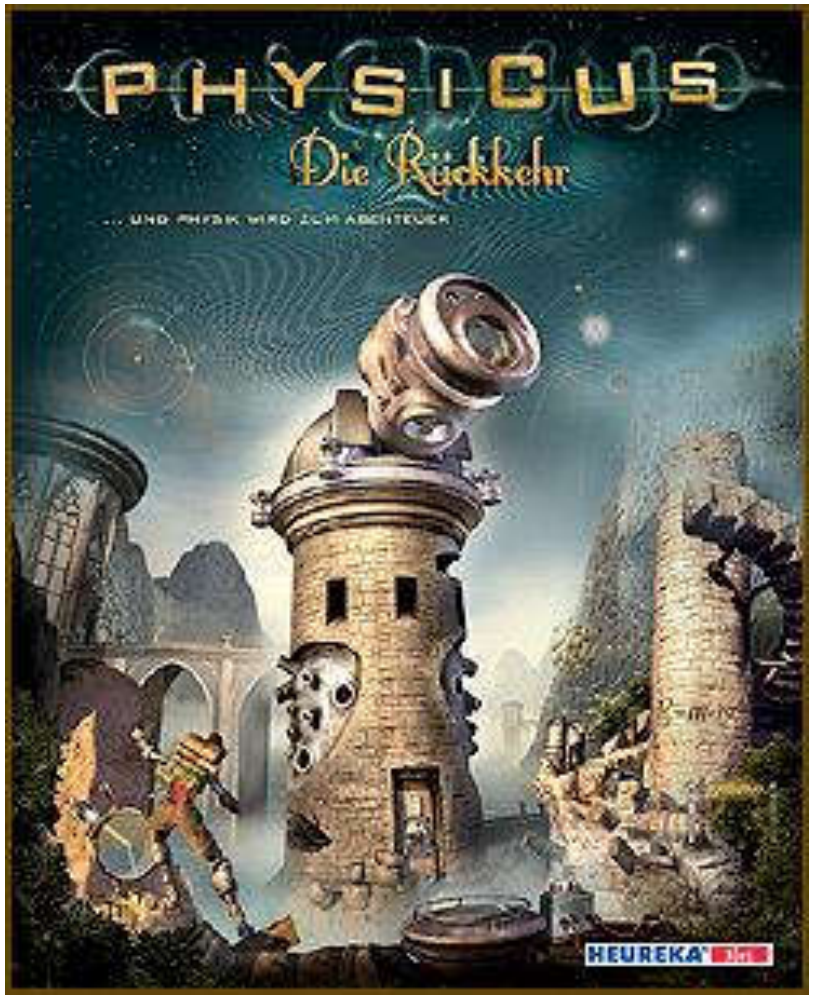

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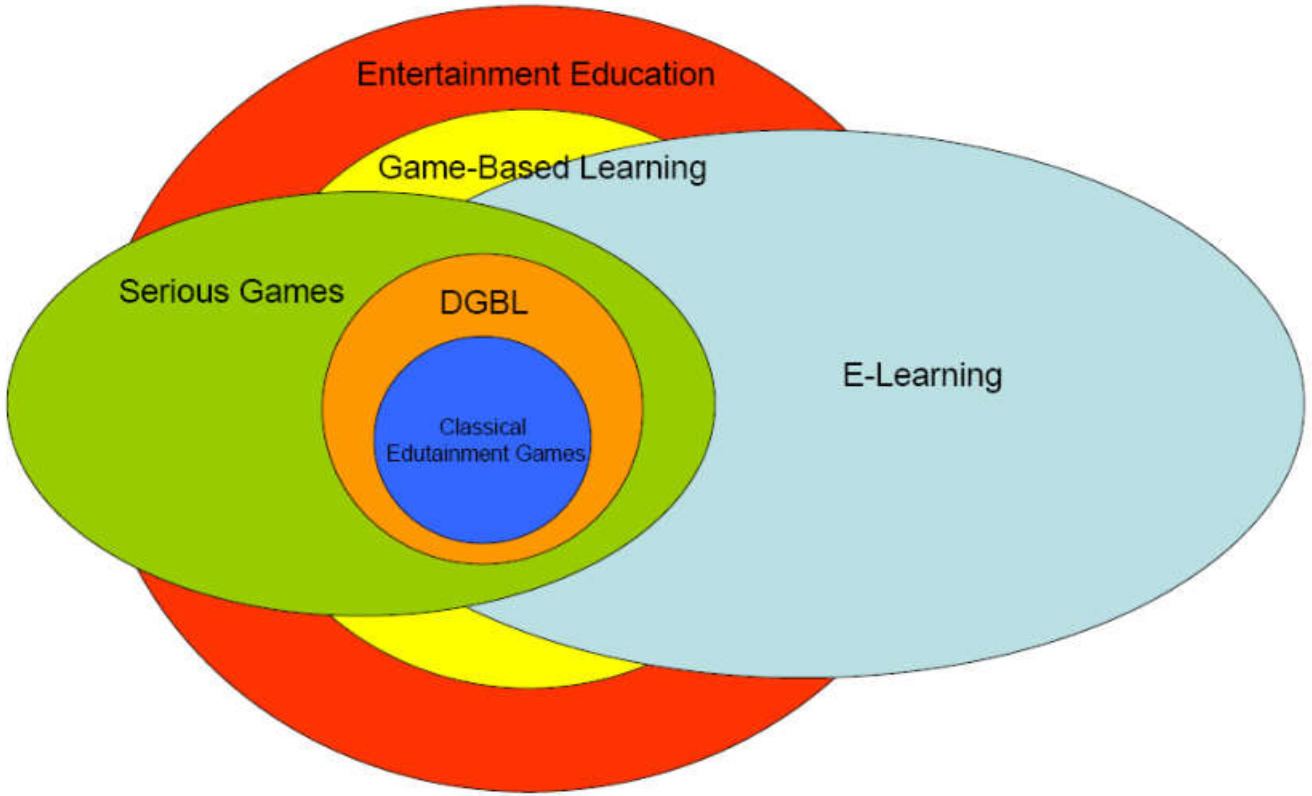

Figure 1: The relations between serious games and similar educational concepts

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Serious Games – same same but different

(vgl. Sawyer / Smith 2008) – Alternative gleich-ungleiche Bezeichnungen

- Serious Games
- Educational Games
- Edutainment
- Digital Game-Based-Learning
- Social Impact Games
- Persuasive Games
- Applied Games
- Games for Change

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Potentials of Conneting Games to Learning

- „ Computer games train the perfect workers of the future“ (Deterding 2007: 3, Original in German)
- To play game is essentially connected to learning processes“ (c.f. Kerres et al. 2009: 1 Original in German)
- Interaction increases the players´self-effficacy (cf. Lampert et al. 2009: 12, Original in German)
- Increasing motivation by adaption of levels (c.f. Vollbrecht 2008, Original in German)
- Repeatbility leads to experience and differences in experience (development processes) (c.f. Corti 2006 Original in German)

Vgl. hierzu auch Dilger / Pechuel (2014)

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Flow?!

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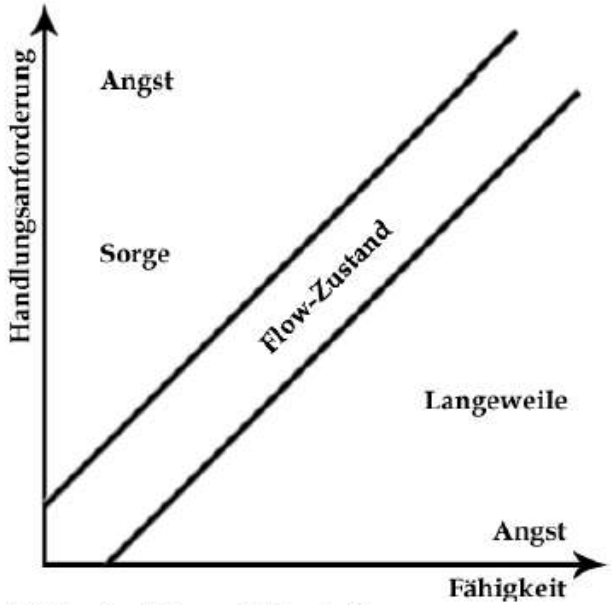

Abb. 1: Flow-Modell nach CSIKSZENTMIHALYI, (1985, S. 75)

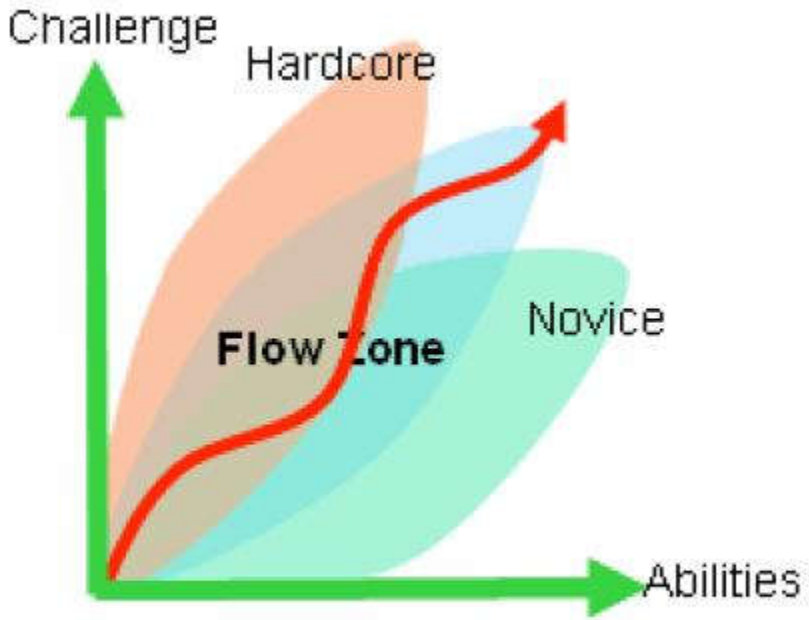

Abb. 4: Flow-Zonen (CHEN, 2006, S. 10)

Vgl. hierzu auch Schnelle, C. H. (2015)

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Too complex for daily work in higher education

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Therefore:

Mini Serious Games

They will be easy to design with the

IDEAL-GAME Online Serious Game Creator

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Mini Serious Games in the IDEAL GAME project

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Serious games for learning professional and subject related vocabulary

Serious games for assignment of corresponding facts and terms

Serious games which focus on process flows

Competitive serious games to enhance learning

Puzzle Games

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https://wiwi.uni-paderborn.de/department5/wirtschaftspaedagogik-prof-beutner

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