

Supplementary material to: Sketching Temporal Uncertainty – An Exploratory User Study

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This is supplementary material to our work, in which we present an exploratory user study. Our 32 participants were provided with three scenario descriptions each and were asked to visually present the given information. They sketched their spontaneous visualization designs with pen and paper and verbally described how they imagine their designs to work in practice.

The following pages contain all collected sketches, as well as some additional information about the corresponding participants. Together with each participant we estimated their average computer usage in comparison to others and rated it from 1(low) – 5(high). We did the same for their experience with information visualization. These ratings are just rough estimations. Furthermore, none of the participants are information visualization experts, hence the highest rating in this category means that the corresponding participants partook in an university course about InfoVis, but did not put particular focus on this topic.

To make it easier to compare the drawings to the corresponding scenario, we recap on the four scenarios we posed to each participant:

1. *Bus scenario* – ‘A bus should arrive at 12:00, but may be running late for up to 10 minutes. How would you visualize this scenario, so that you can estimate the probability of still catching the bus if you arrive at the bus station at a given point in time?’
2. *Project scenario (1/2)* – ‘There are two possible approaches to a given project. The first approach will take 20 to 28 days, while the second one will take 23 to 26 days. How would you visualize the scenario, so you can effectively judge which of the two approaches will on average lead to an earlier completion of the project?’
3. *Project scenario (2/2)* – ‘Consider the same two project approaches as before and an additional given point in time. How would you visualize the scenario, so you can effectively gauge which approach is more likely to have finished until the given point in time?’ This scenario and the previous one are collectively referred to as the project scenario.
4. *Lecture scenario* – ‘Two lectures are taking place after each other. The first lecture will end between 11:50 and 12:05, while the second lecture will start between 12:00 and 12:15. How would you visualize this scenario to be able to judge the probability of an overlap of the two lectures? Furthermore, it should be possible to accurately judge the interval in which an overlap can take place.’

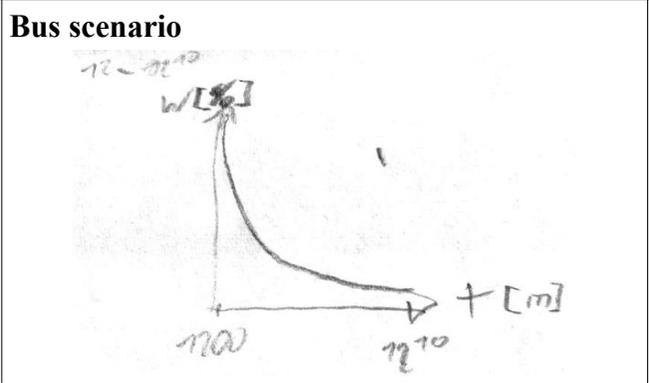
<p>Participant 1: Computer experience: 3 InfoVis experience: 2</p>	<p>Participant 2: Computer experience: 5 InfoVis experience: 4</p>	<p>Participant 3: Computer experience: 1 InfoVis experience: 1</p>
<p>Bus scenario</p>	<p>Bus scenario</p>	<p>Bus scenario</p>
<p>Project scenario</p>	<p>Project scenario</p>	<p>Project scenario</p>
<p>Lecture scenario</p>	<p>Lecture scenario</p>	<p>Lecture scenario</p>

Participant 4 did not provide any sketches.

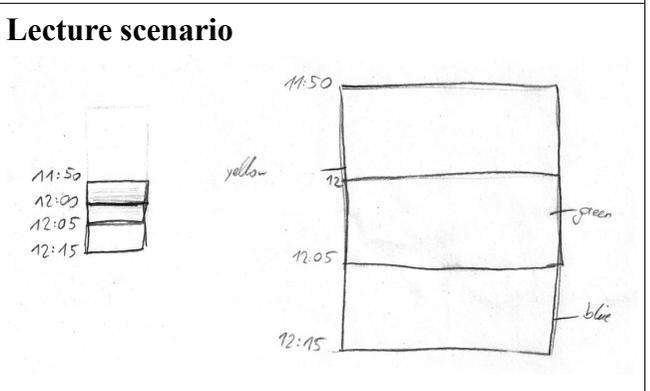
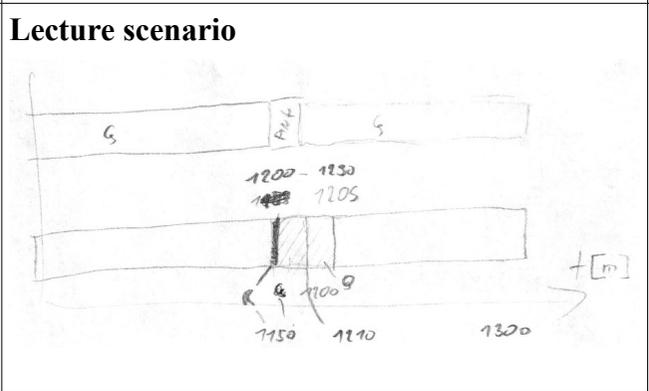
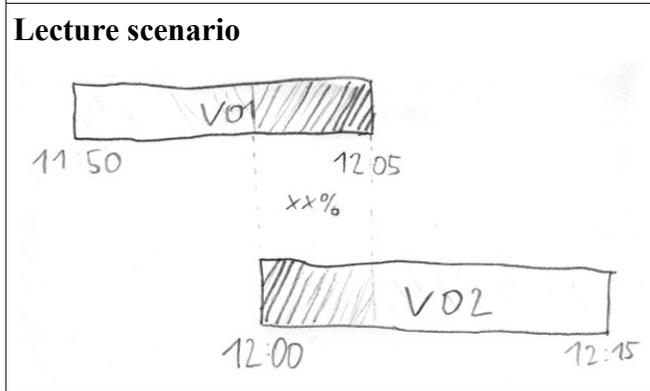
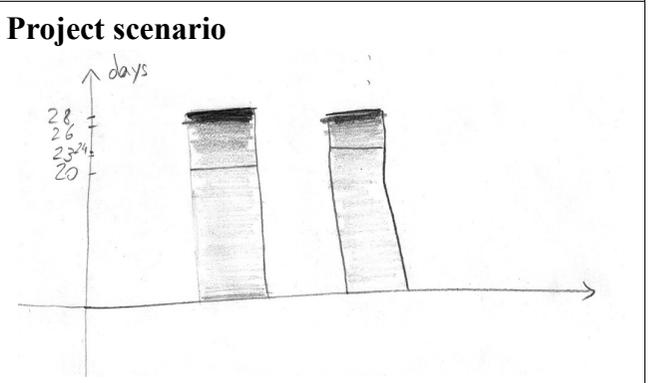
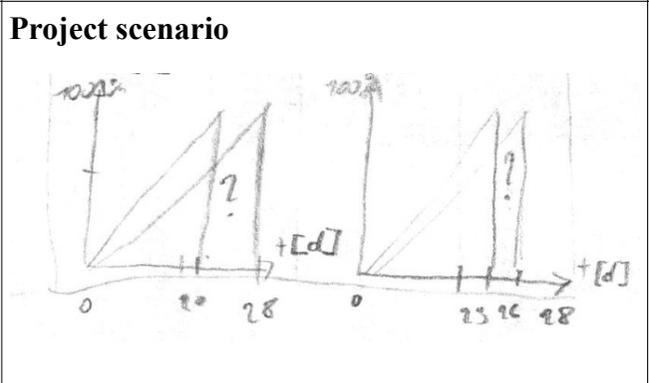
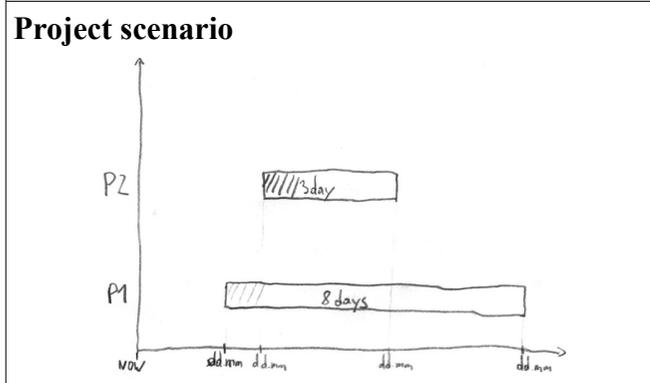
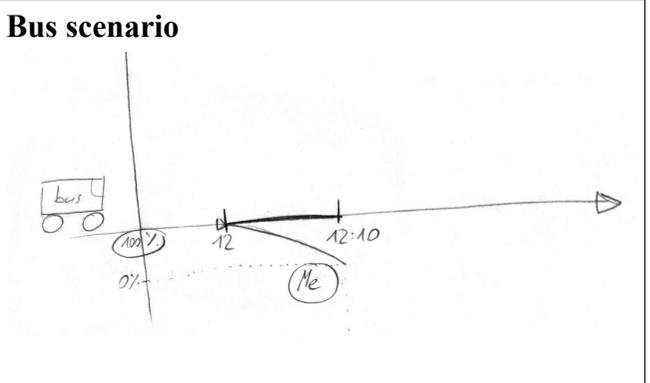
Participant 5:
 Computer experience: 5
 InfoVis experience: 4



Participant 6:
 Computer experience: 3
 InfoVis experience: 2

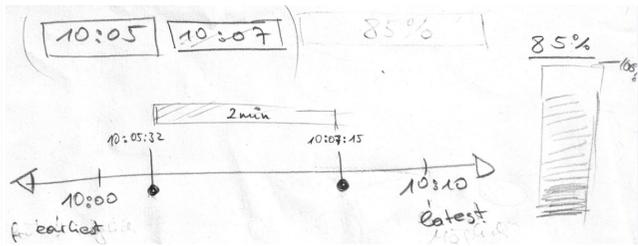


Participant 7:
 Computer experience: 1
 InfoVis experience: 1



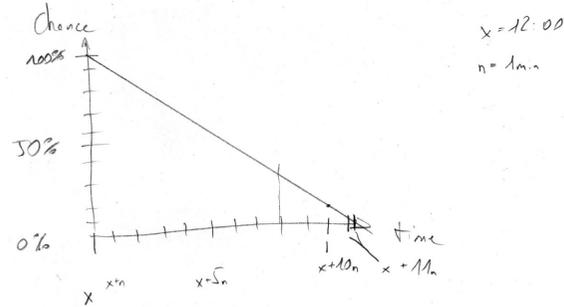
Participant 8:
 Computer experience: 3
 InfoVis experience: 3

Bus scenario



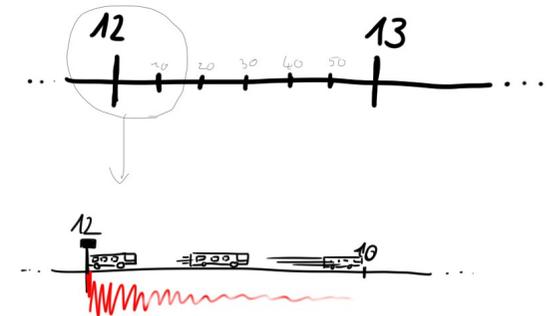
Participant 9:
 Computer experience: 3
 InfoVis experience: 3

Bus scenario

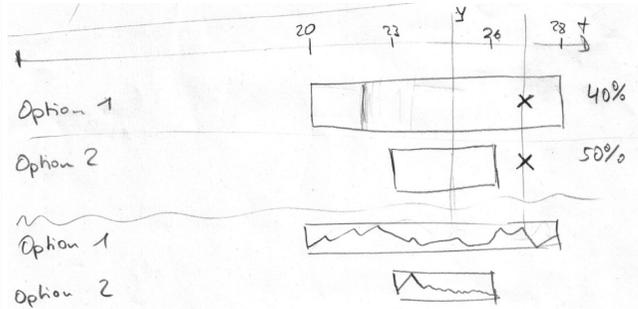


Participant 10:
 Computer experience: 5
 InfoVis experience: 5

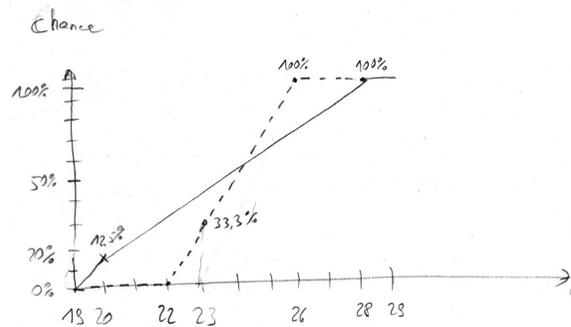
Bus scenario



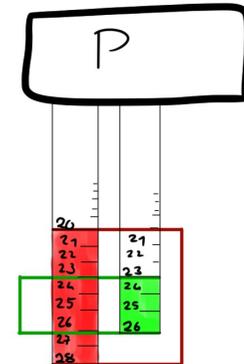
Project scenario



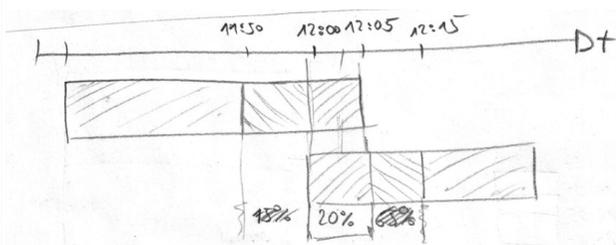
Project scenario



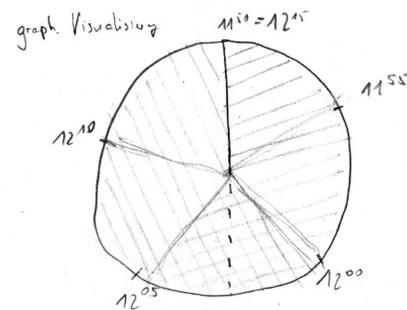
Project scenario



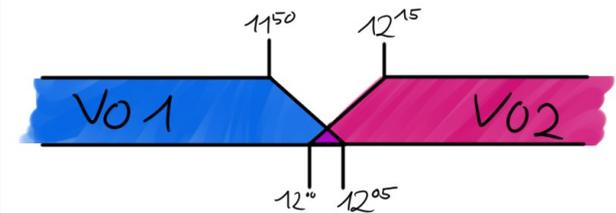
Lecture scenario



Lecture scenario

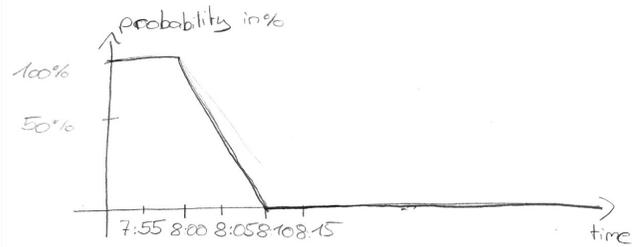


Lecture scenario



Participant 11:
 Computer experience: 3
 InfoVis experience: 1

Bus scenario



Participant 12:
 Computer experience: 5
 InfoVis experience: 1

Bus scenario

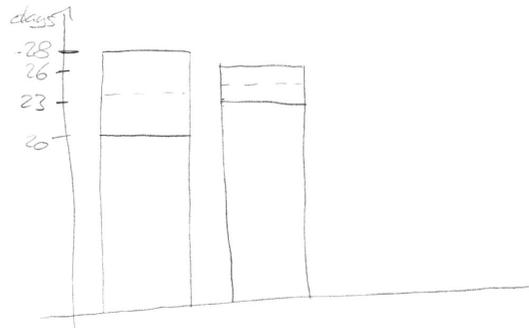


Participant 13:
 Computer experience: 5
 InfoVis experience: 3

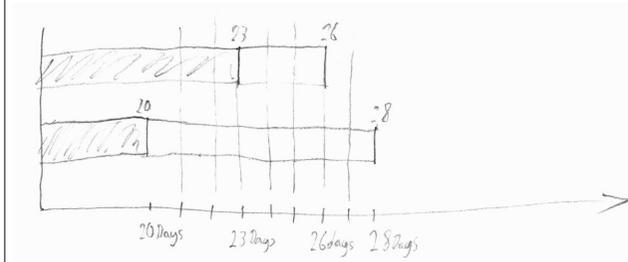
Bus scenario



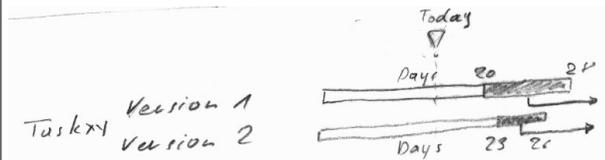
Project scenario



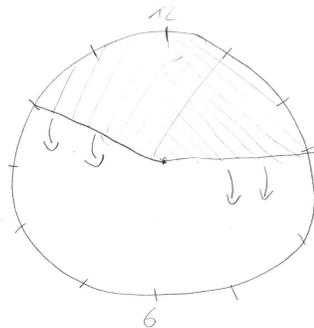
Project scenario



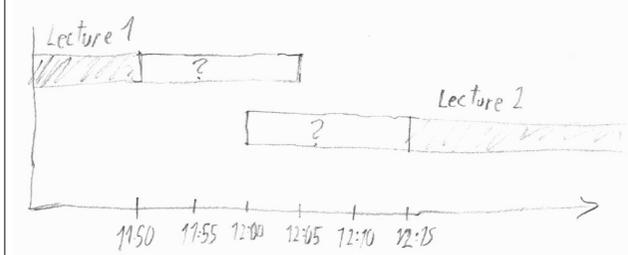
Project scenario



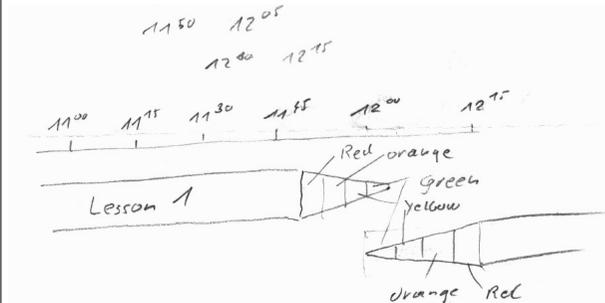
Lecture scenario



Lecture scenario

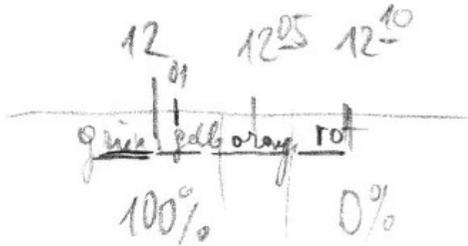


Lecture scenario



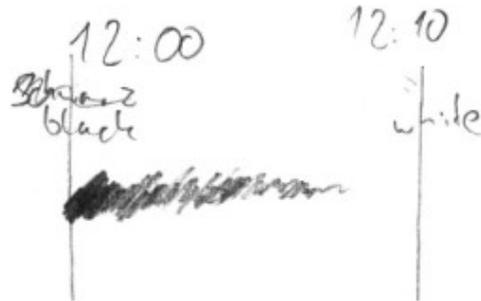
Participant 14:
Computer experience: 1
InfoVis experience: 1

Bus scenario



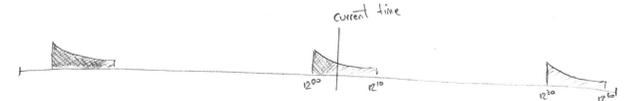
Participant 15:
Computer experience: 5
InfoVis experience: 4

Bus scenario

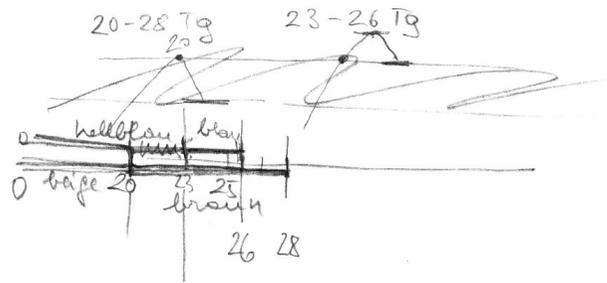


Participant 16:
Computer experience: 5
InfoVis experience: 4

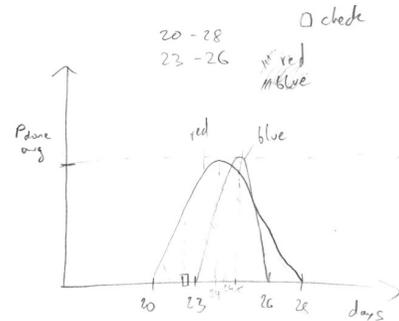
Bus scenario



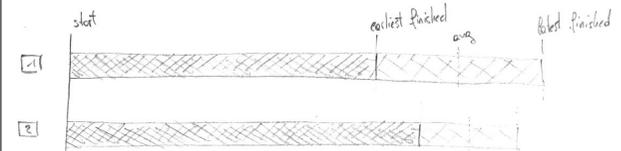
Project scenario



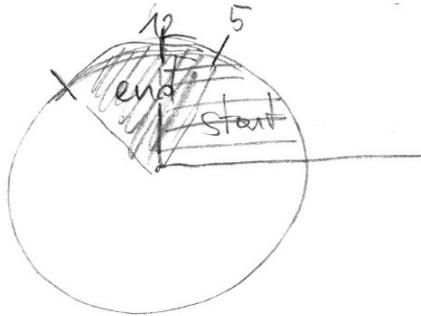
Project scenario



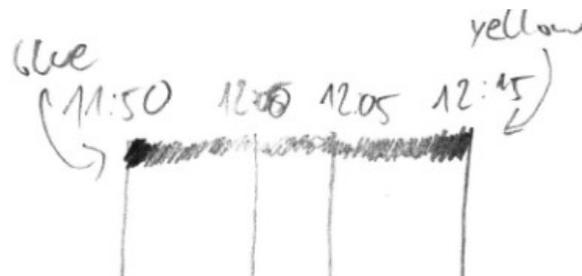
Project scenario



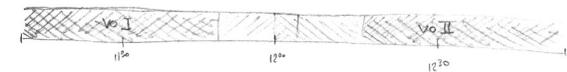
Lecture scenario

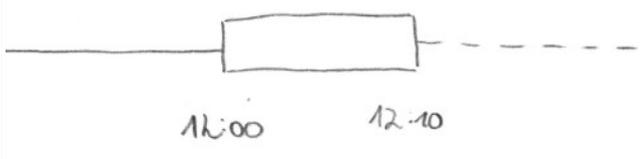
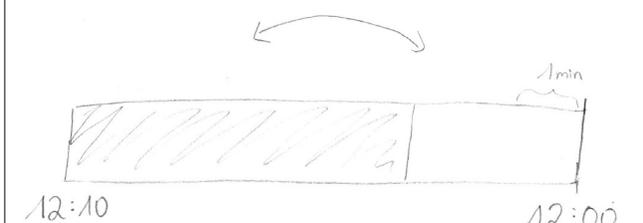
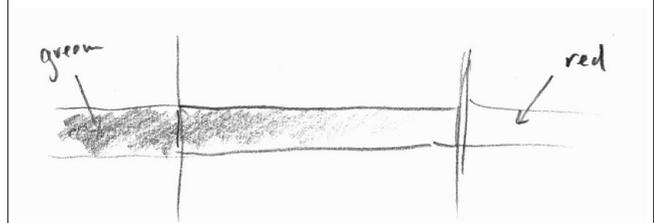
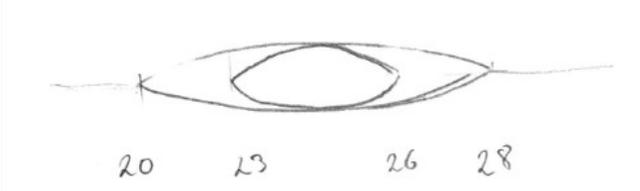
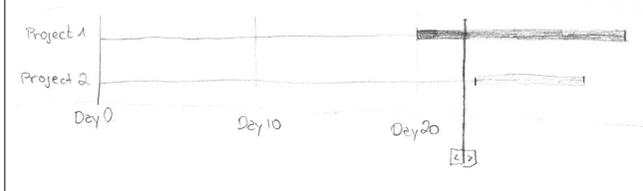
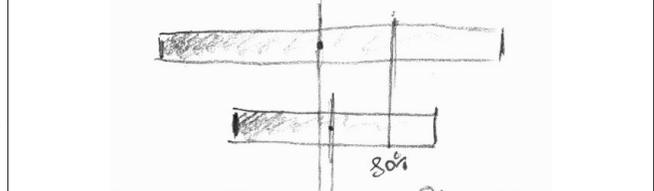
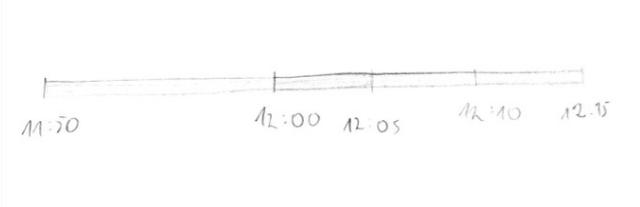
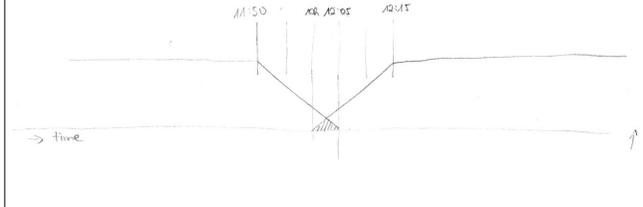
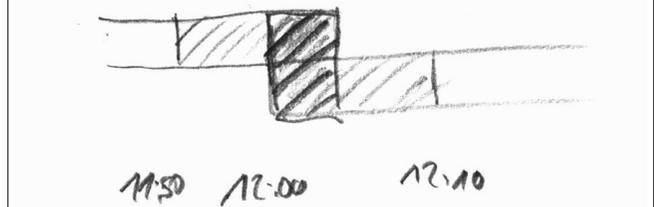


Lecture scenario



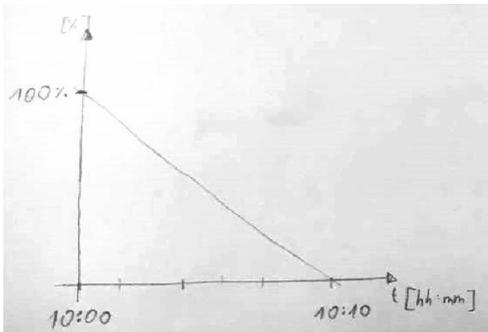
Lecture scenario



<p>Participant 17: Computer experience: 5 InfoVis experience: 4</p>	<p>Participant 18: Computer experience: 5 InfoVis experience: 4</p>	<p>Participant 19: Computer experience: 5 InfoVis experience: 4</p>
<p>Bus scenario</p> 	<p>Bus scenario</p> 	<p>Bus scenario</p> 
<p>Project scenario</p> 	<p>Project scenario</p> 	<p>Project scenario</p> 
<p>Lecture scenario</p> 	<p>Lecture scenario</p> 	<p>Lecture scenario</p> 

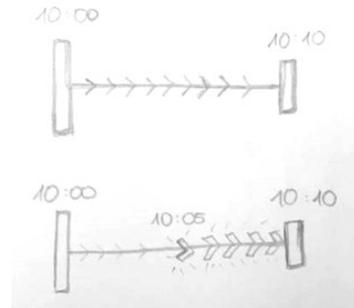
Participant 20:
 Computer experience: 5
 InfoVis experience: 3

Bus scenario



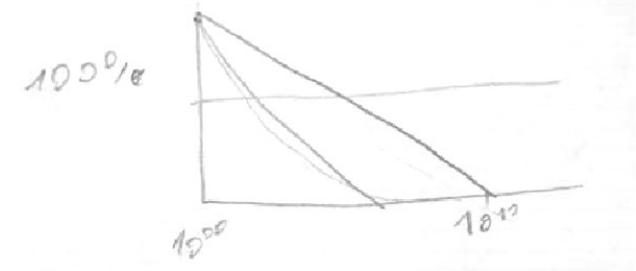
Participant 21:
 Computer experience: 1
 InfoVis experience: 1

Bus scenario

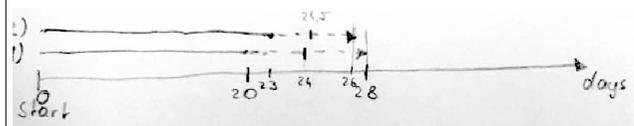


Participant 22:
 Computer experience: 3
 InfoVis experience: 1

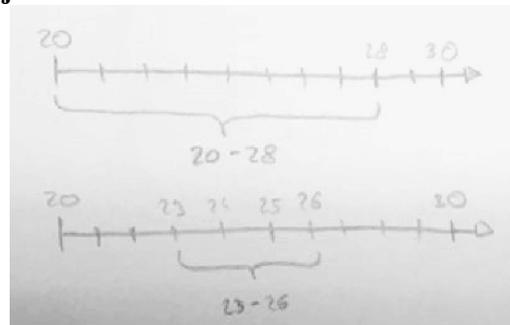
Bus scenario



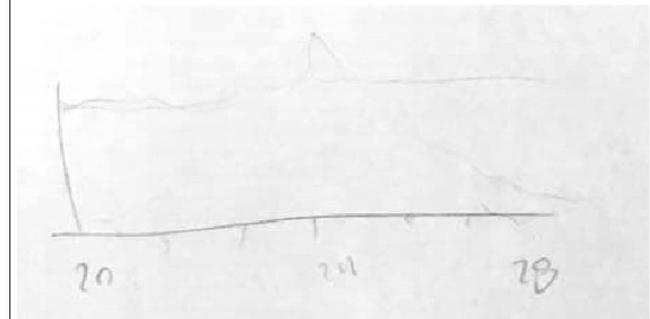
Project scenario



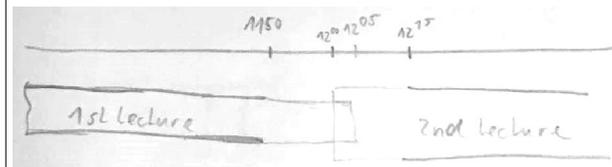
Project scenario



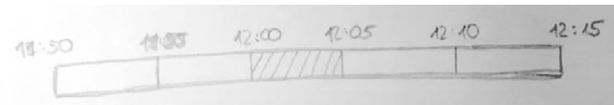
Project scenario



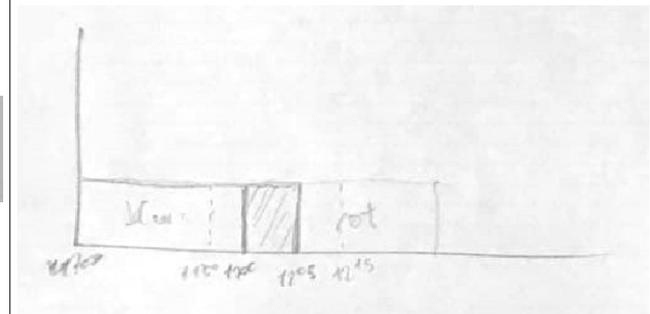
Lecture scenario



Lecture scenario

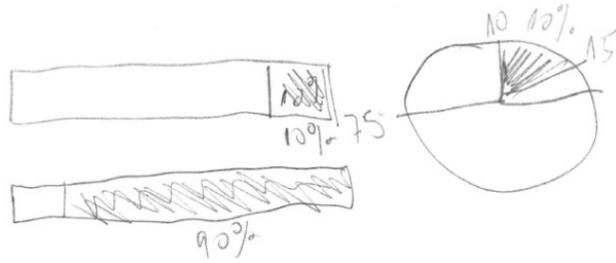


Lecture scenario



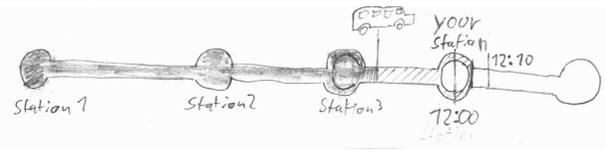
Participant 23:
 Computer experience: 5
 InfoVis experience: 3

Bus scenario



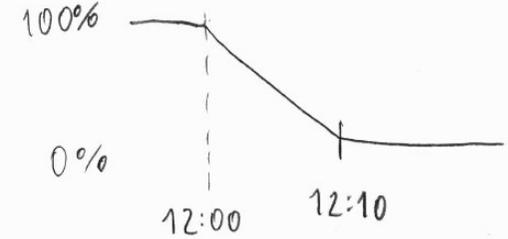
Participant 24:
 Computer experience: 5
 InfoVis experience: 1

Bus scenario

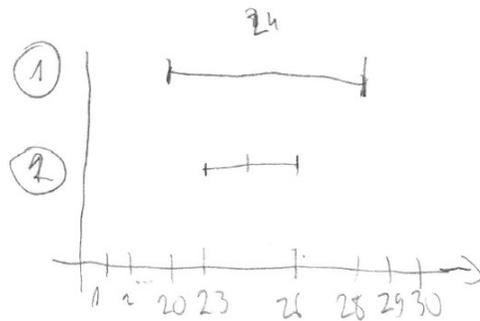


Participant 25:
 Computer experience: 5
 InfoVis experience: 3

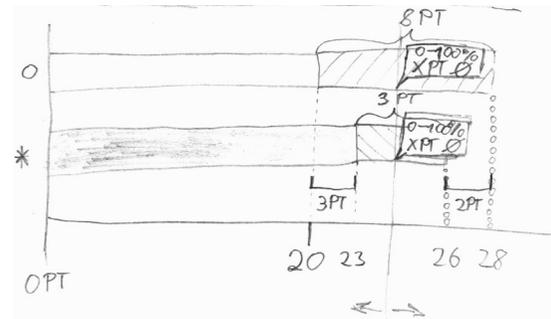
Bus scenario



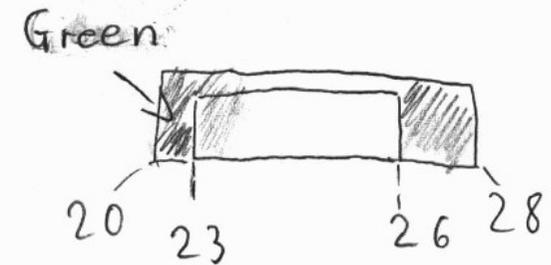
Project scenario



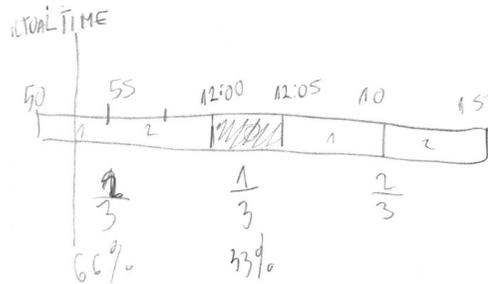
Project scenario



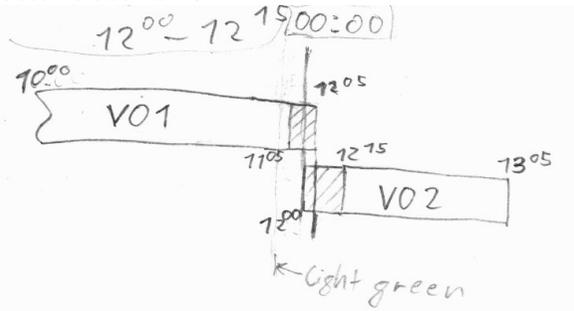
Project scenario



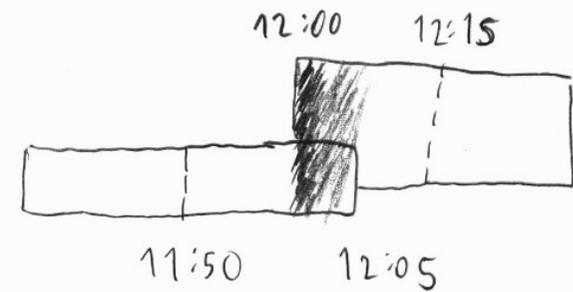
Lecture scenario

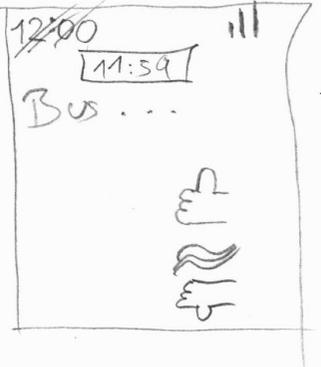
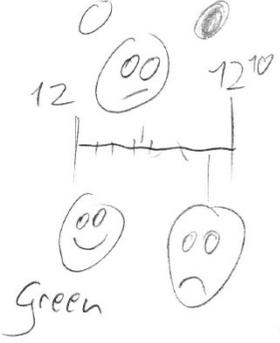
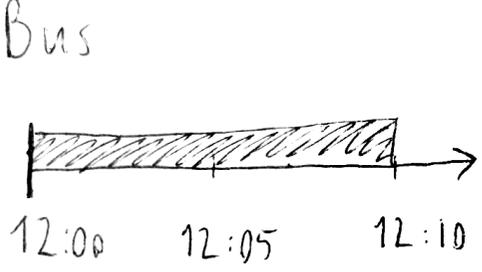
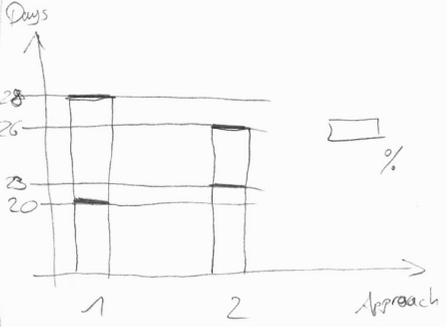
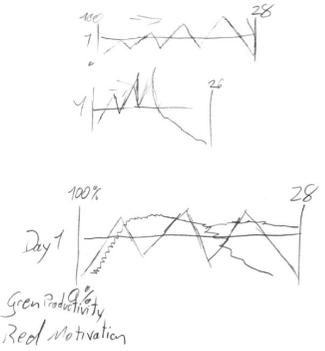
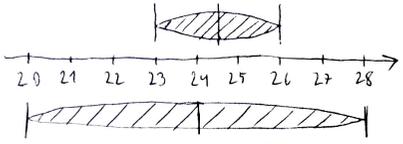
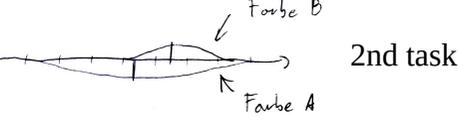
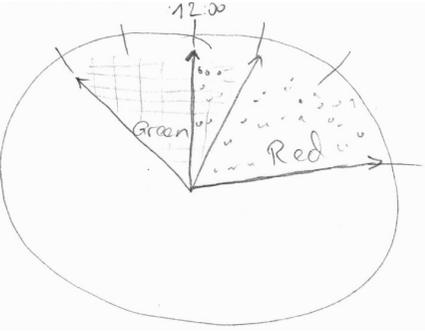
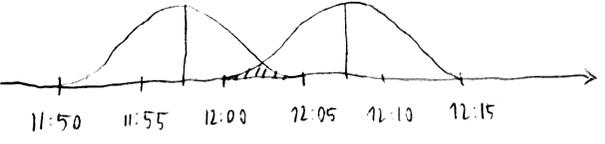


Lecture scenario



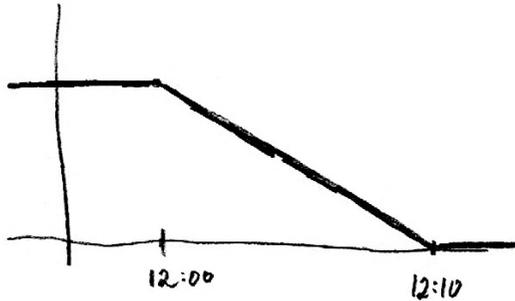
Lecture scenario



<p>Participant 26: Computer experience: 5 InfoVis experience: 1</p>	<p>Participant 27: Computer experience: 3 InfoVis experience: 1</p>	<p>Participant 28: Computer experience: 5 InfoVis experience: 5</p>
<p>Bus scenario</p> 	<p>Bus scenario</p> 	<p>Bus scenario</p> 
<p>Project scenario</p> 	<p>Project scenario</p> 	<p>Project scenario Projekt</p> <p>1st task</p>  <p>2nd task</p> 
<p>Lecture scenario</p> 	<p>Lecture scenario</p> 	<p>Lecture scenario</p> 

Participant 29:
 Computer experience: 3
 InfoVis experience: 1

Bus scenario



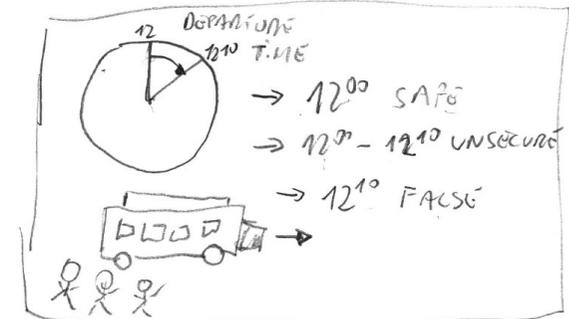
Participant 30:
 Computer experience: 3
 InfoVis experience: 1

Bus scenario

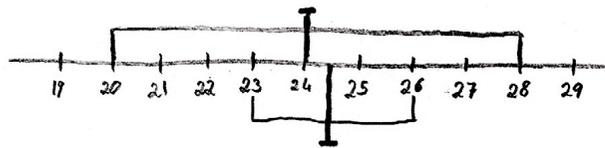
kommt
 12:00  zwischen 12:10 

Participant 31:
 Computer experience: 1
 InfoVis experience: 1

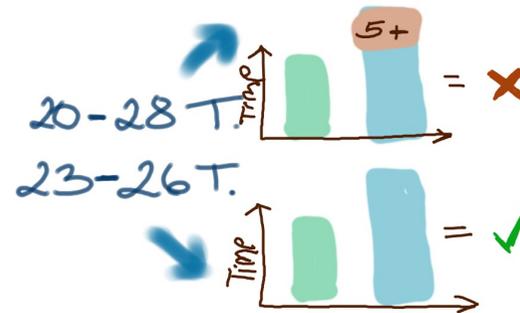
Bus scenario



Project scenario

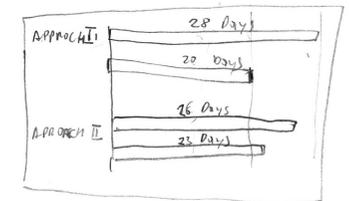


Project scenario



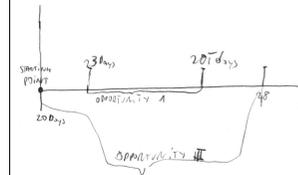
Project scenario

1st task

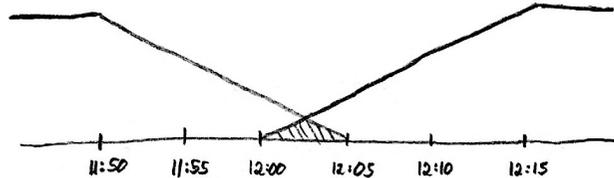


Project scenario

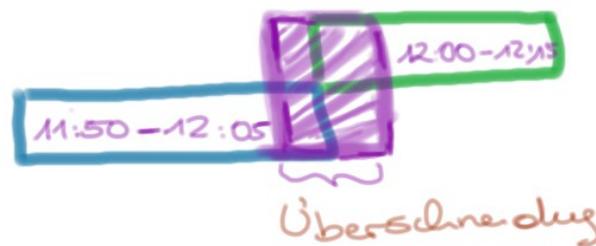
2nd task



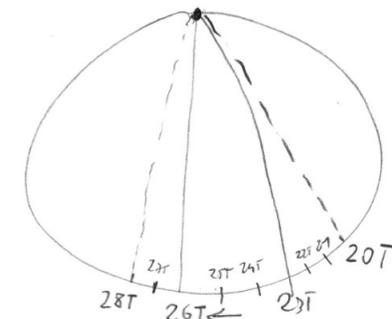
Lecture scenario



Lecture scenario

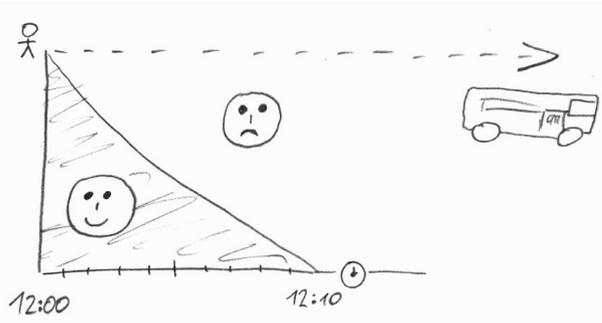


Lecture scenario

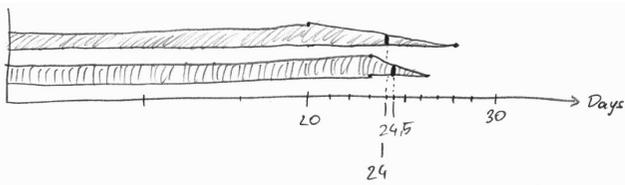


Participant 32:
Computer experience: 5
InfoVis experience: 1

Bus scenario



Project scenario



Lecture scenario

