

BIG DATA IN THE CLOUD

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Lecturer / Lead BDL2

DAY5 - Exam

Lucerne University of
Applied Sciences and Arts

**HOCHSCHULE
LUZERN**

Master of Science in Applied Information
and Data Science

BIG DATA IN THE CLOUD

Deadlines	Task/Content	Responsibility / Sender	Documents/Filing
BDLC			
12.02-16.02	▪ BDLC week course	Module Leader, Coaches	teaching and exercises
16.02	▪ Exam start (afternoon)	Module Leader, Coaches	Topic(s) explained. Teams start to work together on the case. Each team has a total budget of 250CHF Azure Consumption.
16-29.02	▪ Coaching(s)	Students	Each team is allowed to request 1xCoaching sessions each one of 30mins duration. The coaching's are optional and will not be considered on the grading and assessment.
01.03	▪ Exam presentation (Zoom)	Module Leader, Coaches	Present your BigData project and share your solution deployment. Zoom link and time will be hand over during the course week. Each team can arrange the exam latest by 29.2s.

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Part	Weighting	How
Requirements Engineering definition & architecture	30%	Deconstruction and simplicity of requirements. Use of meth- ods and possible diagrams. Depict the solution architec- ture.
Big Data Solution approach	40%	Solution Selection Architecture definition Deployment at the Azure Cloud
Presentation / Form	10%	Correct language Attractive offering presenta- tion
Pricing and Support	20%	Calculation of the solutions costs and possible improve- ments Support clauses and SLA defi- nitions

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Ex a m
t o p i c

You are an energy consultant given the task to digitalise an amount of data from (western) Europe power consumption

Your task is to digitalise them and be able to define the entire project and price it.

All data should be then digitalised and accessible. In best case also presentable.

Be able to show the highest consumption per country and also find correlations of highest consumptions per country.



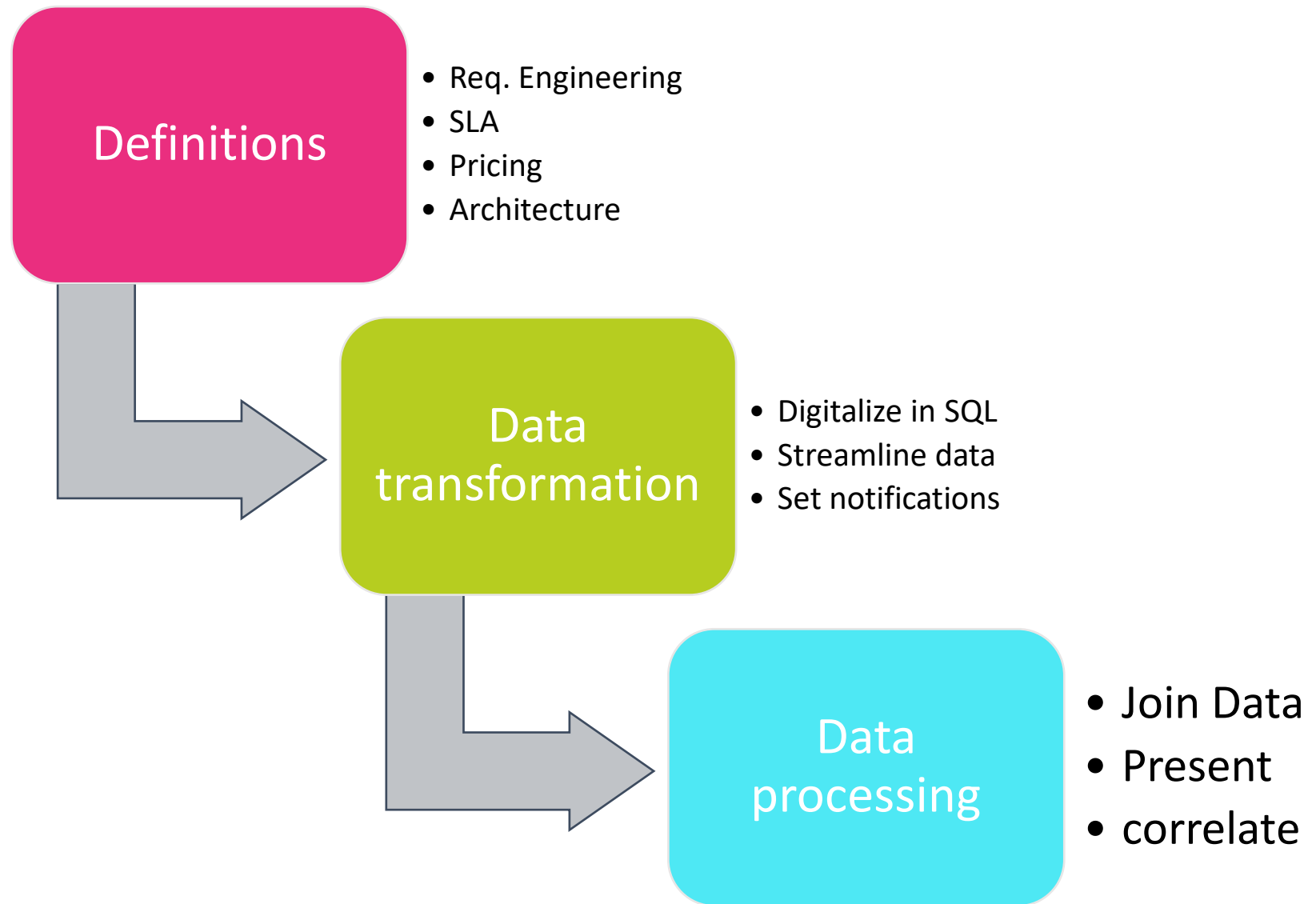
Zip files in in ILIAS



A screenshot of a Microsoft Excel spreadsheet. The ribbon shows the 'Home' tab with options for Clipboard, Font, and Alignment. The active cell is A1, containing the text 'start'. The spreadsheet contains a table with 20 rows and 4 columns (A, B, C, D). The data in the table is as follows:

	A	B	C	D
1	start	end	load	
2	2015-01-01 00:00:00+00:00	2015-01-01 00:15:00+00:00	6017	
3	2015-01-01 00:15:00+00:00	2015-01-01 00:30:00+00:00	5967	
4	2015-01-01 00:30:00+00:00	2015-01-01 00:45:00+00:00	5936	
5	2015-01-01 00:45:00+00:00	2015-01-01 01:00:00+00:00	5934	
6	2015-01-01 01:00:00+00:00	2015-01-01 01:15:00+00:00	5751	
7	2015-01-01 01:15:00+00:00	2015-01-01 01:30:00+00:00	5778	
8	2015-01-01 01:30:00+00:00	2015-01-01 01:45:00+00:00	5746	
9	2015-01-01 01:45:00+00:00	2015-01-01 02:00:00+00:00	5630	
10	2015-01-01 02:00:00+00:00	2015-01-01 02:15:00+00:00	5407	
11	2015-01-01 02:15:00+00:00	2015-01-01 02:30:00+00:00	5337	
12	2015-01-01 02:30:00+00:00	2015-01-01 02:45:00+00:00	5290	
13	2015-01-01 02:45:00+00:00	2015-01-01 03:00:00+00:00	5354	
14	2015-01-01 03:00:00+00:00	2015-01-01 03:15:00+00:00	5285	
15	2015-01-01 03:15:00+00:00	2015-01-01 03:30:00+00:00	5225	
16	2015-01-01 03:30:00+00:00	2015-01-01 03:45:00+00:00	5230	
17	2015-01-01 03:45:00+00:00	2015-01-01 04:00:00+00:00	5256	
18	2015-01-01 04:00:00+00:00	2015-01-01 04:15:00+00:00	5280	
19	2015-01-01 04:15:00+00:00	2015-01-01 04:30:00+00:00	5297	
20	2015-01-01 04:30:00+00:00	2015-01-01 04:45:00+00:00	5308	

Procedure



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Delivery

You will have to Upload to ILIAS until the **01.3**
at 17.00:

- Req.Engineering Document
- PPT with the architecture, SLA objectives and price forecast for the solution

Have your team instance (naming) with the solution sent to us per **email** (one instance)



$$x^2 + y^2 = r^2$$

$$(x-h)^2 + (y-k)^2 = r^2$$

$$x^2 + y^2 + Ex + F = 0$$

$$I \left[\frac{d_1}{d_1 + d_2} \right] \left[\frac{N}{2}(n-1) \right]$$

f med

$$\frac{\sqrt{D^2 + E^2 - 4F}}{2}$$

GOOD
LUCK

THANK YOU

