



## Best practice

example for data mining

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**Subject:** Data Mining

Related Industry 4.0 themes

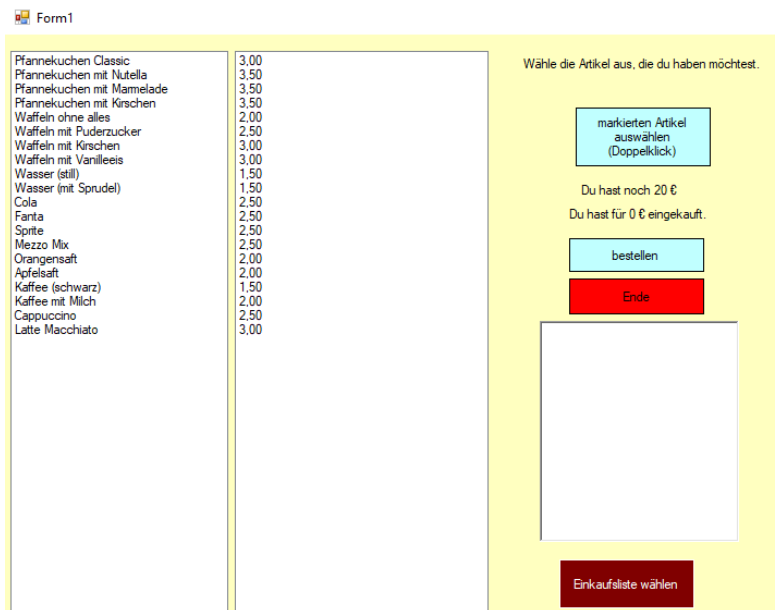
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| <input type="checkbox"/> Autonomous Robots         | <input type="checkbox"/> Augmented Reality                 |
| <input type="checkbox"/> Industrial Internet       | <input type="checkbox"/> Software Integration              |
| <input type="checkbox"/> Additive Manufacturing    | <input checked="" type="checkbox"/> Cloud                  |
| <input type="checkbox"/> Simulation                | <input checked="" type="checkbox"/> Big Data and Analytics |
| <input checked="" type="checkbox"/> Cyber Security |  |

**Presented by:** Students of business informatics, EQF 4 (BK Werther Brücke, GER)

**Description**

- The students worked on the field of Data Mining in groups of 4 to 5 students for one week. The project included work on the theoretical background of Data Mining, the creation of a software program in C# and a presentation.
- Data Mining can be described as "knowledge discovery in databases".
- Data mining describes the actual systematic process of analysing data in reference to relevant connections and findings.
- Data mining gives the possibility to find hidden patterns, trends and structures in databases
- Data Mining is used in a lot of different areas in average digital lives.
- Means of Data Mining are classification, segmentation, prognosis, dependency analysis and variance analysis.

- Students created a Software program that collects and analysis purchase data.
- Students stated that the topic of data security has become more important for them throughout this project.



- The competences mentioned below are relevant for dealing with Data Mining in lectures.

**Further information:** info@bkwb.de

## Key Kompetences

EQF	Description of competence	media competence	appliance competence	IT- knowledge
1-2	Students understand the concept of data mining.	x		
	Students protect their privacy by appropriately configuring the internet browsers.			
	Students protect their privacy by appropriate digital behavior.		x	
3-4	Students understand the advantages and disadvantages of data mining.	x		
	Students use the results of data mining in a targeted manner.		x	
	The students use statistical methods of data mining.		x	
	Students program simple applications for data recording and evaluation.		x	x
5	Students program complex applications for data recording and evaluation.		x	x
6	The students develop concepts for using data mining in companies.		x	

EQF: European Qualification Frame