

Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Date: \_\_\_\_\_

## Artificial intelligence – Future scenarios

### Assignment

Artificial intelligence offers our society many opportunities, but it also presents us with many challenges. Three main trade-offs can be distinguished:

1. Responsibility versus trust
2. Security versus progress
3. Freedom versus dependence

Read through the following future scenario. Consider how and why the three trade-offs are relevant to this scenario by applying the key questions from the “Artificial intelligence – Social trade-offs” graphic to the scenario. The questions are listed below. Also think about the further consequences of your answers.

You should not make a personal judgment about the future scenario, but rather contemplate the ethical challenges of using AI in this area.

### Future scenario

A criminal case is being tried in court: A married couple broke into a house and stole items worth 10,000.00 euros. The homeowner was slightly injured. The controversial aspect of this case is that for the first time, the judge is not a person, but an artificial intelligence system that will render judgment.

A developer team trained the AI system before its use. For this training, numerous files on criminal acts and the judgments from the past ten years were digitalized and entered into a central database. The AI system draws on this database to recognize patterns and develop algorithms that it will apply in future use. Thanks to the training, AI is capable, for example, of computing how similar the married couple is to other repeat offenders. From this process, AI derives how likely it is that an offender will relapse. For this purpose, data about the married couple will be incorporated into the AI system, such as income, place of residence, and biography. Taking into account these computations and other considerations, it determines what judgment is appropriate.

### Key questions

#### Responsibility versus trust

- Who bears the responsibility when a robot makes “wrong” or critical decisions?
- Are people abandoning responsibility?
- In what areas does AI act more reliably than people?
- When and under what conditions do we start trusting in decisions made by machines?

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**Security versus progress**

- How secure are AI systems against hacker attacks?
- How can AI systems be manipulated?
- Can we foresee all consequences of this technology and prevent risks?
- What opportunities does AI help find that never would have been possible without it?

**Freedom versus dependence**

- To what extent does the technology provide new freedoms?
- How does coexistence in society change as a result of AI?
- Are we surrendering our self-determination to machines?
- To what extent are people becoming more dependent on technology due to AI?