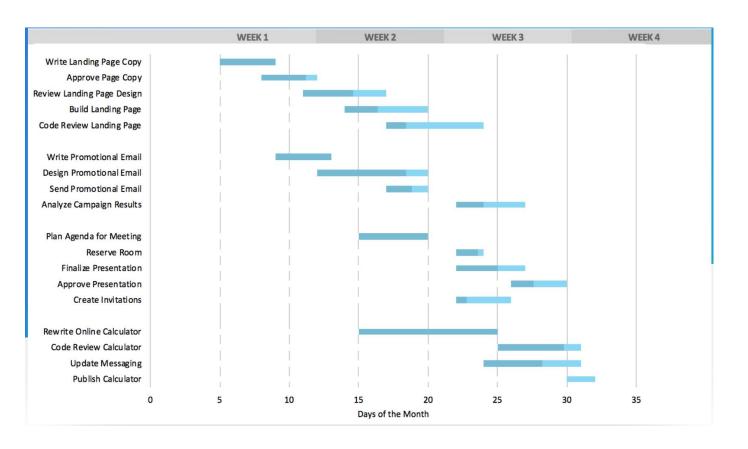
Workplan

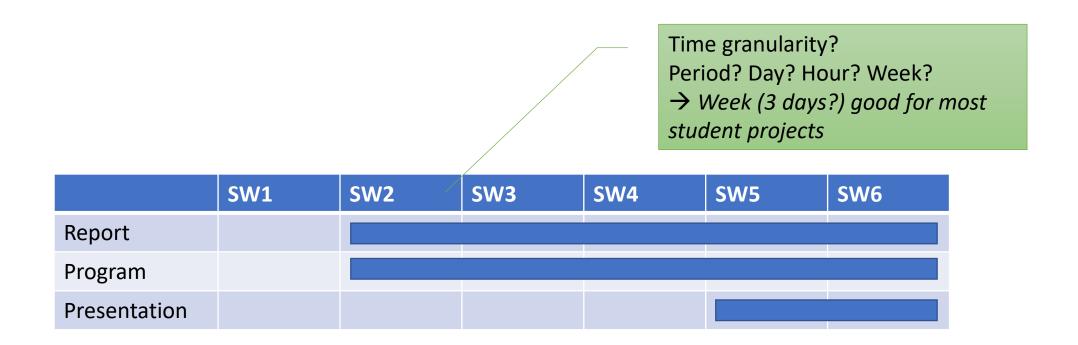
Gantt chart (???)



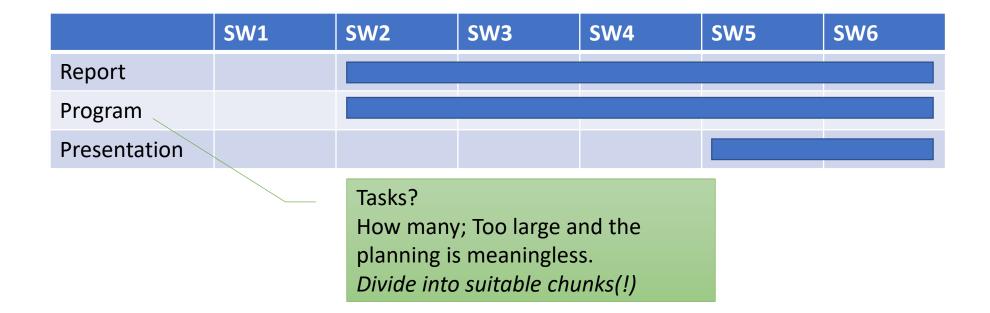
Workplan for DAT300

	SW1	SW2	SW3	SW4	SW5	SW6
Report						
Program						
Presentation						

Workplan for DAT300



Workplan for DAT300



Workplan
Objective:
used to plan
your work



It should be of a good granularity for time:

master thesis = week; here = 3 days /

week?



The task should be detailed and clear for you and others to understand.

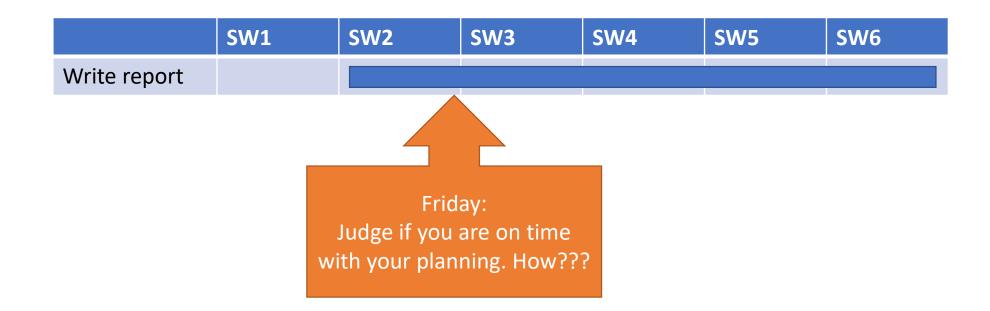
Divide larger tasks into subtasks.



You should be able to judge when you are done

Concrete "milestone"?

Define Tasks



Define Tasks

Friday:
Judge if you are on time
with your planning. How???

		with your plan	ning. How???			
	SW1		<u> </u>	W4	SW5	SW6
Write report			7			
Write related work						
Write experimental setup						
Write intro						
Write experiment						
Write discussion						
Update abstract / conclusion						

Guidelines

Avoid active ongoing verbs	Formulate it into paste tense? Completed related work
Gantt chart not needed	You can make a text description per week
Set a "deliverable" or "milestone" per week.	Something concrete that many can agree whether it is fulfilled.
Recipients?	For you to judge if you are on time For us to see if plan reasonable For us to see if you are on time



Better Workplan (Planning Report)

Sw2	Write a complete abstract, ready to be shared with supervisors			
	Write an outline of the report, to plan future activities			
	Collect the papers needed for the related work			
Sw3	Complete related work			
	Set an outline for the experiments to be done			
	Decide "application area"			
	Complete experiment			
Sw4	Run Experiment			
	Write introduction			
Sw5	Prepare draft of presentation → share with an other group for freedback			
	Complete a draft of report → share with friends in DAT147 course			
	Extra time in case of problem			

DAT300 Group 7
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Planning report

Analyzing data streams from smart meters to provide statistics and detecting outliers

Core idea:

Provide statistics about households or regions for landlord or authorities

Motivation:

By providing statistics about power consumption a "smart" schedule could be generated to suggest customers to use their appliances at different times to reduce peaks. It could also be used to inform tenants that they are using more or less energy than the average tenant is order to reduce energy consumption. Overall goal that motivates the project is to increase the awareness regarding energy consumption by providing statistical data.

Objectives include the following:

Research data stream processing, statistics and outlier detection. Analyze data in real-time with a stream processing engine, the continuous queries will be for finding average values and detecting outliers. The average value can either be based on a single meter's consumption (over time) or an average on multiple meters' momentaneous values. With the help of average values the aim is to find outliers in the data which will be outputted into a graph together with both the momentaneous measurements and the average values.

Scientific challenges:

- · Implement stream processing of measurement data
- Process the data with statistical methods to calculate average values and outliers in real-time
- · Visualize the output from the statistical analysis

How will the scientific challenges be met?

Implementation in Apache Storm, processing of data with help of algorithms in *Mining of Massive Datasets* [1] and in *Online Outlier Detection in Sensor Data Using Non-Parametric models* [2], visualization with the help of frameworks for *Apache Storm*.

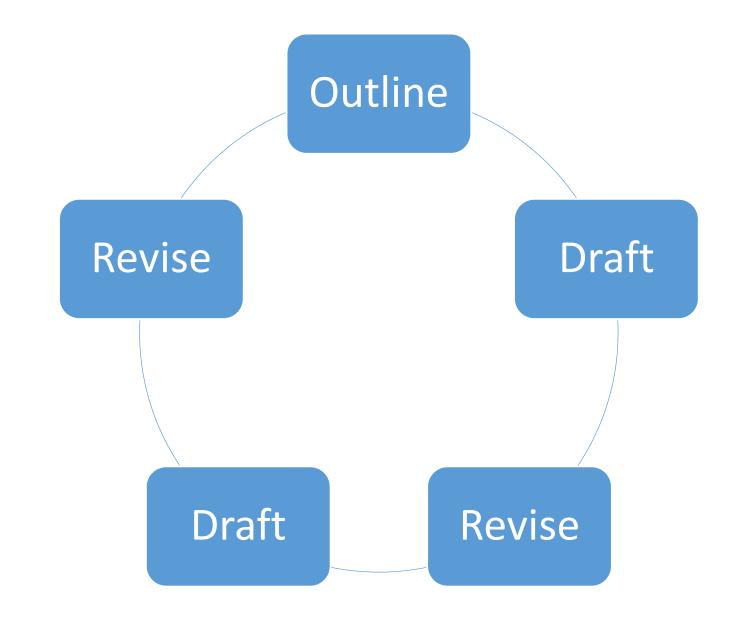
Timeline of project:

Week	Goals
37	Finish the planning report and select paper to present
38	Acquire background information by reading papers more carefully. Get started with Apache Storm (get it up and running and process some simple data).
39	Prepare paper presentation. Continue with implementing Apache Storm (start

Example in box

- Core idea
- Motivation
- Objectives
- Scientific challenges
- How will challenges be met / Approach
- Timeline (try to make it more concrete)

Work in Processes



Change the abstraction level

