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Discussion on 19.11.2025
Homework due on 26.11.2025 at 16:00

Possible solution for Exercise Sheet 6 in Scientific and Technical English for Computer Scientists

The exercise sheets consist of in-class exercises and homework. The in-class exercises take place during the second half of the lecture time slots. The homework, which is optional and ungraded, can be submitted via the “Homework” section in Moodle. The homework is subject to peer review.

Unless indicated otherwise, generative artificial intelligence assistants such as Chat-GPT may be used, as long as you acknowledge how you use them as specified by the Institute’s policy on plagiarism.¹ However, you may not use such tools to generate peer reviews for you. In addition, we strongly recommend that you do not use them to generate entire solutions, since that would defeat the purpose of the exercises.

In-class exercise 6-1 *Punctuation Mistakes* Find eight punctuation mistakes in the following text. Do not change existing commas or capitalization.

Deep sea pumped hydro storage is a new approach towards the realization of an offshore pumped hydro energy storage system (PHES) that uses the pressure in deep water to store energy in hollow concrete spheres. The spheres are installed at the bottom of the sea in water depths of: 600 m to 800 m.

The system consists of two main components — One is a hollow concrete sphere representing the storage tank — and the other is the cylindrical technical unit holding the pump turbine, a controllable valve and the components of the Supervisory Control and Data Acquisition: SCADA system.

While the exploitation of (PHES) often raises environmental issues due to land demand and it’s impact on the water regime, there are no major restrictions expected for the technology.

In 2011, Prof. Horst Schmidt-Böcking and Dr. Gerhard Luther promoted the idea for this new PHES. Their initiative led to a research project that was conducted between 2013–2017, during which a 1;10 scaled prototype was built and successfully tested in Lake Constance in 2016.

¹<https://www.medien.ifi.lmu.de/lehre/Plagiate-IfI.pdf>

POSSIBLE SOLUTION:

Deep sea pumped hydro storage is a new approach towards the realization of an offshore pumped hydro energy storage system (PHES) that uses the pressure in deep water to store energy in hollow concrete spheres. The spheres are installed at the bottom of the sea in water depths of 600 m to 800 m.

The system consists of two main components. One is a hollow concrete sphere representing the storage tank, and the other is the cylindrical technical unit holding the pump turbine, a controllable valve and the components of the Supervisory Control and Data Acquisition (SCADA) system.

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(Adapted from <https://www.iee.fraunhofer.de/en/topics/stensea.html>.)

In-class exercise 6-2 Missing Punctuation The following paragraphs lack all punctuation marks except for commas and hyphens. Add the missing punctuation where necessary.

- a) The first ever documented use of the semicolon occurs in books printed by Aldo Manuzio in 1496 1507 Later, Manuzios grandson explains the need to punctuate interpungo and divide distinguo sentences He names four punctuation marks comma, semicolon, colon, and period, and ranks them in ascending order of their dividing force

POSSIBLE SOLUTION:

The first ever documented use of the semicolon occurs in books printed by Aldo Manuzio in 1496–1507. Later, Manuzio's grandson explains the need to punctuate (interpungo) and divide (distinguo) sentences. He names four punctuation marks (comma, semicolon, colon, and period), and ranks them in ascending order of their "dividing force."

- b) Weve come up with some definitions for toys and fun and even made a good solid run at play Lets try again to answer our original question How should we define game Earlier we stated that a game is something

you play, which seems to be true, but isn't narrow enough. As with play, many people have tried to define game. Let's look at a few of these definitions.

POSSIBLE SOLUTION:

We've come up with some definitions for "toys" and "fun" and even made a good solid run at "play." Let's try again to answer our original question: How should we define "game"? Earlier we stated that "a game is something you play," which seems to be true, but isn't specific enough. As with "play," many people have tried to define "game." Let's look at a few of these definitions.

(Adapted from Jesse Schell, *The Art of Game Design: A Book of Lenses*, CRC Press, 2008.)

- c) Modern Science has hitherto thrown no light on the Wisdom of Antiquity; our discoveries have neither added to nor taken any part from it being of another order, and, as it were, of another world. No consideration of period or place is sufficient to account for the difference; the very ground of human knowledge would seem to have changed.

POSSIBLE SOLUTION:

Modern Science has hitherto thrown no light on the Wisdom of Antiquity; our discoveries have neither added to nor taken any part from it—being of another order, and, as it were, of another world. No consideration of period or place is sufficient to account for the difference; the very ground of human knowledge would seem to have changed.

(Adapted from Mary Anne Atwood, *Hermetic Philosophy and Alchemy*, Routledge, 2015. The original edition is from 1920.)