Group 07 Transcript

Control Group, Student Experiment

Person 1 and 2 are female, person 3 is male

	Recording 77:20
0:00:01.1 PERSON 1	Ok
0:00:01.6 PERSON 2	Record now yeah, otherwise- ok. So first, there are two-
0:00:11.3 PERSON 3	Yeah yeah yeah for the [inaudible] view I should- I think we should include the designing approach. Which means the students to create the roads, and the intersections and stuff.
0:00:22.7 PERSON 2	Yeah
0:00:22.7 PERSON 3	And then there's a different module for running the simulations, so you have set your simulations, but then you have to run it on the design node scenario.
0:00:34.0 PERSON 2	Mhm
0:00:34.3 PERSON 3	So we- I think we should focus on these two different-
0:00:39.0 PERSON 1	Yeah for the development and-
0:00:40.2 PERSON 3	For development, what's your [inaudible]
0:00:43.9 PERSON 1	It isn't obligated, but ok, but it's important
0:00:46.2 PERSON 3	The idea for context
0:00:48.2 PERSON 1	Yeah. I have to look into context again. If you don't mind- then there's this void of quietness
0:01:30.2 PERSON 2	Do we have to tell that we look things up as well?
0:01:33.2 PERSON 3	Yes we can use the internet, it's
0:01:35.2	Yeah

PERSON 1	
0:01:35.4 PERSON 2	Because- ok. No, I'm just using the book actually
0:01:38.3 PERSON 3	Yeah the book also
0:01:41.1 PERSON 2	Ok
0:01:42.3 PERSON 3	Yes, use the book
0:01:50.3 PERSON 1	Ok maybe we have to start just, yeah, the requirements
0:01:50.3 PERSON 2	Yeah ok
0:01:55.7 PERSON 3	Ok. Are you gonna highlight it.
0:02:00.0 PERSON 2	Yeah
0:02:00.9 PERSON 3	Requirements
0:02:03.6 PERSON 2	Ok
0:02:08.7 PERSON 3	And the constraints
0:02:10.3 PERSON 1	Yeah
0:02:13.5 PERSON 2	Ok but the constraints are part of perspectives, right? So, that's not really
0:02:19.5 PERSON 1	No, constraints in the requirements
0:02:23.1 PERSON 3	You cannot have, for example, the allotment view
0:02:25.9 PERSON 2	Ok
0:02:25.9 PERSON 1	Yeah. Like, requirements, will they- what needs to be in there and constraints, what's not need
0:02:36.1 PERSON 2	Ok

0:02:41.5 PERSON 1	So first we need to [inaudible] on this
0:02:43.7 PERSON 2	Ok but- yeah ok
0:02:55.4 PERSON 1	Like this. The resulting map needs not be complex, that's kind of a constraint
0:03:02.4 PERSON 2	No. yeah ok, I know, but I thought that was a non-functional thing. And they haven't mentioned that we have to take that into account ok. But it's convenient, but still it's part of perspectives I think. We can just- so it should accommodate at least six intersections.
0:03:54.6 PERSON 1	Yeah. And also of varying length
0:03:58.1 PERSON 2	Yeah. And what do they mean with different arrangements of intersections.
0:04:09.6 PERSON 3	Cause I think it only allows this kind of intersection
0:04:13.0 PERSON 2	Yeah, not a T. So only- and also not one way roads.
0:04:20.0 PERSON 3	Yeah
0:04:20.4 PERSON 2	Something, that's what I read somewhere. Ok.
0:04:56.4 PERSON 1	What's meant by accommodate left hand-
0:04:59.5 PERSON 2	Yeah
0:05:00.0 PERSON 1	Turns-
0:05:00.7 PERSON 2	I was at the same-
0:05:01.2 PERSON 1	By left hand green arrow lights. Is that like, the lights have to have an arrow
0:05:12.4 PERSON 2	Yeah I think they mean, if you want to- you have three roads and one goes straight-
0:05:18.9 PERSON 3	Yeah
0:05:19.5	The other goes left, the other goes right, then the left traffic light-

PERSON 2	
0:05:24.5 PERSON 3	Automatically be green or red
0:05:26.2 PERSON 2	Yeah and then the arrows
0:05:28.1 PERSON 1	Oh ok. Yeah. Individual scenes. Ok.
0:06:14.8 PERSON 2	Ok so, it doesn't have any other signs then, just the traffic lights.
0:06:18.7 PERSON 1	Yeah
0:06:19.5 PERSON 2	Ok
0:06:20.4 PERSON 1	I think. And like, A, B and C, that's sub requirement from what- from the left turn's project by left hand arrow traffic lights. Or not?
0:06:41.5 PERSON 3	I think I have an idea for information view
0:06:50.3 PERSON 2	What notation are we gonna use
0:06:52.8 PERSON 3	I think for information view we can use petri net?
0:06:56.2 PERSON 1	Yeah
0:06:57.7 PERSON 3	And for-
0:06:58.6 PERSON 2	Yeah ok but a petri net is just one process. Because that's what he told-
0:06:58.6 PERSON 1	But I think, yeah
0:07:05.5 PERSON 2	In class he said like you can have-
0:07:05.9 PERSON 3	Yeah but for example, you can take decisions into a petri net, for example
0:07:10.0 PERSON 2	No
0:07:10.0 PERSON 3	There are two ways of, for example, designing a scenario. You can use a static scenario, which means you're not including automatic

	sensors-
0:07:23.4 PERSON 2	Yeah
0:07:23.4 PERSON 3	So the simulation is a static, because it doesn't change, the way the signal turn from green to red. But when you add sensors on that scenario you turn it into dynamic simulation. So, for example, there's two types of simulations,
0:07:43.9 PERSON 2	Ok
0:07:44.5 PERSON 3	And on the-
0:07:46.4 PERSON 1	But is that information flow
0:07:48.2 PERSON 3	Yeah, don't [inaudible] I'm just wondering
0:07:50.0 PERSON 1	Yeah, maybe information flow is on a higher level or-
0:07:55.6 PERSON 3	So-
0:07:56.0 PERSON 2	Yeah, maybe it is more like functional-
0:07:57.7 PERSON 1	Yeah
0:07:58.4 PERSON 3	Yeah functional
0:07:58.4 PERSON 1	I think this one is at- too functional. Maybe we can start with context and then information
0:08:04.9 PERSON 3	Ok so-
0:08:06.9 PERSON 1	Because the information flow is, like, what is the information in the software, how do you say it, [inaudible] with these students. What's the system, what's the income, what's the outcome. That kind of information flow.
0:08:27.7 PERSON 3	Mhm. The context is like how the different worlds interacts with the system?
0:08:34.9 PERSON 1	Yeah

0:08:35.4 PERSON 2	Yeah
0:08:39.6 PERSON 1	So there's not that much information about it so
0:08:46.3 PERSON 2	But what- yeah ok
0:08:47.6 PERSON 1	It's like the professor at the UCI, university, I don't know, something.
0:08:55.5 PERSON 2	Yeah. Ok, students, let me see.
0:09:04.5 PERSON 1	Well, students [inaudible] students who just complete their basic computer science or software engineer undergraduate degree. So that's, well- shall I just- stakeholder?
0:09:28.4 PERSON 2	Yeah sure
0:09:31.5 PERSON 1	Ok, professor. Cause it's kind of system with an educational goal
0:10:07.0 PERSON 3	Mhm
0:10:08.0 PERSON 1	So that's also something we have to include in context. Ok. We know more stakeholders than the three I mentioned?
0:10:42.5 PERSON 3	Students, professors-
0:10:44.5 PERSON 1	And the university
0:10:44.9 PERSON 2	University yeah
0:10:55.2 PERSON 1	Maybe developers or
0:11:00.8 PERSON 2	Development team, I don't know. Because that's- in this context it looks like she's gonna make the software
0:11:34.7 PERSON 1	Yeah
0:11:35.3 PERSON 2	But yeah, if she wants to try that out. Ok
0:12:00.6 PERSON 1	Ok, I don't think we have to think too difficult

0:12:04.3 PERSON 2	No
0:12:04.7 PERSON 1	Can just draw
0:12:05.3 PERSON 2	And also it states here that the context view of a system defines the relationships, dependencies and interactions between the system and the environment. So we have the stakeholders, and the system is then the-
0:12:17.4 PERSON 1	The environment is university
0:12:19.0 PERSON 2	Yeah
0:12:21.2 PERSON 1	So-
0:12:21.9 PERSON 2	That's true
0:12:23.3 PERSON 1	Like educational environment
0:12:27.3 PERSON 3	You should design the basic appearance of the program as well, as the means by which the user creates-
0:12:39.4 PERSON 1	Ok let's draw [inaudible] we're in
0:12:42.2 Instructor	Hello
0:12:42.5 All	Hi
0:12:42.5 Instructor	Sorry to interrupt. I wanted to ask, do you understand the assignment [inaudible] and were you missing something?
0:12:47.3 PERSON 1	No
0:12:50.2 Instructor	No?
0:12:50.2 PERSON 2	I think it's clear
0:12:51.2 PERSON 1	Yeah
0:12:51.7	Ok, don't forget to do the discussion in English, and don't forget to

Instructor	record, I think you already started
0:12:55.5 PERSON 2	Yeah
0:12:56.8 PERSON 3	Just one question, you mean the 45 minutes for the- make the documentation. It will be here or in the classroom I guess
0:13:05.0 Instructor	Oh no it will be where you are, so after two hours, you know you should stop and- will be coming by in a bit
0:13:05.0 PERSON 3	Start the documentation? By recording, still recording
0:13:13.2 Instructor	No you don't have to record the documentation
0:13:14.9 PERSON 2	Oh ok
0:13:15.8 Instructor	You finish your design session and then you do the documentation. So it's like a separate step
0:13:20.1 PERSON 3	Ok
0:13:20.2 PERSON 2	Ok, yeah. Thanks
0:13:21.7 PERSON 1	Thanks. Ok that's cool.
0:13:40.4 PERSON 2	Ok
0:13:43.6 PERSON 1	Ok
0:13:43.8 PERSON 2	That's the system?
0:13:45.6 PERSON 1	Yeah
0:13:46.6 PERSON 2	Yeah
0:13:47.7 PERSON 1	What's the name of the system. I mean, what kind of system, how do we call it.
0:13:52.9 PERSON 2	Let's just call it system for now
0:13:54.9 PERSON 1	Ok

0:13:56.2 PERSON 2	Or we can make up our own later
0:13:59.4 PERSON 1	Traffic light system
0:14:02.1 PERSON 2	Yeah
0:14:03.9 PERSON 1	Ok
0:14:06.8 PERSON 2	That's the obvious one yeah. Traffic light system. Ok.
0:14:13.1 PERSON 1	We have to add something
0:14:17.4 PERSON 3	I don't know how to add this professor into the context view.
0:14:21.7 PERSON 2	No because it doesn't do anything actually, it just provides the system but it doesn't say if it creates the system of anything. So-
0:14:31.2 PERSON 1	Let's see- she uses the system to explain her lectures about traffic problem thing
0:14:40.8 PERSON 2	Oh, so it's additional to her lecture too. Explain the topic better. Oh yeah, that's true because the topic was too abstract or something
0:14:48.8 PERSON 1	Yeah
0:14:49.5 PERSON 2	Yeah
0:14:50.6 PERSON 3	So maybe, for example, the professor can create, redefine it's scenarios and the students can rely on it for testing their own-
0:14:59.5 PERSON 2	Yeah or she-
0:14:59.9 PERSON 3	Simulations
0:15:01.4 PERSON 2	Refers to it or-
0:15:04.0 PERSON 1	Maybe you have just, with professors and not professor E, because
0:15:08.5 PERSON 3	Yeah yeah
0:15:08.8	And there's a system

PERSON 1	
0:15:10.0 PERSON 3	Yeah yeah yeah
0:15:10.7 PERSON 1	Then can use to, so- yeah, ok. Professor, student ok, more. Why do we need more, some penguins, no. Database-
0:15:36.1 PERSON 2	The scope-
0:15:36.1 PERSON 1	Do we need a database
0:15:37.9 PERSON 2	The scope of- there's also said that, about the scope, this concern considers the main responsibilities of the system. That is what in broad terms it is required to do. So we can identify some explicit exclusions or something. I don't know how to get-
0:16:06.2 PERSON 1	Yeah here we can also, what you said in the beginning, like the static view and dynamic view
0:16:24.6 PERSON 2	Or we can-
0:16:24.8 PERSON 3	I want to say a view but-
0:16:27.8 PERSON 2	Oh process
0:16:29.0 PERSON 3	Yeah processes
0:16:33.6 PERSON 1	Oh and then we have information flow, we can-
0:16:36.8 PERSON 2	Yeah we can elaborate on this
0:16:38.7 PERSON 1	Yeah
0:16:39.1 PERSON 2	Yeah. And then it's consistent. So yeah, that's good
0:16:43.5 PERSON 1	They don't know if I'm drawing
0:16:46.1 PERSON 3	You can also draw a simulation process
0:16:50.2 PERSON 2	Oh this actually doesn't have to necessarily be some sort of relation. Cause that's here also in that case-

0:16:56.3 PERSON 1	Yeah what did you say
0:16:57.5 PERSON 2	The professor in the system
0:16:58.3 PERSON 3	Also the simulation process.
0:17:00.6 PERSON 1	Here?
0:17:00.6 PERSON 3	When you define your, yeah
0:17:02.6 PERSON 2	No but that comes from the dynamic
0:17:05.2 PERSON 3	Yeah maybe from both
0:17:06.7 PERSON 2	Oh ok.
0:17:08.6 PERSON 3	Because all then need to be tested
0:17:10.0 PERSON 1	Static and dynamic
0:17:11.3 PERSON 3	Yes
0:17:15.6 PERSON 2	Ok
0:17:20.2 PERSON 1	And what's in here. Simulations the [inaudible]
0:17:24.5 PERSON 2	The rules
0:17:25.0 PERSON 1	Created I think
0:17:26.8 PERSON 2	Oh ok.
0:17:27.8 PERSON 1	Maybe [inaudible]
0:17:30.3 PERSON 2	[hoe heet het ook alweer]
0:17:33.3	Yeah maybe it's kind of SQL database. No, no

PERSON 1	
0:17:49.6 PERSON 2	Does this actually- doesn't interact with any other system huh.
0:17:53.1 PERSON 1	No. yeah, maybe it's something that
0:17:59.7 PERSON 2	Ok
0:18:02.0 PERSON 3	You can use an outsource program for the static [inaudible]
0:18:13.4 PERSON 2	I think we can still do developers here. To the system
0:18:18.2 PERSON 1	Yeah?
0:18:19.8 PERSON 2	Yeah, it isn't mentioned but, the professor does-
0:18:22.9 PERSON 1	Yeah, when the system gets stuck they also have to be [inaudible] ok. So development team
0:18:31.6 PERSON 2	Yeah and are there also administrators or something. System administrator, I don't know. But it isn't mentioned here and I don't know how closely you have to follow this so
0:18:44.6 PERSON 1	Ok. Let's draw development team
0:18:47.2 PERSON 2	Yeah
0:18:48.9 PERSON 1	So now you have professor, development team, and students
0:18:53.1 PERSON 2	Yeah the students are the user actually, yeah
0:18:55.7 PERSON 1	Yeah. And then two processes, static, dynamic and they belong to the goal simulate.
0:19:06.0 PERSON 2	Yeah
0:19:06.9 PERSON 3	Maybe the simulation have-
0:19:08.0 PERSON 2	Those -
0:19:08.6	Should have a link with an outsource program for the statistical

PERSON 3	distribution [inaudible]
0:19:16.4 PERSON 1	[inaudible] pattern
0:19:21.9 PERSON 2	Oh, on the second page
0:19:22.3 PERSON 1	Yeah
0:19:25.5 PERSON 3	For reusing the code
0:19:28.0 PERSON 1	[inaudible] oh yeah. Yeah ok. So let's go with just software, existing software package.
0:19:44.9 PERSON 2	Yeah
0:19:45.5 PERSON 1	Yeah?
0:19:46.3 PERSON 2	Just a software package yeah ok.
0:19:50.2 PERSON 3	Yeah. But you have to give a technical number, like, [inaudible]
0:20:09.6 PERSON 2	Is this actually an external entity? Or something?
0:20:15.4 PERSON 3	Well we, for example, I think this is a suggestion so they can reuse code, so, for something that's already done. But it can [inaudible]
0:20:23.9 PERSON 1	Oh maybe-
0:20:24.7 PERSON 2	Because an external entity is different in colouring
0:20:28.2 PERSON 1	Maybe we can do like this, so this is educational environment-
0:20:34.1 PERSON 2	Oh, we can make lanes
0:20:35.0 PERSON 3	Oh yeah yeah yeah good idea actually
0:20:37.1 PERSON 1	And then this is the system environment
0:20:41.1 PERSON 2	Yeah

0:20:42.5 PERSON 3	Yes
0:20:43.6 PERSON 1	Yeah, I don't know
0:20:44.9 PERSON 3	Maybe the- borrowing the API's
0:20:47.3 PERSON 1	Yeah ok. Yeah then we have to look for a good software package, for now it's ok.
0:21:00.4 PERSON 2	Yeah
0:21:03.4 PERSON 1	And then database, yeah, I don't, whether that's- yeah I think so, ok. So now our context view is almost ready I think?
0:21:24.3 PERSON 2	Yeah
0:21:28.9 PERSON 1	And this one [inaudible]
0:21:31.0 PERSON 2	What notation did we use actually
0:21:34.0 PERSON 1	UML or-
0:21:35.9 PERSON 2	Yeah
0:21:36.4 PERSON 1	The processes have to be [inaudible] so
0:21:37.7 PERSON 2	[Inaudible] ok. I think we should do UML
0:21:44.6 PERSON 1	Yeah. So then we just have to change processes that's like, so
0:21:53.9 PERSON 2	Yeah that's true. Ok good. So these are the link yeah?
0:21:59.4 PERSON 1	Yeah
0:21:59.8 PERSON 2	So, yeah ok.
0:22:03.9 PERSON 1	And our information view? And then we are elaborating this three processes.
0:22:15.1	In the information view?

PERSON 2	
0:22:16.0 PERSON 1	Mhm
0:22:16.0 PERSON 2	Yeah
0:22:18.5 PERSON 1	And then with-
0:22:18.9 PERSON 2	Yeah or we can just focus on one-
0:22:23.0 PERSON 1	Just one flow you mean
0:22:23.5 PERSON 2	Yeah. Are these actually parallel
0:22:26.9 PERSON 3	Yeah I think they're parallel
0:22:27.9 PERSON 2	Because then we can make a concurrency or not
0:22:31.8 PERSON 3	No no no, it's just for- cause when you deal with- when you create like, some sensors, I think it's more elaborated. The simulation's more elaborated
0:22:43.3 PERSON 2	Yeah ok. So they actually-
0:22:46.6 PERSON 3	Maybe they [inaudible] more different-
0:22:47.1 PERSON 2	So
0:22:49.1 PERSON 3	Packages from the API module or- yeah just for the simulation, not for the designing. Both design is the same but simulations will be different
0:23:11.5 PERSON 1	I will look some [inaudible] for the information view. Because [inaudible]
0:23:23.7 PERSON 2	Still on, I had to check if the sound was ok.
0:23:45.6 PERSON 2	So we're going to leave the context view for now? And just move onto the-
0:23:49.5 PERSON 1	Information

0:23:49.5 PERSON 2	Ok
0:23:53.0 PERSON 1	So that it's clear for the people
0:23:58.1 PERSON 3	I bet there is one
0:24:03.2 PERSON 1	Look maybe we can do it like this, as we did in the assignment. So global [inaudible]
0:24:08.3 PERSON 2	Oh yeah and the we can specify yeah on-
0:24:11.9 PERSON 1	And then mention here again the processes.
0:24:15.5 PERSON 2	Yeah. Yeah we can do that.
0:24:17.5 PERSON 1	And then here- going that with the API and the database and
0:24:24.5 PERSON 2	Yeah
0:24:26.7 PERSON 3	Oh my god, there's no [inaudible]
0:24:29.7 PERSON 1	Yeah I can take
0:24:31.1 PERSON 3	No no no but, there's no other one?
0:24:35.5 PERSON 2	I think there's one
0:24:39.0 PERSON 1	There has to be another one
0:24:44.6 PERSON 3	I can't lift my notebook
0:24:47.2 PERSON 2	You can
0:24:49.1 PERSON 3	How much better do you have, it's like [inaudible]
0:24:51.5 PERSON 2	Half [inaudible] I don't need battery at all so. Don't worry about the-
0:25:09.4	Ok, incoming data in the system. How was it called in the

PERSON 1	assignment? It was in the first part. Actually it's the input of the students heh.
0:25:45.8 PERSON 3	[inaudible]
0:25:46.7 PERSON 2	Yeah depends on what level you're-
0:25:51.4 PERSON 1	What level of detail
0:25:52.5 PERSON 2	Yeah
0:25:53.1 PERSON 1	Yeah that's-
0:25:54.6 PERSON 2	Because-
0:25:54.9 PERSON 1	A bit global then, a bit abstract. And the output is a simulation.
0:26:11.0 PERSON 2	Ok so, what information flow are we actually going to look at, because we have to pick one process, otherwise it's too global I think.
0:26:19.8 PERSON 1	No, because we can have more than one- multiple
0:26:23.4 PERSON 2	Oh you want to just first look at the-
0:26:25.8 PERSON 1	Global
0:26:27.0 PERSON 2	Overall, and then-
0:26:27.4 PERSON 1	Yeah
0:26:27.4 PERSON 2	You want to specify, ok.
0:26:31.4 PERSON 1	So, outgoing data, what it is- simulation of traffic interaction. Traffic light interaction
0:26:48.1 PERSON 3	Can put on, how it's called-
0:26:50.5 PERSON 2	Yeah

0:26:50.5 PERSON 3	Like real-time, in real-time
0:26:53.3 PERSON 1	Oh so
0:26:54.6 PERSON 2	Yeah
0:26:55.2 PERSON 3	Real-time simulation
0:27:02.3 PERSON 1	Yeah ok. And then this just, add here the three processes or the two. Static and the dynamic
0:27:19.8 PERSON 3	I don't know
0:27:23.2 PERSON 1	Because now we have simulation is the output
0:27:26.3 PERSON 2	Yeah but, looking at the, yeah. We can just do the static and dynamic, because that's what we said in the context
0:27:33.2 PERSON 1	Yeah. Because they have two options. Yeah
0:27:45.1 PERSON 2	Yeah
0:27:46.3 PERSON 1	Ok, first on
0:27:47.2 PERSON 3	Do we-
0:27:48.0 PERSON 2	Ok but, out of these two, this comes right?
0:27:51.4 PERSON 1	Mhm
0:27:51.4 PERSON 2	So something went wrong here.
0:27:54.1 PERSON 1	Yeah
0:27:54.9 PERSON 2	Because from-
0:27:55.2 PERSON 3	Yeah yeah yeah
0:27:57.2	From the static and dynamic the-

PERSON 2	
0:27:58.8 PERSON 3	You're saying
0:28:00.0 PERSON 2	Simulation flows. And now the system- flow system [inaudible]
0:28:02.8 PERSON 1	Yeah ok. But this is an or, how do you model that
0:28:08.9 PERSON 2	Isn't the outcome just the- oh yeah, that's a possibility. Isn't the outcome of the system just a visualized-
0:28:17.7 PERSON 3	In real-time the
0:28:20.3 PERSON 1	I'm not sure, what do you mean
0:28:21.6 PERSON 2	Yeah
0:28:22.2 PERSON 1	Visualization
0:28:23.8 PERSON 2	Visualization? For the-
0:28:24.8 PERSON 1	Ok so let's name it
0:28:25.5 PERSON 2	Sort, yeah, interaction
0:28:26.9 PERSON 1	In real-time visualization. Yeah, is or a it true? Because that's more like a picture. Or a-
0:28:37.3 PERSON 3	You can for example
0:28:39.9 PERSON 1	Document
0:28:41.8 PERSON 3	The points that traffic is going to be stuck at like, intersection A, intersection C will be static on this simulation
0:28:50.0 PERSON 1	Yeah ok so
0:28:54.1 PERSON 3	So it can be like a report.
0:28:57.3 PERSON 2	Yeah, or maybe if you put simulation here, that flows from static and dynamic, you can redirect it to the outcome or something. But I don't

	know how yet.
0:29:14.5 PERSON 1	I think it's not clear enough now because you have some incoming data, cause in the system the system has static option, dynamic option and some out coming data.
0:29:26.8 PERSON 2	Yeah ok
0:29:28.1 PERSON 1	And now [inaudible]
0:29:28.7 PERSON 2	And it's not an or actually, it's an and
0:29:32.3 PERSON 1	Yeah?
0:29:32.6 PERSON 2	Yeah. Because he said that it flows parallel, but both is the case
0:29:39.7 PERSON 1	So it's an [inaudible]
0:29:39.7 PERSON 3	Do you have to have like, [inaudible] in this view or do you have to leave it for the functional view. For example, if I want to put here a static, like, add road. We cannot use this on this view right?
0:29:55.3 PERSON 2	No
0:29:55.9 PERSON 3	Ok
0:29:57.0 PERSON 1	Information view-
0:29:57.6 PERSON 2	It's for the functional
0:29:58.7 PERSON 1	It's just about the flows of information
0:30:00.0 PERSON 3	Ok
0:30:00.7 PERSON 1	So
0:30:02.4 PERSON 2	What is to be communicated between different [inaudible]
0:30:07.5 PERSON 1	There's a kind of life cycle

0:30:09.5 PERSON 3	Mhm
0:30:10.3 PERSON 1	Yeah. But this is- is this an OR or an AND
0:30:12.6 PERSON 2	That's and OR
0:30:14.3 PERSON 3	I think it's an OR
0:30:15.4 PERSON 1	It's for the data, it's an OR
0:30:18.1 PERSON 3	Yep
0:30:18.4 PERSON 1	And for the system it's an AND
0:30:20.8 PERSON 2	Ok
0:30:22.0 PERSON 1	I think
0:30:22.5 PERSON 2	Yeah?
0:30:23.2 PERSON 1	Yeah, because you have some input, and then that's-
0:30:29.3 PERSON 2	Yeah, but didn't
0:30:29.5 PERSON 1	Static manner or dynamic. But the system can do both
0:30:37.2 PERSON 3	It's because the static process have only one input, which the initial input. They put the initial data and the round is done. But the dynamic view have one input on the beginning, and one real-time input, like, it's repeating.
0:30:57.7 PERSON 1	Yeah that-
0:30:58.7 PERSON 2	So you mean it- how do you say that- I don't know the English word
0:31:04.9 PERSON 3	So maybe we can the put like, the designing map and the- and then we can put two different. Oh we should also-
0:31:16.2	You can draw

PERSON 1	
0:31:20.7 PERSON 2	Yeah, you mean it's not parallel, and it's also not serial, but it flows to each other
0:31:24.4 PERSON 3	Maybe, before static and dynamic we can put, like, the map designing.
0:31:33.6 PERSON 1	And then-
0:31:33.6 PERSON 3	Or there's a functionality here
0:31:35.3 PERSON 2	Yeah
0:31:36.0 PERSON 1	Yeah
0:31:37.4 PERSON 2	It is, but we can-
0:31:38.1 PERSON 1	But what you said is true, because we have to add, like, real-time input, something like that
0:31:44.5 PERSON 2	You can just call it map. And we can specify it in the functional
0:31:48.3 PERSON 3	Ok just map, so here we form the map.
0:31:51.3 PERSON 2	Yeah
0:31:52.2 PERSON 3	On the final-
0:31:54.1 PERSON 1	Yeah
0:31:54.6 PERSON 3	Designer input
0:31:55.7 PERSON 1	So then there's map, and then OR
0:31:58.1 PERSON 3	Ok
0:31:59.0 PERSON 1	Or not? Yeah, I don't know
0:32:00.5 PERSON 2	Yeah, is it OR?

0:32:01.9 PERSON 1	No
0:32:02.6 PERSON 2	Because then [inaudible]
0:32:02.8 PERSON 1	I [inaudible]
0:32:04.6 PERSON 2	Yeah, I think
0:32:05.4 PERSON 1	I think we can leave it out
0:32:07.6 PERSON 2	Yeah
0:32:07.8 PERSON 1	That's just an arrow
0:32:09.0 PERSON 2	Yeah I agree
0:32:11.7 PERSON 3	Ok. then I can flip the traffic information
0:32:22.1 PERSON 1	Yeah
0:32:23.1 PERSON 2	Yeah
0:32:24.9 PERSON 3	Which is gonna be entering [inaudible], but I don't know how you're gonna put in the draw?
0:32:30.5 PERSON 1	Yeah maybe we'll also, something like travel rules, or
0:32:34.2 PERSON 3	Yeah. Traffic information and sensor information
0:32:38.1 PERSON 1	Oh yeah
0:32:42.4 PERSON 3	Sensor information. Ok.
0:32:50.0 PERSON 1	And it's also both eh?
0:32:51.4 PERSON 3	Yeah also, no no, only for dynamic
0:32:53.4	But, oh yeah

PERSON 1	
0:32:54.3 PERSON 2	Yeah
0:32:59.5 PERSON 3	Is it gonna be-
0:33:03.0 PERSON 1	No it's also [inaudible]
0:33:04.5 PERSON 3	Yeah yeah yeah it's-
0:33:08.1 PERSON 2	Ok, but that's gonna be the- just the simulation right? And this is just some static eh-
0:33:14.9 PERSON 1	Yeah, ok, yeah [inaudible] yeah. So maybe we have to go to simulation or-
0:33:21.6 PERSON 2	Yeah. Oh just simulation is good because that comes with the context, right? In the context we have also something about simulation
0:33:33.0 PERSON 1	Mhm
0:33:33.0 PERSON 2	Where's an, so-
0:33:34.8 PERSON 1	You mean to be consistent
0:33:35.4 PERSON 2	Yeah
0:33:36.2 PERSON 1	Yeah
0:33:40.0 PERSON 2	But it also has to have the same input and output. But we can watch that later.
0:34:04.5 PERSON 1	Yeah here, by which the user creates a map, sets traffic timing schemes and views
0:34:10.5 PERSON 3	Traffic
0:34:11.1 PERSON 1	Traffic simulation, so that's where we, yeah.
0:34:14.9 PERSON 3	And what is, after traffic timing
0:34:17.6	Schemes?

PERSON 1	
0:34:18.3 PERSON 3	Schemes?
0:34:19.1 PERSON 1	And then views traffic simulations
0:34:22.7 PERSON 3	View traffic simulations. Oh ok.
0:34:25.3 PERSON 1	So the system views traffic simulations
0:34:27.0 PERSON 3	So I think-
0:34:27.4 PERSON 1	Shall we [inaudible]
0:34:27.5 PERSON 3	Yeah yeah yeah
0:34:28.1 PERSON 2	Yeah
0:34:29.1 PERSON 3	[inaudible] how are you gonna see this [inaudible]
0:34:30.5 PERSON 1	Yeah
0:34:30.6 PERSON 3	This is in working
0:34:31.4 PERSON 1	Yeah
0:34:33.1 PERSON 3	So
0:34:33.1 PERSON 1	So that's going just with the terms in the assignment so [inaudible]
0:34:37.2 PERSON 3	[inaudible] traffic view, can be traffic view. Track simulation [inaudible]
0:34:42.0 PERSON 1	Yeah I think-
0:34:42.9 PERSON 2	Yeah, traffic simulation view
0:34:50.4 PERSON 1	And here you add schemes?

0:34:54.1 PERSON 3	It's like traffic timing scheme
0:34:57.2 PERSON 1	Yeah yeah. And then the map is here, schemes and views. Ok
0:35:10.9 PERSON 2	We have two [inaudible] arrows also, some information
0:35:16.7 PERSON 1	Yeah, it's not [inaudible] no?
0:35:18.5 PERSON 2	Because
0:35:20.9 PERSON 1	With that life cycle it's just arrows, it's just the direction of the information
0:35:26.9 PERSON 2	Ok
0:35:27.4 PERSON 3	Maybe before traffic simulation view you can- the outsource package that makes the map
0:35:36.5 PERSON 1	We're running [inaudible] the map, is has to be-
0:35:38.1 PERSON 3	No but here it's just defined- for example, these go on this [inaudible] and that's a sign of here
0:35:45.1 PERSON 1	Mhm
0:35:45.8 PERSON 3	But here it's going to make the [inaudible] come, like for example, if three cars come from here at speed of three times, three cars per minute
0:35:54.6 PERSON 2	Yeah
0:35:54.9 PERSON 3	And then, so this, another package is gonna make the count, and show on the green [inaudible]
0:35:58.2 PERSON 1	Oh yeah
0:36:00.1 PERSON 2	So there's-
0:36:00.7 PERSON 3	It's not shown on the screen, it's gonna make the preliminary out coming and then the system is gonna show [inaudible]
0:36:07.2 PERSON 2	Yeah

0:36:07.2 PERSON 1	Yeah ok
0:36:11.8 PERSON 3	So for here, the outsource
0:36:25.0 PERSON 1	Afterwards you can read that again. Are there any applications, by the way? So like- what's there, it's just on their computer
0:36:51.0 PERSON 2	Yeah
0:36:52.3 PERSON 1	Why is it also a game
0:36:55.6 PERSON 2	No I don't think so
0:36:56.4 PERSON 1	[inaudible] future
0:36:56.9 PERSON 2	Yeah
0:37:03.0 PERSON 3	How much time did we spend to, here
0:37:09.2 PERSON 2	Let me check, we're at half an hour
0:37:11.0 PERSON 3	37 minutes
0:37:11.8 PERSON 2	37 minutes yeah
0:37:13.8 PERSON 1	Ok, do we need any information systems, like, email, notifications from the system. No right?
0:37:22.4 PERSON 2	No
0:37:24.0 PERSON 1	Ok. Other information systems?
0:37:35.9 PERSON 3	I don't think so
0:37:36.7 PERSON 1	No right. Ok. Program language? Do we need to mention it here? For developer
0:37:45.5 PERSON 3	[inaudible]
0:37:47.1	Ok

PERSON 1	
0:37:47.3 PERSON 2	Yeah
0:37:48.6 PERSON 1	Maybe we can [inaudible]
0:37:49.7 PERSON 3	For map they can use XML
0:37:59.0 PERSON 1	So it this what we want. Yeah. Ok maybe we have to continue to functional view and then, later on we can discuss or add things
0:38:17.0 PERSON 2	Yeah
0:38:17.4 PERSON 1	Yeah? Ok. so now we have to list all the features I think
0:38:30.9 PERSON 2	Yeah
0:38:30.9 PERSON 1	First-
0:38:31.8 PERSON 3	For the-
0:38:32.2 PERSON 1	Functional
0:38:33.1 PERSON 3	Yes
0:38:33.1 PERSON 2	Yeah. All the features are going to be our models
0:38:37.6 PERSON 3	This is the UML
0:38:42.3 PERSON 1	Yeah, because this is really abstract huh
0:38:45.2 PERSON 2	Mhm. We can make multiple of this. Yeah.
0:38:58.0 PERSON 1	Ok. Oh maybe, for information view we have to change visualization into visual map
0:39:08.9 PERSON 3	Mhm
0:39:08.9 PERSON 1	Because that’s mentioned in-

0:39:13.0 PERSON 2	Ok good
0:39:19.2 PERSON 1	Ok functionalities. It's like, the roads, they should allow for the roads of varying length. And then know how to- different intersections, and at least six.
0:40:02.4 PERSON 2	Yeah
0:40:16.5 PERSON 1	Students must be able to describe the behaviour of the traffic lights at each of the intersections. It's up to you to determine what the exact interaction will be. Ok, so we thought about the kinds of report heh.
0:40:36.5 PERSON 3	The part that check, for example, if you put a green sign or here, so the other side of the street, the sign would be red. We should include in which view, like, these automatic constraints. It's functional right?
0:40:51.4 PERSON 2	Yeah
0:40:52.1 PERSON 3	Ok
0:40:52.9 PERSON 1	So
0:40:53.2 PERSON 3	So it would be a module like-
0:41:00.8 PERSON 2	Checking
0:41:02.9 PERSON 3	Signals checkings
0:41:06.8 PERSON 2	Checking like behaviour, turn light behaviour or something. I don't know
0:41:10.8 PERSON 3	Intersection, dependency, signals checking
0:41:16.6 PERSON 1	Ok, it's too long. Checking light behaviour for now
0:41:21.2 PERSON 3	Yeah, for intersections
0:41:22.4 PERSON 1	Ok, checking light behaviour
0:41:24.3	Yeah ok, but for intersections that's only the case because- so for

PERSON 2	intersection is redundant
0:41:31.7 PERSON 1	Ok, between brackets. But how are going to do it
0:41:41.9 PERSON 3	I think it's a module that's going to be activated after you've designed the map. For example, you design the map and now you're in the simulation process. It's before the simulation process. It's gonna be a module, it's gonna be run just for checking independencies
0:41:57.0 PERSON 2	Yeah
0:41:57.0 PERSON 1	Ok
0:41:57.6 PERSON 3	Ok, we forgot to create these dependencies
0:42:00.3 PERSON 1	Ok
0:42:00.3 PERSON 2	Mhm
0:42:01.0 PERSON 1	Yeah. So before map add simulation. Ok this one, about the left hand turns blablabla
0:42:20.2 PERSON 2	Yeah
0:42:22.2 PERSON 1	Combination of individual signals, and I don't know
0:42:31.0 PERSON 2	Combination of individual signals it's-
0:42:31.8 PERSON 1	Oh, it's about signals of the light
0:42:34.3 PERSON 2	Yeah
0:42:37.0 PERSON 1	So, you mentioned the example of these three roads with-
0:42:40.4 PERSON 2	Oh I think what they mean is that, if one traffic light is green, and the other turns green as well, but a crash could happen. That cannot be the case
0:42:52.4 PERSON 3	Yeah but that [inaudible]

0:42:53.5 PERSON 2	But that's- needs to be-
0:42:53.9 PERSON 1	Also the checker
0:42:54.9 PERSON 2	Yeah
0:42:56.6 PERSON 1	So this one's, yeah. Ok this is-
0:43:00.2 PERSON 2	That's just a rule
0:43:02.1 PERSON 1	Yeah
0:43:02.1 PERSON 3	Yeah
0:43:02.9 PERSON 2	Yeah. Ok. The next is just about, every intersection has the-
0:43:14.9 PERSON 1	It's also a rule
0:43:16.8 PERSON 2	Yeah
0:43:16.8 PERSON 1	We have to list also, the kind of rules of the systems
0:43:19.4 PERSON 2	Yeah. Oh we can just model that as business rules or something
0:43:25.1 PERSON 1	Yeah
0:43:25.1 PERSON 3	Already have a technical [inaudible]
0:43:27.5 PERSON 2	And it is to be for-
0:43:30.6 PERSON 3	For the checking dependencies
0:43:32.8 PERSON 2	Ok
0:43:32.8 PERSON 1	Ok
0:43:33.4	No no, for the- sorry sorry. Thinking about the idea, is for the system

PERSON 3	that is going to outsource the, what is it, oh here on this-
0:43:41.7 PERSON 2	Oh you mean this?
0:43:43.3 PERSON 1	No no no, it's-
0:43:43.9 PERSON 3	Here here
0:43:43.9 PERSON 1	In the context
0:43:45.0 PERSON 3	We can use like a metric system. Because I already did-
0:43:47.8 PERSON 1	In the information view? Yeah
0:43:51.0 PERSON 3	No, it has to be on a different view right? Ok just forget it
0:43:55.0 PERSON 1	In development. You remember
0:43:58.1 PERSON 3	Yeah yeah
0:43:58.4 PERSON 1	Ok so, it's kind of, rules of the system
0:44:05.1 PERSON 2	Yeah so-
0:44:07.7 PERSON 1	That's are the constraints, so six intersections
0:44:13.9 PERSON 2	[inaudible] yeah and they have to be four way
0:44:17.5 PERSON 1	Yeah
0:44:17.9 PERSON 2	And every intersection has to have traffic lights.
0:44:29.1 PERSON 3	We have only 45 minutes to documentate it.
0:44:33.6 PERSON 2	Yeah, but we're kind of already doing-
0:44:35.3 PERSON 3	Yeah yeah

0:44:36.4 PERSON 2	Yeah. Combination of individual signals, cannot lead to crashes
0:44:44.0 PERSON 1	Yeah but that's not really a rule
0:44:47.9 PERSON 2	Yeah well, it is a rule. You mean rules of the system? But it is a rule
0:44:54.4 PERSON 1	Yeah ok. Combination of signals, four way-
0:45:02.6 PERSON 2	Yeah, I don't get this part. What was it again. Students must be able to design each intersection, with or without the option-
0:45:09.9 PERSON 1	Yeah that's about the sensoring information
0:45:12.4 PERSON 2	Oh yeah
0:45:13.8 PERSON 1	It's about the static and dynamic
0:45:14.9 PERSON 2	Yeah
0:45:15.7 PERSON 1	But that's what we already modelled.
0:45:18.8 PERSON 2	Yeah ok cool.
0:45:23.1 PERSON 1	Then we go to requirement three. The students must be able to simulate traffic flows. Yeah, already add it. Real-time [inaudible]1
0:45:23.1 PERSON 2	Yeah
0:45:44.4 PERSON 3	Yeah
0:45:44.8 PERSON 2	Is also. The current state of intersection traffic lights should also be depicted visually. Yeah, that's also about the checking light behaviour so that's-
0:46:00.9 PERSON 2	Oh you mean that if there aren't any cars, the lights should still be-
0:46:06.5 PERSON 1	Yeah. Yeah. Well, the current state, so just on every time, also without input of the students you have to know what is the state of the light
0:46:20.3	Yeah

PERSON 2	
0:46:20.9 PERSON 1	Yeah, or otherwise you can't change, because when you don't know what's the-
0:46:24.9 PERSON 2	And also updated
0:46:26.5 PERSON 1	[inaudible] yeah. That's also here, so
0:46:31.5 PERSON 2	And we can decide our own, how to visualize it, information
0:46:38.5 PERSON 1	Yeah. And then four, students must be able to change the traffic density that enters the map of a given road. Oh that's about the cars, or
0:46:58.7 PERSON 2	Oh that's just about how many cars are on a road. And the-
0:47:06.0 PERSON 1	How can we implement that?
0:47:11.2 PERSON 3	Now you are in the simulation right? Constraints
0:47:15.5 PERSON 2	But do they mean like, there has to be some certain rule that there can be no more than four cars on a road, or that they can change, like say, we can put twenty cars on the road but if I want three I can get also [inaudible] out of something? I don't know
0:47:34.2 PERSON 1	Yeah, I know what you mean
0:47:35.8 PERSON 2	Yeah
0:47:47.7 PERSON 1	With, indeed, that's the simulation part so we can add in our documentation or explanation, like, ok it has be this and this but not add in the model
0:47:59.5 PERSON 3	Mhm
0:47:59.5 PERSON 2	Yeah
0:48:01.1 PERSON 1	So
0:48:01.6 PERSON 2	Ok

0:48:02.1 PERSON 1	Something like density checker or
0:48:06.4 PERSON 2	Something like that yeah, I think it's a good name.
0:48:10.2 PERSON 3	[inaudible] checker
0:48:12.9 PERSON 1	Ah that's better
0:48:13.1 PERSON 2	Yeah. I think the last bit we already covered.
0:48:23.3 PERSON 1	Yeah. Ok, so now we can- you can draw because you know how to draw professional
0:48:31.3 PERSON 2	Oh my god, I really hate this, functional. Ok. So let's start. Ok, so we have to have- there's also a rule, it depends on if- are we going to do a FAM? I think for the functional we also have to do a petri net. Well we have to choose one process because you can't do all for a petri net. But let's just first do a FAM.
0:48:58.6 PERSON 3	Ok
0:48:59.0 PERSON 1	Ok
0:49:03.3 PERSON 2	Ok. I don't know with which one we should start so, you can collaborate. So we can-
0:49:30.0 PERSON 1	So now we are going to separate the functionalities of the simulation, functionalities of system global functionalities, or- and the rules of the system. Or not?
0:49:48.3 PERSON 2	No. well, I don't know yet how we're going to incorporate this and this. Because this is- But we can make this a model, like for example, rules management or something.
0:50:03.2 PERSON 1	Mhm
0:50:03.2 PERSON 2	And then we can make, out of the rules management, a petri net
0:50:07.6 PERSON 3	Mhm
0:50:08.3 PERSON 1	Ok yeah ok

0:50:09.2 PERSON 2	Yeah, I don't know
0:50:10.4 PERSON 1	Yeah, that's good. And then just mention in the functional view, rules management.
0:50:15.8 PERSON 2	Yeah
0:50:16.3 PERSON 1	Yeah ok
0:50:17.1 PERSON 2	Yeah. So we're making first an overall-
0:50:21.2 PERSON 1	Yeah
0:50:21.7 PERSON 2	View and then- but we have to make models and I don't know yet how to-what kind of models we can have. For example, varying lengths of road.
0:50:34.2 PERSON 1	That's a functionality
0:50:35.0 PERSON 2	Yeah. And therefore we have to have a model that represents that. So, a module, not a model, a module.
0:50:49.1 PERSON 1	Bu then you can then name that module varying lengths of road
0:50:52.3 PERSON 3	This is yours?
0:50:54.3 PERSON 2	This? No
0:50:55.1 PERSON 3	Oh
0:50:56.0 PERSON 2	This is mine
0:50:57.6 PERSON 3	Ok
0:50:58.8 PERSON 1	Ok, can I look? Cause then I know, for example-
0:51:02.6 PERSON 2	No no no, because I have to translate this to a FAM, this is process model. Oh a process diagram
0:51:09.3 PERSON 1	Which is also functional view

0:51:11.1 PERSON 2	Yeah.
0:51:12.1 PERSON 1	But then it's ok, we don't need to do a FAM now
0:51:17.1 PERSON 2	Oh ok
0:51:18.2 PERSON 1	Because we have only 1 hour left or something so
0:51:22.0 PERSON 2	Ok
0:51:22.6 PERSON 1	Maybe
0:51:24.8 PERSON 2	Then we can just- then I'll just do something. We're on 50 minutes, you want a break?
0:51:30.7 PERSON 3	No
0:51:31.1 PERSON 2	Ok
0:51:33.6 PERSON 3	Just for checking
0:51:35.9 PERSON 2	But I really have to get a good view of how the system works. So with what functionality do we start?
0:51:47.1 PERSON 1	Global functionalities, and then specific functionalities
0:51:50.9 PERSON 2	Yeah ok
0:51:51.9 PERSON 1	I think, something like that
0:51:53.9 PERSON 3	And in the specific functionality can, map designing
0:52:01.9 PERSON 2	So we can have a module that is map creating
0:52:04.6 PERSON 3	And then a real-time simulation
0:52:06.0 PERSON 1	Yeah
0:52:06.7	During real-time simulation you can change some parameters, cause

PERSON 3	on the description said that you can change the scenarios between the simulations
0:52:13.6 PERSON 1	Yeah
0:52:15.1 PERSON 2	Can we have, oh I didn't realize that
0:52:18.1 PERSON 1	Ok, can you give me-
0:52:18.1 PERSON 3	But yeah so, two different-
0:52:24.3 PERSON 1	Processes, modules
0:52:26.4 PERSON 3	Yeah well-
0:52:26.9 PERSON 1	Functionalities
0:52:28.1 PERSON 3	Yeah but what was the- two different?
0:52:30.5 PERSON 1	Global functionalities-
0:52:31.3 PERSON 3	Yeah exactly
0:52:31.9 PERSON 2	Global and specific yeah
0:52:32.5 PERSON 1	Yeah
0:52:33.2 PERSON 3	Two different modules, the global functionalities, which means like the GUI, like the [inaudible]
0:52:39.8 PERSON 2	Yeah the [inaudible] centre
0:52:41.1 PERSON 3	All the general stuff like database and connections and stuff. And then on the specific functionality we have, first the map, the map designing, which means we are designing the road, which intersections are, where are the signals, and then you have the preset simulations. When you set the flux, when it comes, when it goes, how many cars per hour or per minute. And then you have a different module, which means like real-time simulation that you can

	change [inaudible] see how it works on real-time. Yeah.
0:53:22.8 PERSON 1	Yeah. Ok something like this?
0:53:26.2 PERSON 3	Yes. Yeah
0:53:30.2 PERSON 1	Ok. And then list or something, or modules, that's- I don't know what's the right modelling technique.
0:53:43.3 PERSON 2	Yeah you have, like, modules, those are this. Like somewhat-
0:53:47.5 PERSON 1	Management
0:53:49.6 PERSON 2	Systems
0:53:50.5 PERSON 1	Yeah
0:53:50.9 PERSON 2	And you can request information or give information. That's the most-
0:53:57.9 PERSON 1	Global
0:53:58.6 PERSON 2	Yeah
0:53:59.2 PERSON 1	Yeah ok. So this are the global functionalities. So first the rules of the system, or how do you, rules management
0:54:09.6 PERSON 2	Rules management I think yeah. And then maybe map creation also? Cause that's what the-
0:54:19.1 PERSON 1	Yeah. And what's in here
0:54:28.7 PERSON 3	Map creation wouldn't be here also
0:54:31.8 PERSON 1	Yeah that's right
0:54:33.8 PERSON 3	Cause I think it's more specific
0:54:34.7 PERSON 1	Yeah this is just
0:54:38.5 PERSON 3	Rules management of course

0:54:41.6 PERSON 1	Interface?
0:54:42.7 PERSON 3	Interface GUI, I don't know what this means, what this-
0:54:47.3 PERSON 2	Graphical user interface
0:54:48.8 PERSON 3	Ah
0:54:50.9 PERSON 1	Ok
0:54:53.9 PERSON 3	Database connection?
0:55:00.1 PERSON 2	What, why?
0:55:01.9 PERSON 3	Or you just-
0:55:02.4 PERSON 2	Because I think yeah
0:55:03.7 PERSON 3	Ok
0:55:06.1 PERSON 1	It's a functionality
0:55:08.2 PERSON 2	Why. Database connection
0:55:12.8 PERSON 3	It's a functional [inaudible]
0:55:12.8 PERSON 2	Ok yeah, but I don't think it's like, a module
0:55:18.5 PERSON 3	So maybe-
0:55:19.0 PERSON 2	You can just
0:55:19.5 PERSON 3	Import and export moduling, you get files and [inaudible]
0:55:24.2 PERSON 1	Connector, maybe we have to call the module connectors. Connector.
0:55:31.2	Alright

PERSON 2	
0:55:33.3 PERSON 3	Yeah no, I don't think so because I think a connector is more for like, plugins
0:55:37.0 PERSON 1	Oh ok
0:55:37.0 PERSON 2	Oh yeah
0:55:38.4 PERSON 1	So what's your-
0:55:39.7 PERSON 3	Import and export module, I think
0:55:42.2 PERSON 1	Ok yeah
0:55:44.8 PERSON 2	Yeah. Or can they just be in with the arrows, like information flow, so not a module but a- it's information flow, or yeah call it information flow
0:55:58.3 PERSON 1	Ok. This- so that are the global functionalities, rules management, import/export data, and the interface
0:56:06.3 PERSON 3	Right is import and export data. Here- it's here. Ok. [laugh]
0:56:12.6 PERSON 1	Ok
0:56:14.0 PERSON 3	No no, just checking
0:56:17.0 PERSON 1	Ok. So, and then we have-
0:56:19.9 PERSON 2	So we also have to have some sort of checker. Because it checks on density but also on some other stuff [inaudible]
0:56:27.8 PERSON 1	And we can connect it here-
0:56:29.9 PERSON 2	Oh yeah
0:56:30.5 PERSON 1	Specific
0:56:31.6 PERSON 2	Ok
0:56:31.9	Because now you have map design

PERSON 1	
0:56:33.5 PERSON 2	But the checker we can connect to the, also to the rules so-
0:56:38.5 PERSON 3	Mhm
0:56:39.0 PERSON 2	Management I think
0:56:39.8 PERSON 1	Yeah? Yeah indeed. So, you mean, checker as a global functionality, or just here
0:56:50.4 PERSON 2	Yeah, I don't know yet
0:56:51.9 PERSON 2	Presetting simulation is the checker heh. So and then we can connect
0:56:56.2 PERSON 2	Yeah
0:56:58.7 PERSON 1	This just connected
0:56:59.6 PERSON 2	Yeah
0:57:01.3 PERSON 1	Ok, checker light behaviour
0:57:07.5 PERSON 3	The outsource
0:57:10.4 PERSON 1	And then rules management. Ok. We have another, oh yeah, density bottleneck checker
0:57:26.5 PERSON 2	Yeah but I think-
0:57:27.4 PERSON 1	That's for all, or map design?
0:57:28.7 PERSON 2	I thought maybe we can take checkers global, and then specify this. So we have more view on it.
0:57:38.7 PERSON 1	But the bottleneck checker, that's also juts in the presetting simulation?
0:57:45.3 PERSON 2	Yeah I think so. I think it's part of the-
0:57:47.3 PERSON 1	Not in the real-time?

0:57:48.3 PERSON 2	Because, like, for example, here. No I can't find, yeah.
0:57:59.5 PERSON 1	Ok so just call it [inaudible]
0:58:01.0 PERSON 2	Yeah, for example, here- oh sorry
0:58:02.8 PERSON 1	Yeah yeah
0:58:03.2 PERSON 2	You don't know. Ok. Here they made a functional view. And then they don't want to specify author anymore. So, they did that here, then the scope is authoring and they say how the functionalities are linked. I thought perhaps we could do that with the bottlenecks checker
0:58:21.6 PERSON 1	Ok so just checker-
0:58:24.1 PERSON 2	But only if we have time to do more views
0:58:29.8 PERSON 1	Yeah. And then light behaviour, and maybe then we have to specify bottlenecks, because otherwise it's just too much else
0:58:43.2 PERSON 3	yeah. And the outsource- software are you gonna use for checking the map flux, for example, I'm gonna- we can give a name for example, metric flux. Because we did in Brazil like a metric flux that input the [inaudible] so we can- this one can be an outsource package
0:59:04.7 PERSON 1	Ok
0:59:05.2 PERSON 2	Ok
0:59:05.6 PERSON 3	All metric flows checker
0:59:11.3 PERSON 1	Oh, in the checker
0:59:12.1 PERSON 3	Yeah maybe
0:59:12.7 PERSON 1	Ok
0:59:12.7	I don't know

PERSON 3	
0:59:14.5 PERSON 1	Metric, how do I spell it, like this?
0:59:17.2 PERSON 2	You- yeah, that's a good one
0:59:17.8 PERSON 1	Metric flows
0:59:20.0 PERSON 3	Metric flows checker, yeah.
0:59:23.3 PERSON 1	Ok. And this is for-
0:59:28.6 PERSON 3	For giving the bottlenecks maybe?
0:59:30.0 PERSON 1	Yeah ok. And what about light behaviour, we can just, yeah, maybe we have to specify what we want to know and that's the current state.
0:59:46.8 PERSON 3	Mhm
0:59:50.8 PERSON 1	No? You're not allowed to-
0:59:52.2 PERSON 2	No that's ok. We'll change it later
0:59:54.5 PERSON 1	Yeah. What- current state maybe, we want to know whether it's as an arrow or not? So is the light for [inaudible]
1:00:10.3 PERSON 2	Oh you mean- yeah
1:00:11.5 PERSON 1	Yeah. I don't know how to describe basically
1:00:16.1 PERSON 2	Light visualization or something like that
1:00:18.4 PERSON 1	I don't know. What is four?
1:00:24.7 PERSON 2	Shape?
1:00:24.7 PERSON 1	Yeah. Shape of the light
1:00:36.6	You need a pattern

PERSON 3	
1:00:38.2 PERSON 1	Yeah
1:00:38.6 PERSON 3	Ok
1:00:38.6 PERSON 1	Ok maybe it's [inaudible]
1:00:40.9 PERSON 3	Shape was like, what does it mean or
1:00:42.6 PERSON 1	Yeah
1:00:44.4 PERSON 2	No but it's- It's an arrow, to the left. She's talking about when you're
1:00:48.9 PERSON 3	Like, it's going in this direction, or that direction.
1:00:51.8 PERSON 2	Yeah if you're on the left lane, the traffic light is [inaudible] to the-
1:00:57.9 PERSON 3	Shapes, shapes that, I think that. Ok
1:01:00.4 PERSON 2	You shape your- you think of rectangle and-
1:01:02.9 PERSON 1	Yeah
1:01:03.6 PERSON 2	Yeah ok
1:01:04.0 PERSON 1	Thinking about the light and-
1:01:05.5 PERSON 3	Maybe it's pattern to constraint
1:01:08.2 PERSON 1	Ok pattern.
1:01:08.6 PERSON 2	Ok
1:01:09.9 PERSON 1	We can explain, so then it's good
1:01:11.2 PERSON 3	Yeah, we have to explain so

1:01:13.3 PERSON 1	Ok, something we need to check. Density of the roads? But that's the metric flux heh, or not? It's bottlenecks. Maybe we have to check how many cars are- we have to set a maximum.
1:01:32.3 PERSON 2	Yeah that depends what a [inaudible]
1:01:35.7 PERSON 3	It will be an outcome of the process, like, you want to give like, how many cars it's supporting on this intersection, for example.
1:01:45.9 PERSON 2	Mhm yeah. Yeah but-
1:01:48.1 PERSON 1	Shall we-
1:01:48.4 PERSON 2	Do we make it a rule, like for example, there can be no more then-
1:01:52.1 PERSON 3	Yeah yeah yeah
1:01:52.9 PERSON 2	Or do we-
1:01:55.2 PERSON 3	And the roles can be set, also, by the user
1:01:57.6 PERSON 1	Yeah-
1:01:57.6 PERSON 2	But we can also let the user decide to- yeah.
1:02:03.4 PERSON 1	Ok, but then we don't edit in checker but in rules management. Yeah?
1:02:08.1 PERSON 2	Yeah
1:02:08.8 PERSON 1	Ok. So let's specify rules management now
1:02:13.3 PERSON 3	Like, for example
1:02:15.7 PERSON 1	At least six intersections. Maximum of cars, something
1:02:25.2 PERSON 3	Yes yes, how many minutes a car can wait on a single street
1:02:33.9 PERSON 1	Maximum of waiting time then?

1:02:36.7 PERSON 3	Yeah, or maybe maximum- minimum speed
1:02:41.9 PERSON 1	Minimum speed?
1:02:43.1 PERSON 3	I don't know how if-
1:02:43.6 PERSON 1	Yeah yeah
1:02:44.8 PERSON 3	View [inaudible]
1:02:47.9 PERSON 1	Both or-
1:02:49.8 PERSON 3	Maybe both
1:02:50.0 PERSON 1	Yeah. Every intersection has to have traffic lights
1:02:58.7 PERSON 2	And also has to have the four way
1:03:01.8 PERSON 3	Maybe it can be minimum average speed and not maximum average time, cause it's only for a single car
1:03:08.0 PERSON 2	No
1:03:08.0 PERSON 1	Yeah ok. Yeah, what do you say?
1:03:17.9 PERSON 2	There's to be a four way street
1:03:19.1 PERSON 1	Oh yeah
1:03:19.8 PERSON 2	And the combination of signals cannot lead to crashes
1:03:27.0 PERSON 1	Yeah, that's also a [inaudible]
1:03:29.4 PERSON 2	Yeah
1:03:31.0 PERSON 1	Combination
1:03:33.5	I don't know how we can put this, like a model yet

PERSON 2	
1:03:38.1 PERSON 1	I mean it's ok
1:03:39.0 PERSON 3	Just maximize the view on this. But I think, a suggestion for the next hour. We can focus, or redesign it this way. Before putting them, so maybe one focus on this and one draw and or we just-
1:03:54.4 PERSON 2	Yeah both
1:03:55.3 PERSON 3	No this [inaudible]
1:03:55.6 PERSON 2	We have to-
1:03:56.7 PERSON 1	Yeah
1:03:56.7 PERSON 2	Yeah. I think we have to [inaudible]
1:03:58.5 PERSON 3	I still think 45 minutes is not-
1:04:00.9 PERSON 2	So I think the, yeah
1:04:03.4 PERSON 3	Yeah ok
1:04:03.7 PERSON 1	But now we have already context, information and functional right?
1:04:06.3 PERSON 3	Mhm
1:04:06.8 PERSON 1	That's required so
1:04:07.8 PERSON 3	Ok
1:04:09.5 PERSON 2	Yeah
1:04:10.6 PERSON 1	I think we have-
1:04:11.5 PERSON 2	We can take a break
1:04:13.8	5 minutes

PERSON 3	
1:04:14.5 PERSON 1	Yeah
1:04:14.5 PERSON 2	Yeah
1:04:15.3 PERSON 1	Ok yeah?
1:04:16.7 PERSON 2	Are doing it now? Yeah ok.
1:04:18.6 PERSON 3	It's almost one hour right?
1:04:19.6 PERSON 2	Yeah one hour and five minutes, so yeah. I think yeah
1:04:24.2 PERSON 1	We are back [laugh]
1:04:25.6 PERSON 3	This is the second part of the assignment now
1:04:28.7 PERSON 2	Ok, let's continue. So we're going to leave the specific functionalities just with these three boxes right?
1:04:37.0 PERSON 1	This is the functional view
1:04:39.4 PERSON 2	Oh yeah. We're talking about the functional view. Please don't
1:04:43.9 PERSON 3	Yes
1:04:45.7 PERSON 2	Ok.
1:04:49.8 PERSON 1	Ok, just checker, checker here, rules management, rules management, input, export. It's ok. Interface, map designing. What about map designing, are there some constraints or requirements management attached?
1:05:04.0 PERSON 2	Let me check. I believe there were
1:05:11.3 PERSON 1	Oh yeah, the length of the roads.
1:05:14.0 PERSON 2	Oh yeah

1:05:14.6 PERSON 1	Stuff like- or
1:05:15.8 PERSON 2	Yeah, oh we did that in rules management as well. Or enough-
1:05:21.0 PERSON 1	No no no
1:05:21.3 PERSON 2	Oh no, ok, we're good
1:05:23.3 PERSON 1	So this is variation of length roads. Something like that
1:05:36.8 PERSON 2	Yeah, map designing, does that also include the design he basic appearance of the program
1:05:47.1 PERSON 3	Oh yes, I saw that
1:05:48.5 PERSON 2	Yeah
1:05:48.5 PERSON 3	But it doesn't include in any view. Maybe we can put on the [inaudible] like the document, cause there's-
1:05:54.9 PERSON 2	Because that says something about how the user creates a map, sets traffic lights, timing schemes and such. Some sort of interface of how they-
1:06:04.0 PERSON 3	]inaudible] this part
1:06:08.0 PERSON 1	[inaudible]
1:06:34.1 PERSON 3	I can't keep talking on it
1:06:35.2 PERSON 2	Ok
1:06:36.7 PERSON 1	Ok
1:06:38.5 PERSON 2	Are you going to design something actually about what I just said, or
1:06:42.1 PERSON 3	Yeah yeah
1:06:42.7 PERSON 2	Ok

1:06:42.7 PERSON 3	Just like the interface
1:06:44.8 PERSON 2	Yeah
1:06:46.1 PERSON 1	The GUI
1:06:48.1 PERSON 3	Yeah, because it really- on the here on the [inaudible] it says that we have to present our interface
1:06:53.3 PERSON 1	Yeah ok
1:06:53.9 PERSON 2	Yeah here's also an- with the desired outcomes
1:06:56.9 PERSON 3	Yeah [inaudible]
1:06:57.5 PERSON 1	Part one
1:06:58.8 PERSON 3	[inaudible] introduction maybe
1:07:00.6 PERSON 1	Ok, and then we can finish this
1:07:04.0 PERSON 2	Yeah
1:07:06.4 PERSON 3	Ok
1:07:09.4 PERSON 1	Ok this one is connected to the wall, and this one is- and this just- or also to the wall. Or just to [inaudible]
1:07:20.3 PERSON 2	Yeah I think to the wall
1:07:21.9 PERSON 1	Yeah
1:07:21.9 PERSON 2	Cause it's also says something about-
1:07:23.9 PERSON 1	And checker to this. So-
1:07:25.6 PERSON 2	Yeah yeah. Exactly.
1:07:28.0	And so- what's needed for real-time simulation, as functionalities.

PERSON 1	That's about concurrency eh
1:07:42.1 PERSON 2	Oh yeah
1:07:42.1 PERSON 1	So parallel processes, yeah, I don't know how to call them
1:07:48.9 PERSON 2	Yeah that's concurrency
1:07:52.4 PERSON 1	Maybe we can just call it concurrency functionalities
1:07:56.5 PERSON 2	Yeah concurrency elements or something
1:07:58.9 PERSON 1	Yeah oh yeah. Ok.
1:08:05.1 PERSON 2	Oh, that's so pretty
1:08:08.6 PERSON 3	The squares?
1:08:09.4 PERSON 2	Yeah [laugh]
1:08:12.1 PERSON 1	Ok. Oh it's really a lot of text to
1:08:22.7 PERSON 2	Yeah
1:08:25.1 PERSON 1	Complain complain
1:08:25.9 PERSON 2	Yeah [laugh]
1:08:34.1 PERSON 1	Current state of the intersection, yeah we did, oh here. Checker will also be updated. Change management
1:08:49.2 PERSON 2	Yeah
1:09:05.4 PERSON 1	Ok, I think we can start modelling. Let's check last time, the text
1:09:22.0 PERSON 2	First we- context
1:09:23.6 PERSON 1	Yeah

1:09:24.5 PERSON 2	Oh.
1:09:29.9 PERSON 1	In the context model we named like, existing software package. But is that the metric flux? What you said, or is that something else
1:09:41.1 PERSON 2	It's yeah, well-
1:09:43.3 PERSON 3	Yeah yeah yeah
1:09:44.0 PERSON 2	Yeah, but not only, because there can be multiple
1:09:46.3 PERSON 3	Can be a different model
1:09:47.2 PERSON 2	Yeah
1:09:49.1 PERSON 3	Modules
1:09:49.1 PERSON 1	Ok. So for context let's just
1:09:51.8 PERSON 3	Yeah just
1:09:52.3 PERSON 1	Have [inaudible] ok
1:09:53.9 PERSON 3	Pattern
1:09:54.9 PERSON 1	For in the document we can say, MT
1:09:58.0 PERSON 3	Yeah yeah yeah
1:09:58.5 PERSON 2	Yeah
1:09:58.9 PERSON 1	Metric flux in
1:10:00.3 PERSON 3	Exactly
1:10:06.3 PERSON 1	Functional yeah ok.
1:10:14.2	Did we actually have to make pictures of it and send it, or do it in

PERSON 2	visio. Because he said, we can just make pictures and email it
1:10:24.4 PERSON 1	Oh ok.
1:10:25.7 PERSON 2	In the lecture, in the introduction
1:10:28.9 PERSON 1	But then we need to draw it again
1:10:30.8 PERSON 2	Yeah yeah yeah
1:10:32.5 PERSON 1	Maybe it's better, it's faster
1:10:35.4 PERSON 2	Yeah
1:10:36.5 PERSON 1	Ok, but for now we have to check one last time, the text I think.
1:10:42.6 PERSON 3	Oh we are definitely going to do this in visio. We cannot do it in visio in 45 minutes
1:10:47.8 PERSON 1	No
1:10:47.8 PERSON 2	No
1:10:50.1 PERSON 1	Ok, and then we have to check consistency, and then stop recording and then-
1:10:56.2 PERSON 2	Yeah
1:10:57.1 PERSON 1	Yeah?
1:10:57.4 PERSON 2	Yeah
1:10:58.1 PERSON 1	Ok so
1:10:59.8 PERSON 2	But we have to record for two hours so we have 40
1:11:04.5 PERSON 1	No. it's maximum 2 hours
1:11:07.7 PERSON 2	Oh ok

1:11:09.0 PERSON 1	He said
1:11:09.8 PERSON 2	Oh ok
1:11:10.5 PERSON 1	Yeah. But to be sure that all requirements are in one of the views. Maybe they are just researching the motivation of students [laugh]
1:11:33.1 PERSON 3	Maybe we get- [laugh] yes definitely
1:11:47.7 PERSON 2	Oh wow, my laptop just turned off. Well- ok.
1:12:10.3 PERSON 3	What's direction-
1:12:40.9 PERSON 1	What's meant by variety of sequences. Is that about the shape?
1:12:49.4 PERSON 2	No I don't think so. Where was it
1:12:58.4 PERSON 1	Then I put-
1:12:58.9 PERSON 2	Yeah ok, so the interaction between the cars, from the intersection they can be a variety
1:13:08.4 PERSON 1	So then I add it in checker
1:13:12.3 PERSON 2	Yeah
1:13:13.6 PERSON 1	Yeah ok
1:13:14.2 PERSON 2	It can be a part of checker yes. Cause what was in checker again? It was about the density
1:13:33.5 PERSON 1	Yeah
1:13:33.5 PERSON 2	So we also have to specify that it also has variety of sequences. So that sometimes two cars, and three cars from the right, and then one car, and one car from the left or something
1:13:46.2 PERSON 1	Yeah, but then we specify-
1:13:48.5 PERSON 2	Oh we can also make-

1:13:49.6 PERSON 1	Like the behaviour
1:13:50.5 PERSON 2	Yeah
1:13:51.9 PERSON 1	And then change management to update
1:13:55.4 PERSON 2	Oh yeah
1:13:56.4 PERSON 1	And the metric flux checker is about what [inaudible]
1:14:01.6 PERSON 2	Mhm yeah I thought maybe we can also make a module about variety or something.
1:14:10.1 PERSON 1	Separate module?
1:14:10.9 PERSON 2	Yeah
1:14:11.4 PERSON 1	Yeah but I have now
1:14:13.5 PERSON 2	Ok
1:14:14.6 PERSON 1	So like, behaviour and then variety
1:14:16.6 PERSON 2	Oh yeah, I see it, ok.
1:14:21.8 PERSON 3	That's why it's called the [inaudible] like
1:14:23.0 PERSON 1	Yeah, we have to- think so
1:14:25.0 PERSON 2	Mm? what did you say
1:14:26.3 PERSON 3	How it's called the [inaudible] system, the main system
1:14:28.8 PERSON 2	Yeah
1:14:30.9 PERSON 1	It doesn't have a name
1:14:36.0	Traffic signal simulator

PERSON 2	
1:14:39.2 PERSON 3	Yeah, traffic simulation
1:14:42.1 PERSON 1	TSS [laugh]
1:14:43.5 PERSON 3	TSS
1:14:44.9 PERSON 1	Yeah, TSS system nice. T triple S
1:14:54.3 PERSON 3	TSS one point zero
1:14:59.6 PERSON 2	But who says this is the first version
1:15:03.0 PERSON 1	Yeah, it's our version
1:15:04.7 PERSON 2	Ok. did you check all the-
1:15:15.7 PERSON 3	[inaudible]
1:15:15.8 PERSON 1	Yeah, almost. Yeah, I think we have-
1:15:51.0 PERSON 3	Can I put simulation
1:15:52.1 PERSON 1	But this is the desired outcome, so you must design the basic structure of the code. That's the functional view now, but it's a bit
1:16:01.9 PERSON 3	It's a little bit [inaudible]
1:16:03.4 PERSON 1	Yeah ok, you should focus on the important design decisions that form the foundation for the implementation. So it's about the foundation, not really in detail
1:16:15.6 PERSON 2	No
1:16:20.0 PERSON 1	Ok
1:16:23.7 PERSON 2	Yeah. I already made the three lanes, for the context. Shall we start with the context?
1:16:34.9	To draw?

PERSON 1	
1:16:35.6 PERSON 2	Yeah
1:16:36.6 PERSON 1	But when we start drawing we can stop recording
1:16:38.5 PERSON 2	Oh ok. Do we have to say something more. Are we done actually? Or do they actually also wanna know how we include the notation and such, because-
1:16:53.3 PERSON 1	No they also get the documents, so they can see
1:16:56.3 PERSON 2	Yeah ok, but maybe how we come up with the- I don't know. No? isn't necessary?
1:17:02.9 PERSON 3	Mm
1:17:04.2 PERSON 1	It's just use UML notation, for all
1:17:07.0 PERSON 2	For all?
1:17:08.6 PERSON 1	No, and lifecycle model, and petri net. No, no petri net
1:17:14.9 PERSON 2	Perhaps petri net. Ok, shall we- shall I just?
1:17:19.4 PERSON 1	Yeah
1:17:19.9 PERSON 2	Ok