Group 08 Transcript

Test group, Student experiment

All participants are male

Bad audio

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|  | First Recording 88:56 |
| 0:00:03.5  PERSON 1 | Ok so, let’s start with the context view |
| 0:00:05.0  PERSON 2 | [inaudible] view |
| 0:00:06.0  PERSON 1 | We have already our requirements listed over here, in Google docs |
| 0:00:09.3  PERSON 2 | Yes |
| 0:00:10.8  PERSON 1 | So, it might be a good idea to start with the most abstract view then, alright? Yeah, the context view, you opened up visio. Is it ready? Yeah, let’s start in visio |
| 0:00:21.4  PERSON 3 | So, who are the stakeholders first |
| 0:00:23.9  PERSON 1 | Yeah, yeah I think that [inaudible] so the course, what? |
| 0:00:28.8  PERSON 2 | The core system or something? That we need to design, maybe |
| 0:00:43.5  PERSON 1 | Yeah, we can of course use the thing again right, the- what’s it called- the use case diagram and notation. Well, part of the use case diagram notation [inaudible] |
| 0:00:59.6  PERSON 3 | But how do you do that? |
| 0:01:01.2  PERSON 2 | Yeah [inaudible] |
| 0:01:01.7  PERSON 1 | No, [inaudible] find the right shapes |
| 0:01:04.2  PERSON 3 | Ok |
| 0:01:05.3  PERSON 2 | Did you search some use case diagram? |
| 0:01:08.4  PERSON 3 | So what database in the software and- |
| 0:01:10.6  PERSON 1 | Typing in use case [inaudible] |
| 0:01:14.1  PERSON 3 | This one? |
| 0:01:17.6  PERSON 2 | The system boundary right? Yeah exactly, yeah. [inaudible] that on. And then maybe if we want to model software packages or some, then we need to- we can also model them maybe as systems then or, maybe basic shapes or something. |
| 0:01:36.5  PERSON 1 | Yeah |
| 0:01:38.3  PERSON 2 | The thing itself, the system itself is the system scope then right? And then from UML. Yeah, these are the packages, and these are then actors right? |
| 0:01:51.5  PERSON 3 | Mm |
| 0:01:54.8  PERSON 2 | So what do we have, the, yeah, core system then. The core traffic light simulation system right |
| 0:02:02.0  PERSON 1 | Yeah, that’s the base system yeah |
| 0:02:04.8  PERSON 3 | Traffic simulation. Traffic signal simulator |
| 0:02:09.0  PERSON 2 | Yeah |
| 0:02:09.4  PERSON 1 | Traffic signal simulation. |
| 0:02:12.2  PERSON 2 | Core system. Ok. And then of course actor, and one the actors is the student. So this might be a student. Developer as well [inaudible] |
| 0:02:28.8  PERSON 3 | Yeah, so did we [inaudible], because- |
| 0:02:31.5  PERSON 1 | Developers can be a stakeholder. Not sure |
| 0:02:36.5  PERSON 3 | Yeah, you said that |
| 0:02:38.9  PERSON 2 | Yeah yeah, it’s for later on, for really developing a system |
| 0:02:41.4  PERSON 3 | Beside me ok |
| 0:02:42.4  PERSON 1 | Yeah |
| 0:02:43.1  PERSON 3 | To present your design you attempt to- |
| 0:02:50.0  PERSON 1 | The professor might be a stakeholder |
| 0:02:52.9  PERSON 2 | Exactly, that’s a good one |
| 0:02:54.3  PERSON 3 | Mhm |
| 0:02:55.5  PERSON 1 | Professor E |
| 0:03:01.6  PERSON 3 | So we put the name E |
| 0:03:03.9  PERSON 1 | Yeah, professor E |
| 0:03:07.2  PERSON 3 | Professor E, it’s like a [inaudible] and then? Scenario |
| 0:03:23.8  PERSON 1 | Yeah you have existing software |
| 0:03:24.6  PERSON 3 | Existing software package, that should |
| 0:03:28.9  PERSON 2 | Yeah well, that could be an assumption of course that people make, but you could do that. For example is, you have a separate software package, or software functionality that supports simulation functionality. If you really want to calculate, like, queuing times and things like that, then you need software, you need functionality for that right? Yeah. So I – put in that, just support system in that, maybe? That was- |
| 0:04:02.0  PERSON 1 | Yeah, and also the operating system |
| 0:04:05.0  PERSON 2 | Yeah, [inaudible] yeah |
| 0:04:12.5  PERSON 1 | And then, does it matter what type, windows, mac or linux. |
| 0:04:17.9  PERSON 2 | Depends on what you- yeah well- |
| 0:04:20.1  PERSON 1 | Do we believe that this is a requirement? |
| 0:04:22.9  PERSON 2 | Because if you really have to, yeah, that should be cross platform right. Then we also should model like it should run on- |
| 0:04:31.4  PERSON 1 | Should it run on Java maybe or something, or- |
| 0:04:34.3  PERSON 2 | But that’s not- yeah well, that’s not really said, anything about where the system runs, or about, or yeah, on what operating system it should run |
| 0:04:46.9  PERSON 3 | Mhm sure enough |
| 0:04:51.4  PERSON 1 | Yeah |
| 0:04:53.7  PERSON 2 | Yeah, yeah maybe, can’t that one instead of queuing system, just yeah, statistical package or statistical- cause there are more things that can be supported in the simulation right? |
| 0:05:04.0  PERSON 1 | Yeah |
| 0:05:04.0  PERSON 3 | Yeah same package |
| 0:05:12.4  PERSON 1 | And maybe the model, the operating system, package everyone. For example, one windows, package one for macOSX, and one for unix based [inaudible] |
| 0:05:22.5  PERSON 2 | Yeah |
| 0:05:25.3  PERSON 3 | You mean, so there are multi or |
| 0:05:29.3  PERSON 3 | Yeah, then we have three operating system components |
| 0:05:35.8  PERSON 3 | With different box? |
| 0:05:36.7  PERSON 1 | Yeah |
| 0:05:38.9  PERSON 3 | Ok. Or should we do that |
| 0:05:42.2  PERSON 1 | So one is for windows, one for macOSX and one for linux |
| 0:06:03.8  PERSON 3 | Ok |
| 0:06:14.1  PERSON 1 | Ok. Are there any other stakeholders here, or elements in the environment. |
| 0:06:25.9  PERSON 2 | Yeah, I was thinking maybe since professor E is, of course part of the civil engineering department but, yeah, should you model that really as a stakeholder. I have a bit of doubts about that |
| 0:06:38.9  PERSON 1 | You mean the department itself or the infra |
| 0:06:40.7  PERSON 2 | Yeah, for example yeah. The department itself, what else would a stakeholder mean. Alright, now it’s noted that professor E of course teaches that course, but might be of course that- |
| 0:06:50.2  PERSON 1 | Mhm |
| 0:06:51.1  PERSON 2 | That other people also have an interest in the system. Someone in the department or someone [inaudible], and might be another actor but maybe a- yeah well, unless the case is described. One doesn’t doubt that you should adopt that one as an actor right? I mean, yeah |
| 0:07:18.9  PERSON 1 | Yeah the department might ask additional environments |
| 0:07:22.2  PERSON 2 | Yeah |
| 0:07:23.8  PERSON 1 | But those are not stated here, this description, so I think we should just leave them out |
| 0:07:28.4  PERSON 2 | Yeah, I just leave it with the professor E then. |
| 0:07:30.7  PERSON 1 | Yeah |
| 0:07:31.8  PERSON 2 | Ok. I think our, context diagram right, could be [inaudible] editor- |
| 0:07:40.1  PERSON 3 | We have students, software developers, professor E [inaudible] system and the [inaudible] |
| 0:07:49.4  PERSON 2 | Yeah maybe besides the [inaudible] pack, also simulation package or something? I think that can also [inaudible] yeah |
| 0:08:00.0  PERSON 1 | This is always statistical to simulate- |
| 0:08:02.3  PERSON 2 | Yeah but there should be changes done right? |
| 0:08:05.1  PERSON 1 | Yeah |
| 0:08:05.1  PERSON 2 | The simulation package. Because in fact the simulation that encompass, like of course queuing [inaudible] but also like random number generators and things like that right. So that’s more than just, yeah, just simulation package. If you call it like that then we are, yeah, of course already assuming that a lot of package is used, but I think that’s, yeah, an assumption |
| 0:08:24.3  PERSON 3 | We can explain in the glossary |
| 0:08:27.4  PERSON 2 | Yeah. And also for later on, if a sub sequence is used for example, if we want to denote, like ok, for example, we want to make the information viewpoint or something. We want to denote the information flow for example, then we could also move that, like ok, like now is an [inaudible] is already used or something like that. We still need to look at that but [inaudible] I think, right yeah? |
| 0:08:55.8  PERSON 1 | Yeah [inaudible] |
| 0:09:02.6  PERSON 2 | Save it |
| 0:09:08.3  PERSON 1 | Ok then move on to the, functional viewpoint |
| 0:09:09.3  PERSON 2 | Yes the functional viewpoint, yeah. Next one. There are at least three to be made right? Do we have to- there’s a functional [inaudible] now let’s hope that we won’t have any trouble with visio [laugh] |
| 0:09:40.5  PERSON 3 | So, functional. The first things for the- what is the main [inaudible] |
| 0:09:46.1  PERSON 2 | Yeah the products group you mean |
| 0:09:47.6  PERSON 3 | Yeah, products group |
| 0:09:48.5  PERSON 2 | Yeah, so the products group is in this case of course the system itself. So we should [inaudible] a sort of broad overview because we have to discover our requirements of course |
| 0:10:03.8  PERSON 1 | Yeah, so there is- |
| 0:10:06.2  PERSON 3 | What is the [inaudible] yeah, maybe we can draw a map |
| 0:10:12.3  PERSON 2 | Yeah, so the requirements, maybe we can just put it- |
| 0:10:15.9  PERSON 1 | Yeah, there’s a [inaudible] visualization? |
| 0:10:18.1  PERSON 3 | Yeah visualization, maybe that’s the correct word [inaudible] |
| 0:10:31.3  PERSON 2 | So in fact what you could do, for example, is [inaudible], these are in fact are already all separate modules right? |
| 0:10:44.3  PERSON 1 | Yeah. You mean the behaviour of traffic lights, simulation of traffic flows and visualization. And traffic density |
| 0:11:07.2  PERSON 3 | [inaudible] put in the traffic |
| 0:11:09.5  PERSON 2 | Yeah, oh wait, you can also do like this, and then like this, you have for example |
| 0:11:17.1  PERSON 3 | Create the visual map? Yeah from visualization |
| 0:11:23.3  PERSON 2 | So yeah for example, [inaudible] yeah, a separate module then write it. There’s no functionality in the system then of course. So you have sort of a draw functionality then |
| 0:11:34.9  PERSON 1 | Mhm |
| 0:11:37.1  PERSON 2 | That’s for the visual map, you should be able to create the visual map but- |
| 0:11:42.9  PERSON 3 | And the traffic [inaudible] here? |
| 0:11:48.6  PERSON 1 | Yeah I was thinking is it a computer application, or a web-based application. It doesn’t really say- |
| 0:11:57.4  PERSON 2 | It doesn’t really no, it was between the computer right? Or did they say something- |
| 0:12:01.8  PERSON 1 | That might be a point for the context diagram as well, the context viewpoint. And also- |
| 0:12:06.1  PERSON 2 | Yeah that’s true |
| 0:12:12.5  PERSON 3 | What is the benefits if we put a web application, so it- do we |
| 0:12:18.0  PERSON 2 | I think it’s more accessible |
| 0:12:20.8  PERSON 3 | Yeah, we can- |
| 0:12:21.1  PERSON 2 | Multiple platforms |
| 0:12:22.3  PERSON 3 | Mhm |
| 0:12:24.0  PERSON 2 | Yeah but that also would have better context viewpoint I mean |
| 0:12:26.0  PERSON 1 | Yeah |
| 0:12:27.2  PERSON 2 | So, but yeah that is the thing that- yeah well, not described in this. So I think that you just make- choose your own interpretation of that maybe, but- |
| 0:12:39.6  PERSON 1 | Yeah ok, what do we choose then. |
| 0:12:42.6  PERSON 2 | I would say then we also have a web application right? |
| 0:12:46.1  PERSON 3 | Then we can leave the operating system in to just [inaudible] |
| 0:12:51.8  PERSON 2 | But the we still need to add maybe- |
| 0:12:53.9  PERSON 1 | Yeah browsers |
| 0:12:54.8  PERSON 2 | Browser. So yeah, then you have a client of course as well for example |
| 0:13:01.0  PERSON 1 | [inaudible] is the student |
| 0:13:03.1  PERSON 2 | Yeah, and the student then yeah, [inaudible] and of course, yeah, a server and things like that. But that should be added then also in the context diagram right? |
| 0:13:13.5  PERSON 1 | Yeah, and then leave out operating systems, I think |
| 0:13:18.0  PERSON 2 | Yeah and then later on we also might be able to make deployment [inaudible] or something maybe also, based on that. Yeah well |
| 0:13:26.8  PERSON 1 | Yeah, let’s just stick to the context, functional and information |
| 0:13:32.0  PERSON 2 | Yeah, and deployment also wouldn’t make any [inaudible] in this case. It’s true |
| 0:13:39.8  PERSON 1 | And I think we have to make an assumption that every browser renders the output the same. |
| 0:13:46.1  PERSON 3 | Mhm |
| 0:13:46.7  PERSON 1 | Do not care about the differences in the browsers, and then we just have one browser as an actor in the environment. Right? |
| 0:13:57.8  PERSON 2 | Yes. Then we should also maybe differentiate right. Because the student interacts then with the browser, as of course- |
| 0:14:11.4  PERSON 1 | Or that the student interacts with some type of device, whether it is mobile or- it doesn’t matter. And then the device is a browser, and the browser interacts with our application |
| 0:14:20.8  PERSON 2 | [inaudible] yeah. But we can model that in a context model as well right? |
| 0:14:24.4  PERSON 1 | Yeah. Actually I should change that now |
| 0:14:27.7  PERSON 3 | So - |
| 0:14:28.1  PERSON 2 | Just a [inaudible] system, get rid of that one |
| 0:14:35.1  PERSON 3 | We just leave |
| 0:14:35.6  PERSON 2 | Just call it [inaudible] maybe. We also make dependency relationship here then, for example |
| 0:14:45.8  PERSON 1 | Yeah but, through the browser right, and not directly to the system |
| 0:14:50.6  PERSON 2 | [inaudible] yeah |
| 0:14:52.1  PERSON 3 | Student [inaudible] |
| 0:14:53.4  PERSON 2 | Can you rename [inaudible] to browser? And point operating system to the browser? That might already be out of scope but- yeah and the student interacts with- |
| 0:15:20.7  PERSON 3 | The browser |
| 0:15:21.6  PERSON 2 | With the device actually |
| 0:15:23.3  PERSON 1 | Yeah |
| 0:15:23.9  PERSON 2 | You should also model that so- we need to rename windows to device |
| 0:15:29.9  PERSON 3 | To device, so the device is- |
| 0:15:33.1  PERSON 2 | So use another thing for that maybe? |
| 0:15:35.9  PERSON 3 | Mhm |
| 0:15:36.8  PERSON 2 | Another |
| 0:15:38.3  PERSON 1 | Another type of- |
| 0:15:38.6  PERSON 2 | [inaudible] yeah |
| 0:15:41.2  PERSON 3 | From the process |
| 0:15:43.5  PERSON 2 | Yeah. Can I change something. I want to point- |
| 0:15:46.6  PERSON 3 | And maybe this one |
| 0:15:47.8  PERSON 2 | Yeah. To the device, and then the device points to operating system, and then- |
| 0:16:02.0  PERSON 3 | [inaudible] |
| 0:16:04.0  PERSON 1 | Yeah |
| 0:16:05.2  PERSON 2 | And then the operating system to signal, simulation, that arrow should be removed. Cause there is no direct relationship |
| 0:16:13.9  PERSON 3 | Ok. This one? |
| 0:16:15.0  PERSON 2 | Yeah. Yes |
| 0:16:22.6  PERSON 3 | Something like this? |
| 0:16:27.2  PERSON 2 | I would say that, yeah, well, maybe the client- or the student interacts with the browser right? |
| 0:16:35.8  PERSON 3 | Oh yeah |
| 0:16:37.6  PERSON 2 | And the browser runs on the device and the device has an operating system, but you could also model these as a dependency or- |
| 0:16:44.8  PERSON 1 | Nah, a dependency maybe |
| 0:16:47.6  PERSON 3 | [inaudible] for something like this. Also these, [inaudible] to operating system and then to device |
| 0:17:00.1  PERSON 2 | Yeah |
| 0:17:02.9  PERSON 1 | Should play the card game |
| 0:17:04.8  PERSON 2 | Yeah is it already time for- |
| 0:17:05.9  PERSON 1 | It’s time |
| 0:17:06.6  PERSON 2 | Ok |
| 0:17:07.4  PERSON 1 | For the card game |
| 0:17:08.4  PERSON 2 | Then we should do that. Ok so, the card game then. Anybody has a pen or something, or pencil or- |
| 0:17:22.9  PERSON 1 | Yeah |
| 0:17:25.5  PERSON 2 | Also [Person 1] you want a – you already have a pen? |
| 0:17:26.7  PERSON 1 | Yeah |
| 0:17:28.5  PERSON 3 | I still have one |
| 0:17:30.3  PERSON 2 | [inaudible] this one. We can start play the card game |
| 0:17:52.2  PERSON 1 | So we need to discuss the context |
| 0:17:54.6  PERSON 2 | Yes and I think that the way that it is right now we can- you do that, we have already discussed the matter or- |
| 0:18:01.9  PERSON 1 | [inaudible] context design. Yeah we already did some parts in the discussion |
| 0:18:06.3  PERSON 2 | Yeah that’s true. But the we first start with the context right, and then- ok the context. The context is about design [inaudible] requirements, what assumptions there are made. Ok. |
| 0:18:29.2  PERSON 3 | The [inaudible] has context of the design |
| 0:18:40.1  PERSON 1 | Ok so- Put down the context card |
| 0:18:43.3  PERSON 2 | So, ok, what time is it then? Time is like 18 minutes right? 18 minutes of |
| 0:18:55.6  PERSON 3 | Yeah, could [inaudible] |
| 0:19:12.2  PERSON 2 | Ok so, the, first. So first we need to discuss our assumptions then right? So what assumptions are made in the context diagram. |
| 0:19:20.3  PERSON 1 | Oh do you- yeah then you have to put down the assumption card |
| 0:19:23.2  PERSON 2 | Yes |
| 0:19:24.8  PERSON 1 | And it- assumption that it is a web-based application |
| 0:19:30.3  PERSON 2 | Exactly. We made another assumption that a simulation package is used of course |
| 0:19:36.8  PERSON 1 | Yeah |
| 0:19:37.9  PERSON 2 | So these are the assumptions- |
| 0:19:44.3  PERSON 1 | To reduce the coding that’s needed by the developers to reuse certain |
| 0:19:49.7  PERSON 2 | Exactly |
| 0:19:50.4  PERSON 1 | And also for the- |
| 0:19:52.3  PERSON 3 | [inaudible] |
| 0:19:52.3  PERSON 2 | And also when it is web-based, it’s really platform made [inaudible] it also holds for example, mobile devices like that can be used for it |
| 0:20:00.0  PERSON 1 | Yeah also with travelling you can use this application |
| 0:20:05.1  PERSON 3 | But maybe we saw that [inaudible] something, some [inaudible] doesn’t apply to the sub process. Like [inaudible] |
| 0:20:17.2  PERSON 2 | Yeah. Yeah ok. Assumptions could of course be a HTML 5 right now. Right, I mean, flash wouldn’t be an option because then all [inaudible] |
| 0:20:27.3  PERSON 1 | Certainly not flash, so |
| 0:20:31.2  PERSON 2 | HTML 5 yeah? Information would of course [inaudible] constraints or risk or trade-offs, we have to make- a risk might be of course that- of course there is a [inaudible] so while you are travelling. For example, when you have an older device that could be a problem of course. So then you couldn’t use the navigation maybe, the- well, [inaudible] right? |
| 0:21:07.9  PERSON 1 | What do you mean exactly? For example. |
| 0:21:10.8  PERSON 2 | Yeah well, for example, if you are travelling and you want to use the application. You want to use the traffic simulator, then of course that might be the case that your device is not suitable for it. For example. So, on the other hand- |
| 0:21:26.0  PERSON 1 | Of it doesn’t have enough capability to compute- |
| 0:21:27.8  PERSON 2 | Exactly |
| 0:21:28.5  PERSON 1 | Or do the simulation, yeah |
| 0:21:29.0  PERSON 2 | Exactly yeah |
| 0:21:30.1  PERSON 1 | Yeah, I thought about that as well |
| 0:21:32.0  PERSON 2 | Yeah, so that might be a risk of course by doing it in the [inaudible] it might be slow. It might be slow on a smartphone, so that |
| 0:21:39.9  PERSON 1 | Yeah. |
| 0:21:40.2  PERSON 3 | You have to be online? You cannot [inaudible] |
| 0:21:44.1  PERSON 2 | Yeah |
| 0:21:45.2  PERSON 1 | Yeah |
| 0:21:47.5  PERSON 3 | Yeah, you can find wifi everywhere |
| 0:21:50.3  PERSON 1 | It’s everywhere, so network |
| 0:21:53.3  PERSON 2 | Yeah. I’ve also written it down, because this also might be a sort of trade-off then. |
| 0:21:57.3  PERSON 1 | Yeah, it’s a risk and a trade-off I would say |
| 0:21:59.3  PERSON 2 | Alright yeah. Exactly. Risk might be, also, of course the case. Are there any other risks that maybe- looking at our context model right now [inaudible] yeah of course you want it to be dependent on a separate package of course, this [inaudible] package is a separate package. By another vendor of course |
| 0:22:27.4  PERSON 1 | Yeah, what functionality does that- vendor offers |
| 0:22:30.9  PERSON 2 | Yeah |
| 0:22:32.4  PERSON 1 | We have no concrete example of such a package |
| 0:22:35.9  PERSON 2 | Exactly yeah, and if it turns out for example, that certain functionalities are, yeah, duplicated or [inaudible] and because, yeah, you can’t manage it yourself of course right? |
| 0:22:47.7  PERSON 1 | Yeah |
| 0:22:48.2  PERSON 2 | So that might be a risk |
| 0:22:49.6  PERSON 1 | So it might not be a good idea to- |
| 0:22:51.4  PERSON 2 | Exactly we made an assumption of course |
| 0:22:55.9  PERSON 1 | You said it was a trade-off that we- just for a web-based application |
| 0:23:00.4  PERSON 2 | Exactly yeah |
| 0:23:01.3  PERSON 1 | It might be easier to develop because we have just one output, to web, and then almost a device as a web-browser |
| 0:23:09.6  PERSON 3 | Mhm |
| 0:23:09.6  PERSON 2 | Yeah |
| 0:23:11.3  PERSON 1 | Yeah, it’s a risk that you need internet, and you need enough computing capabilities in your device to run the simulation at all. And then, it is a risk- |
| 0:23:26.6  PERSON 2 | Maybe we should write this down by the way or we won’t [inaudible] |
| 0:23:28.0  PERSON 3 | Oh yeah yeah |
| 0:23:29.8  PERSON 2 | Because if we document it later on- |
| 0:23:31.1  PERSON 1 | Yeah, so first the trade-off card |
| 0:23:33.7  PERSON 2 | Yeah. So trade-off card, and then the risk card, where’s the trade-off card again, I guess |
| 0:23:50.4  PERSON 1 | Yeah, I can write it down, it makes sense to me. So, consider risk to depend on an external company to provide functionality |
| 0:23:58.1  PERSON 2 | Yeah, that’s really a risk of course. That is something- I would say a trade-off is of course doing it through internet, having it supported. But it might be slow on the [inaudible]. Right, that can be trade-off. |
| 0:24:08.3  PERSON 1 | Yeah |
| 0:24:08.8  PERSON 2 | So |
| 0:24:09.3  PERSON 1 | So I think it’s better to do web-based game because the benefits outweigh the possible disadvantages |
| 0:24:21.1  PERSON 2 | That’s true. And also the things in functionality like the queuing functionality and stuff like that. You can also maybe program it yourself then right? |
| 0:24:29.4  PERSON 1 | Yeah or maybe focus on some open source depository somewhere |
| 0:24:33.4  PERSON 2 | Yeah |
| 0:24:35.7  PERSON 1 | Just maintain it yourself which is also some additional work but, already some work is done by the community |
| 0:24:42.8  PERSON 2 | Exactly |
| 0:24:43.9  PERSON 1 | So that was five minutes of card game |
| 0:24:46.0  PERSON 2 | Ok so then we had the first session |
| 0:24:48.1  PERSON 1 | Continue to fuctional? |
| 0:24:49.9  PERSON 2 | Functional, the FAM |
| 0:24:52.0  PERSON 1 | To the FAM |
| 0:24:52.7  PERSON 2 | Ok everything that is in context right now, still holds right? I mean everything is- cause right now we have to do this, the packages, yeah, could be of course interpreted in a more abstract way then |
| 0:25:04.9  PERSON 1 | Yeah |
| 0:25:05.6  PERSON 2 | And students goes to the browser, to the traffic simulator and thereby uses an operating system to- |
| 0:25:12.5  PERSON 1 | Why do we go through the browser and not to the device |
| 0:25:16.8  PERSON 2 | Yeah, yeah |
| 0:25:16.8  PERSON 1 | Cause the user, the student uses a device, not directly to a browser [inaudible] it’s just a piece of software |
| 0:25:22.7  PERSON 2 | Exactly yeah |
| 0:25:24.6  PERSON 1 | So I would point it to the device then |
| 0:25:26.4  PERSON 2 | Yeah [inaudible] yeah because the first user uses the device, and on the device is the browser |
| 0:25:31.0  PERSON 1 | Yeah, it might be out of scope but |
| 0:25:32.9  PERSON 2 | Yeah but we can do that. Client- |
| 0:25:38.6  PERSON 3 | But the [inaudible] browser is eh? |
| 0:25:44.8  PERSON 2 | But then maybe you could say, like the, yeah, yeah. So there’s a device, operating system- |
| 0:25:52.9  PERSON 3 | And is there connector, it’s only in the upper layer, yeah. Or just by using the browser they interact with the application through the browser app |
| 0:26:02.2  PERSON 1 | Yeah but then we should only- we can connect the student to the browser, but then divide the device and operating system, but that might be out of scope |
| 0:26:10.1  PERSON 3 | Mhm |
| 0:26:11.3  PERSON 1 | Because we only depend on that there is a browser available, and it doesn’t really matter what the operating system is. So then just leave device and operating system out |
| 0:26:22.3  PERSON 2 | Then just connect to the browser directly |
| 0:26:26.5  PERSON 3 | So the- bit like this? |
| 0:26:28.9  PERSON 2 | Yeah |
| 0:26:29.1  PERSON 1 | And then move the other one around |
| 0:26:30.8  PERSON 2 | Yeah I think you’re right also. Ok, so this is the context view then? If we might have other things, we can still add it right? |
| 0:26:37.2  PERSON 1 | Yeah |
| 0:26:38.4  PERSON 2 | Shall we go to the FAM |
| 0:26:38.9  PERSON 1 | Yeah sure |
| 0:26:40.0  PERSON 2 | Shall we first go to the FAM and then we can still- |
| 0:26:42.4  PERSON 1 | Yeah move on to the- |
| 0:26:43.9  PERSON 2 | Decide what to do later on. Yeah. Ok, so then requirements also here right. Ok. You already started to model it heh [Person 3] |
| 0:26:54.9  PERSON 3 | Yeah this is the basic flow, maybe the first thing is to create the visual map and then set the traffic via the [inaudible] configuration. And maybe in the application can [inaudible] simulation [inaudible] there will be a [inaudible] condition or something like that. And then the last thing is for the simulation itself. Like the way we do in petri net, we can, step by step right? |
| 0:27:27.8  PERSON 2 | Mhm |
| 0:27:28.3  PERSON 1 | Yeah |
| 0:27:30.7  PERSON 3 | Step by step [inaudible] I don’t know |
| 0:27:35.2  PERSON 2 | [inaudible] step by step simulation, yeah you can walk through it yeah |
| 0:27:39.1  PERSON 3 | Mhm |
| 0:27:39.8  PERSON 2 | And then at each intersection what happens right now and what’s the- is there for example a traffic jam right now etcetera. Is that the system then calculates. Ok, this is based on the main requirements right, then? |
| 0:27:54.5  PERSON 3 | Yeah but [inaudible] |
| 0:27:54.8  PERSON 2 | We have a visual map, we have- [inaudible] of the traffic lights |
| 0:28:02.9  PERSON 1 | Yeah |
| 0:28:03.4  PERSON 3 | Yeah, number four |
| 0:28:04.3  PERSON 1 | Traffic [inaudible] |
| 0:28:05.1  PERSON 2 | Yeah traffic light behaviour, yeah |
| 0:28:09.0  PERSON 3 | So it’s three, or maybe also part of the traffic behaviour |
| 0:28:12.7  PERSON 2 | Changes the traffic density, yeah, that is also part of the traffic behaviour then [inaudible] |
| 0:28:19.5  PERSON 1 | Yeah |
| 0:28:20.9  PERSON 2 | Observe any problems with their time schemes- ok this could be then- sort of an |
| 0:28:30.2  PERSON 1 | Yeah well- |
| 0:28:31.1  PERSON 2 | [inaudible] any system, problems with their map, timing scheme. Yeah, this is sort of an evaluation I’d say or, yeah |
| 0:28:42.8  PERSON 1 | Yeah, we have evaluate simulation there |
| 0:28:44.8  PERSON 2 | Yeah but, simulation, what would you- what is your understanding of evaluate simulation then. That must be clear I guess. Yeah. Cause here they say like, for example, [inaudible] |
| 0:29:05.1  PERSON 3 | [inaudible] |
| 0:29:07.5  PERSON 2 | Yeah |
| 0:29:07.5  PERSON 3 | We still have- |
| 0:29:09.0  PERSON 2 | So students should be able to observe nay problems with their maps timing scheme. [inaudible] the results of the change of the traffic. So that could be of course, an evaluation functionality or something |
| 0:29:21.9  PERSON 1 | Yeah, but there’s also part of the visualization because the student only sees the visualization. |
| 0:29:36.7  PERSON 3 | Maybe it’s [inaudible] to move this first. Otherwise we can make- |
| 0:29:43.0  PERSON 1 | Yeah, remove the- |
| 0:29:51.5  PERSON 3 | Secondly, we have to make the traffic behaviour and- |
| 0:29:55.0  PERSON 1 | Maybe add traffic density inside this one? |
| 0:29:59.4  PERSON 2 | Yes yes yes |
| 0:30:00.8  PERSON 1 | Inside the traffic behaviour |
| 0:30:02.8  PERSON 3 | Cause that’s part of [inaudible] |
| 0:30:06.2  PERSON 1 | So traffic behaviour is the main [inaudible] then |
| 0:30:09.1  PERSON 2 | Exactly. We can later on zoom in on this one right. As a sub module view or something |
| 0:30:15.3  PERSON 1 | Yeah when necessary, but we can also relate it right here. And there’s only one sub module. What else belongs to behaviour? |
| 0:30:25.8  PERSON 2 | Yeah, we have traffic light behaviour as well, right? Traffic behaviour, traffic light behaviour |
| 0:30:31.0  PERSON 1 | Yeah that, and- |
| 0:30:32.5  PERSON 2 | Intersections |
| 0:30:33.0  PERSON 1 | That part should be called behaviour as a general something I think, and then |
| 0:30:39.9  PERSON 2 | Yeah true |
| 0:30:40.3  PERSON 1 | Density, and then traffic light behaviour |
| 0:30:50.2  PERSON 2 | Simulate traffic flow [inaudible] |
| 0:30:55.8  PERSON 3 | Traffic light |
| 0:30:56.9  PERSON 2 | Traffic light behaviour. Ok. |
| 0:31:07.4  PERSON 3 | Ah, I’m stuck, please, don’t make us |
| 0:31:19.4  PERSON 1 | Yeah, maybe traffic density is more of a property of traffic behaviour |
| 0:31:26.5  PERSON 3 | oh, this is the properties |
| 0:31:27.8  PERSON 2 | yeah, and now the traffic density, maybe we name that traffic behaviour |
| 0:31:32.8  PERSON 3 | Mhm |
| 0:31:44.0  PERSON 1 | [inaudible] to just behaviour |
| 0:31:48.7  PERSON 2 | Then we may have to zoom in |
| 0:31:52.2  PERSON 1 | But I can also just check like, [inaudible] on the behaviour aspect and then the [inaudible] relations or something. Yeah, they are not really, yeah, relations |
| 0:31:58.6  PERSON 3 | So then that means- |
| 0:32:00.7  PERSON 2 | There are really two separate functionalities of course, well, traffic behaviour and traffic light behaviour yeah |
| 0:32:07.0  PERSON 1 | Yeah. Cause traffic behaviour also includes the density and [inaudible] |
| 0:32:14.1  PERSON 3 | Yeah |
| 0:32:14.1  PERSON 2 | Yeah |
| 0:32:18.8  PERSON 3 | Left hand turn [inaudible] we cannot forget that during the simulation students can change the condition, the density and such. Everything’s changed |
| 0:32:32.9  PERSON 2 | Yeah exactly, yeah yeah . That is an effect |
| 0:32:38.4  PERSON 3 | Such like traffic light changing, but how to put it |
| 0:32:44.9  PERSON 2 | Because the FAM is still quite high-level right, I mean, you could say for example like- cause these effect right now, we don’t have any arrows [inaudible] also, yeah. Behaviour and then density, ok, so that you have a sort of process. For example, the student first creates a map, then he sets the right parameters in fact, then eventually he runs the simulation then. |
| 0:33:20.5  PERSON 3 | Maybe something [inaudible] so after running the simulation they still can change the parameters and then effect the simulation |
| 0:33:36.2  PERSON 2 | Yeah, but then they need to run the simulation again right. So I would say that you, you have the visual map then, then you have the behaviour. From behaviour you go to run simulation- so you would have a sort of loop I would say. So I would turn this one around. [inaudible] that you have an arrow over here. For example, you create a visual map, then you set the behaviour right. And then from behaviour you run the simulation, and after simulation you might want to add in parameters again, and then again a simulation to see what the new results are. But if we choose to be this way around then maybe, but now we should have numbered arrows I guess. But then you have a sort of scenario now then already maybe. |
| 0:34:21.3  PERSON 1 | Yeah but road simulation is something continuous right? Or is it just computed and then- yeah |
| 0:34:27.3  PERSON 2 | I think is a sort thing right, you first need to set everything, and then you can run the simulation right, or- |
| 0:34:35.6  PERSON 1 | Yeah yeah. I was also thinking the device itself, does it need to compute the simulation, because the server does that for you |
| 0:34:44.1  PERSON 3 | Mhm |
| 0:34:44.9  PERSON 1 | Ideally it just communicates the output through you device and that renders it |
| 0:34:50.4  PERSON 2 | Yeah yeah |
| 0:34:51.9  PERSON 1 | So there is no computation on your device self |
| 0:34:54.0  PERSON 2 | Yeah exactly |
| 0:34:54.4  PERSON 1 | So the right is not really a problem |
| 0:35:00.9  PERSON 2 | [inaudible] otherwise we also need [inaudible] for mobile devices in this case |
| 0:35:05.6  PERSON 1 | Yeah |
| 0:35:07.1  PERSON 2 | So that’s basically- but then |
| 0:35:09.8  PERSON 1 | Run simulation is the point to create visual map right? Or |
| 0:35:14.8  PERSON 3 | Or- well because we used the [inaudible] |
| 0:35:17.9  PERSON 2 | Yeah. But it depends on how you |
| 0:35:22.7  PERSON 1 | It’s again a different state because where do you start in this. This FAM |
| 0:35:32.4  PERSON 3 | From the- |
| 0:35:32.9  PERSON 2 | Something comes out over here, so user input comes in over here, I would say, because he wants to create the visual map. So you have to have the user input over there, and the of course- create visual map, and from the visual map you’re going to use, like- cause that’s also another think maybe that we should adopt, but [inaudible] behaviour, but you should also have a sort of paint right, or something like the students- so I visualize the student is of course just be able to draw and intersections onto a map for example. Stuff like that, and I would say that that is separate from setting traffic and traffic light behaviour. Then again maybe- |
| 0:36:23.6  PERSON 1 | Yeah it is |
| 0:36:26.4  PERSON 2 | Right, so that might, maybe also be a module or something before going to the set behaviour module then, in this case |
| 0:36:36.6  PERSON 3 | Yeah maybe step by step in the drawing, was the- what are the steps in the [inaudible] map gonna be drawn [inaudible] drawn the, put the traffic light |
| 0:36:56.8  PERSON 2 | Yeah but then again, how far do you want to go because if you don’t watch out, if you don’t- that you are not going to model- that you start modelling and, yeah, [inaudible] information flow right, something like that, because- like in a FAM you run, you’re looking at how modules interact right? |
| 0:37:27.2  PERSON 1 | Yeah |
| 0:37:28.0  PERSON 2 | So maybe it’s- right now we’re looking from the user’s perspective, of course already, like ok, you’re gonna create some map, maybe we should think more in module terms. That for example |
| 0:37:46.9  PERSON 1 | Yeah but we have to a clear picture of how the flow of the entire application is |
| 0:37:52.2  PERSON 2 | Yeah |
| 0:37:53.0  PERSON 1 | Even with the user, I think the user draws the intersection on a map, and the user can also set parameters in the application, somewhere on the screen. Then the user presses a button, then the simulations starts and all that data is send to the server and it can then do some simulation. So when you |
| 0:38:15.3  PERSON 2 | Yeah, [inaudible] the calculation |
| 0:38:18.0  PERSON 1 | Get that, when that data received on the server comes then |
| 0:38:24.7  PERSON 2 | Ok but that’s already in the scope of the FAM right, by the way |
| 0:38:31.6  PERSON 1 | No, I’m not sure. Some function is called them, cause of the calls it makes to the server. Says it creates out of these parameters and this is how my intersection looks like. How can I run the simulation with this. There [inaudible] |
| 0:38:47.1  PERSON 2 | Yeah [inaudible] but |
| 0:38:48.2  PERSON 1 | Behaviour properties must be set |
| 0:38:51.2  PERSON 2 | Yeah, [inaudible] like the calculation process happens in the server right. So the only thing that the server does is just send a package response to some function within the program. You would say. So then you would have, like, ok server, and then ok, invokes functionality in the program or something like that. And then everything can be rendered or something. It can be rendered on the map for example. |
| 0:39:13.1  PERSON 1 | yeah |
| 0:39:13.9  PERSON 2 | I think so |
| 0:39:15.2  PERSON 1 | Yeah, I’m not sure. Yeah I do not think it is completely rendered. The user draws the map with an intersection so that it stays where it is, and the simulation provides only data for the traffic and the lights. And those are simulated. So, then we have only two components right, there is some kind of visualization, and there is a simulation. There are only two components in the program then |
| 0:39:44.6  PERSON 3 | Two main components |
| 0:39:45.5  PERSON 1 | Yeah two main components |
| 0:39:47.8  PERSON 3 | But the setting [inaudible] is also part of the- setting the simulation. Setting and priming, only [inaudible] from the setting |
| 0:39:57.3  PERSON 2 | Yeah I think so |
| 0:40:01.5  PERSON 1 | So maybe we can all first wrote those two top level elements and zoom in on both of them |
| 0:40:10.2  PERSON 2 | Because, yeah you have to yeah, well it could be of course- you could also then model the flow within each of the module. So that then later on the interaction maybe |
| 0:40:20.4  PERSON 1 | Yeah |
| 0:40:21.1  PERSON 2 | What- |
| 0:40:21.7  PERSON 1 | Mhm |
| 0:40:23.6  PERSON 2 | [inaudible] first we have to only two box here [inaudible] |
| 0:40:29.1  PERSON 1 | Ok, then we get- but what is inside that box |
| 0:40:33.0  PERSON 2 | Yeah well- you have the simulation and visualization right |
| 0:40:39.6  PERSON 1 | Yeah |
| 0:40:39.7  PERSON 2 | So within the visualization you can then maybe think of - |
| 0:40:47.2  PERSON 3 | Maybe a simple something |
| 0:40:53.6  PERSON 2 | Yeah but yeah |
| 0:40:54.6  PERSON 3 | [inaudible] |
| 0:40:55.3  PERSON 2 | Yeah, but if you only have, like, here the simulation, and here you have the visualization then right. Only two blocks, and then we can zoom in on both of these blocks and then other views. But if you have the visualization then, of course then there are several functionalities, yeah. Yeah the setup, the map of course, map functionalities, behaviour elements, maybe [inaudible]. That could also be part of the visualization module maybe. Where he has all the calculation things are in the simulation part. Right? |
| 0:41:38.1  PERSON 3 | Yeah. So it comes to the most complex things |
| 0:41:43.2  PERSON 2 | Yeah this one can be added then right. We can just make one- or just two boxes over it, without any arrow. At least all our arrows [inaudible] and then just, this one [inaudible] and that one also- wait, and then just call this one visualization |
| 0:42:09.0  PERSON 3 | Without the sub- |
| 0:42:10.2  PERSON 2 | Yeah without all the sub things. Visualization [inaudible] simulation, yeah |
| 0:42:31.2  PERSON 3 | Ok |
| 0:42:45.0  PERSON 2 | Maybe you could make a model-view-controller pattern out of it [laugh] |
| 0:42:51.2  PERSON 1 | We have to define some pattern |
| 0:42:53.0  PERSON 2 | Alright, because then you have the views, which is of course a Y functionality in fact, and you could have the simulation stuff. And yeah also parts of your visualization logic [inaudible] part of the logic for example. Then you have a controller which arranges interaction between these two |
| 0:43:11.3  PERSON 1 | Yeah we can do that, but we do not necessarily have to choose every [inaudible] for web application |
| 0:43:17.9  PERSON 2 | Do we agree to choose that eventually, a natural pattern |
| 0:43:20.1  PERSON 1 | Yeah, there must be some kind of [inaudible] because there must be some kind of a coding |
| 0:43:25.5  PERSON 2 | Oh yeah |
| 0:43:26.2  PERSON 1 | Structure you have to define |
| 0:43:28.8  PERSON 2 | Yeah that’s true |
| 0:43:30.8  PERSON 3 | Number 2 |
| 0:43:30.8  PERSON 1 | Basic structure of the code, which will be used to implement. So, we have to discuss that later on I think |
| 0:43:41.2  PERSON 2 | Yeah maybe we can do that, first look at the basic functionality |
| 0:43:44.7  PERSON 3 | But maybe in the [inaudible] about the flow of the user when using the application. Is that something that we have to do until the [inaudible] from the simulation? |
| 0:44:01.5  PERSON 2 | Yeah you mean that there is an interaction between [inaudible] that the user- you want to have it- you want to look at it from the user’s perspective in fact |
| 0:44:10.2  PERSON 3 | Yeah |
| 0:44:12.6  PERSON 2 | Yeah, because that was what we had first right. First we had like, ok, something logs in and then, yeah, several modules, and then there is an interaction between these modules in fact. Or yeah, user, there is an interaction between these modules, and yeah. Because now we have two modules. Yeah well. You can also model that over here right, you can also just model two connectors over here |
| 0:44:44.9  PERSON 3 | Mhm |
| 0:44:45.5  PERSON 2 | So that there is an interaction between them, and then |
| 0:44:49.7  PERSON 3 | And also about the external, so when the simulation is from, become the- |
| 0:44:56.8  PERSON 2 | No no no. no I don’t think that’s what we- because that would be probably more due to [inaudible] maybe yeah. The FAM is purely about the modules right, but then your application then- yeah, the modules, the functional aspects [inaudible] |
| 0:45:28.2  PERSON 1 | Something like this |
| 0:45:29.6  PERSON 3 | Oh stop- |
| 0:45:30.2  PERSON 2 | Not for- you also need the define incoming and outgoing arrows, so you could for example say like, ok a user, well a student request or something, whenever a student thing comes in, you know, goes straight to the process. And you can maybe like, draw outgoing arrows from the simulation, for example. Because simulation connects to a separate server, eventually, but that server shouldn’t be modelled in the FAM |
| 0:46:08.4  PERSON 1 | We have to play the card game again |
| 0:46:11.0  PERSON 3 | Oh? |
| 0:46:12.3  PERSON 1 | Card game |
| 0:46:12.6  PERSON 2 | Yeah, is it time for the card game? |
| 0:46:13.8  PERSON 1 | It is time. So what is the discussion |
| 0:46:22.2  PERSON 3 | Problem or- |
| 0:46:23.6  PERSON 2 | Ok, let’s play the card game. First, what do we have then, the problem this time, so we could- or wait, design problems and its functions |
| 0:46:33.1  PERSON 3 | Solutions, problems |
| 0:46:45.3  PERSON 2 | The problems are definitely [inaudible] design solution are [inaudible] |
| 0:47:01.9  PERSON 3 | Is this a problem that we resolve |
| 0:47:08.0  PERSON 2 | Yeah, so what do we have to discuss right now. Do we have to discuss a problem or- |
| 0:47:17.1  PERSON 3 | This might be problem first |
| 0:47:19.0  PERSON 1 | Yeah, I don’t know if we really have a problem right now |
| 0:47:22.0  PERSON 2 | No, yeah really. So that’s fine |
| 0:47:25.9  PERSON 3 | But maybe the problem |
| 0:47:26.2  PERSON 1 | Do we have any assumption then, that affect the design problem |
| 0:47:31.1  PERSON 2 | Yeah well, we now of course assume that it goes to an external server and in fact we also should adopt this server. Yeah, once the calculations happen |
| 0:47:43.0  PERSON 1 | Yeah, but it’s the same server possibly, only [inaudible] can be the same [inaudible] but doesn’t need a server [inaudible] for something |
| 0:47:49.3  PERSON 2 | Yeah could be. Yeah ok |
| 0:47:55.1  PERSON 1 | So yeah, I might include an external server on which the simulations run which has better hardware, specifications to do good simulations and calculations |
| 0:48:07.9  PERSON 2 | Yeah but either way we have to add a server, by the way, to the context view as well, right. I mean, the web application in on the server so. We can just add one server |
| 0:48:19.2  PERSON 1 | Yeah |
| 0:48:19.7  PERSON 2 | That just, yeah, well, contains a web application and simulation then, or you could |
| 0:48:24.8  PERSON 1 | Yeah yeah ok. The we should update the context view |
| 0:48:27.2  PERSON 2 | Yeah because right now it’s not |
| 0:48:31.3  PERSON 1 | It can either be a single server or an entire datacentre for example, doesn’t really matter here |
| 0:48:37.1  PERSON 2 | No |
| 0:48:38.2  PERSON 1 | Just needs yeah some kind of an interface with which it can communicate to the single server |
| 0:48:43.7  PERSON 2 | Yeah exactly |
| 0:48:45.1  PERSON 3 | [inaudible] |
| 0:48:45.9  PERSON 2 | No I’ll just choose a server I can- it doesn’t really matter which one it is. I think it makes [inaudible] a server right yeah. |
| 0:49:13.1  PERSON 1 | I think that really affects the design problem, or is more the assumption that affects the solution |
| 0:49:24.7  PERSON 3 | I think the problem is how to make this perfect |
| 0:49:28.7  PERSON 2 | [inaudible] solution |
| 0:49:34.0  PERSON 3 | Sorry what? |
| 0:49:37.4  PERSON 2 | Yes I think so. Design problems, design solutions [inaudible] yeah [inaudible] |
| 0:50:22.6  PERSON 1 | Ok you want to change it? |
| 0:50:24.7  PERSON 2 | [inaudible] |
| 0:50:25.7  PERSON 1 | Yeah. Ok that’s fine? |
| 0:50:28.2  PERSON 2 | Yes so, yeah we need to spend a certain amount on [inaudible] |
| 0:50:36.3  PERSON 1 | No no that’s fine I think [inaudible] to the FAM |
| 0:50:38.6  PERSON 2 | Yeah it think we can- yeah exactly, we can just move on right. So we have- there’s a [inaudible] now, there’s an outgoing out to an external server and then we can start something on the modules I guess. Because we only have, also like, we have a problem right now |
| 0:50:51.4  PERSON 1 | Yeah we have an hour and about ten minutes |
| 0:50:53.4  PERSON 2 | Exactly, so maybe it’s- |
| 0:50:54.5  PERSON 1 | So you turn |
| 0:50:55.8  PERSON 2 | Exactly, not stay too long |
| 0:50:58.2  PERSON 1 | Yeah I made some list here |
| 0:51:00.1  PERSON 3 | Ok. Please |
| 0:51:00.9  PERSON 1 | For the visualization when zooming in, so first the user can construct the roads into four way intersections. Then set parameters of the traffic lights, for example, sequences and timings. And for the traffic you can set the density, or is it more of a road property, can also be. And then for the roads I have sensors and the roads can have different lengths which the user can specify. And for the [inaudible] visualization we also need to animate the traffic which returns from the simulation output, and also the- |
| 0:51:37.9  PERSON 2 | Traffic light |
| 0:51:39.5  PERSON 1 | Status. Yeah, what the current status is of the traffic light, and it needs to change, yeah, or correspond to the right status. And then there are six default intersections available in the program. I think those are the five or four |
| 0:52:00.6  PERSON 3 | Four [inaudible] |
| 0:52:03.8  PERSON 1 | Yeah elements or things, features |
| 0:52:05.0  PERSON 2 | Modules, or visualization |
| 0:52:06.6  PERSON 1 | Visualization has to support and, can you model that [Person 3]? |
| 0:52:13.5  PERSON 3 | Yeah [inaudible] |
| 0:52:14.9  PERSON 1 | Then we can think about simulation |
| 0:52:18.5  PERSON 2 | What do you think, like for example, the simulation then in fact. Because like, we have an [inaudible] area here, right now |
| 0:52:25.4  PERSON 1 | Yeah |
| 0:52:25.6  PERSON 2 | And which we know without a fact the response of the simulation functionality is send to, well, in fact to the system that can calculate it. Or we can also just say, like we have only the simulation box in which everything happens in fact. And we don’t have any outcoming arrows or a FAM, only incoming arrows but that is- right. Because you can also like, directly say [inaudible] or then a simulation would have things like queuing calculations, I don’t know, number generators maybe. Like these kind of statistical functionalities, which can be used to support mathematical- |
| 0:53:06.1  PERSON 1 | Yeah, I’m thinking about it might be difficult to involve an external server for the simulation, cause some parts have to happen on our server, and some have to happen on the external server so. I really- I think an external server or just a server on which the application runs. And all simulation also happen and that [inaudible] server |
| 0:53:25.3  PERSON 2 | Both then right |
| 0:53:26.9  PERSON 3 | Or maybe just we can call the service, the extra service called by API [inaudible] |
| 0:53:34.4  PERSON 2 | Yeah |
| 0:53:34.6  PERSON 1 | Yeah |
| 0:53:36.5  PERSON 3 | Cause it’s a web apps |
| 0:53:37.9  PERSON 2 | Yeah |
| 0:53:39.4  PERSON 1 | Yeah that complicates it. Do we have an external server for simulation calculation |
| 0:53:44.2  PERSON 2 | I think that maybe we should just set everything on the same server then [inaudible] |
| 0:53:47.3  PERSON 1 | Yeah I think that’s easier |
| 0:53:49.8  PERSON 2 | If we can do that, and then we can hold that here also |
| 0:53:54.0  PERSON 1 | Otherwise you might- may have some overhead of delegating the computing to another |
| 0:54:00.7  PERSON 2 | Exactly. And there’s also more latency involved right. |
| 0:54:05.1  PERSON 3 | About this FAM and the metrics. So are they part of the simulation or already part of the- |
| 0:54:10.8  PERSON 1 | Well it- yeah, the animation has to be visualized at the client side |
| 0:54:16.9  PERSON 2 | Yeah the [inaudible] calculation are [inaudible] simulations |
| 0:54:21.0  PERSON 1 | Simulation just- I’m not exactly sure how that’s communicated in the [inaudible] but, there must some kind of interval at- when do I show which state. But that’s not really a FAM, so I think |
| 0:54:36.6  PERSON 2 | Nah I think that for this |
| 0:54:38.4  PERSON 1 | As long as the |
| 0:54:38.4  PERSON 2 | Especially where right now, here in the FAM [inaudible] that it is important that we just, especially from what with the modules, maybe they’re supporting functionality. That’s the most important. Of course they are interacting with one another, but of course later on when you are going into [inaudible] yeah, [inaudible] or a petri net or etcetera [inaudible] important then |
| 0:55:02.9  PERSON 1 | yeah yeah, but this |
| 0:55:04.2  PERSON 2 | Yeah exactly |
| 0:55:07.0  PERSON 1 | But for the design, [inaudible] you need some kind of [inaudible] |
| 0:55:11.1  PERSON 3 | Yeah |
| 0:55:16.0  PERSON 1 | What does the simulation, have to do this, and there’s some queuing you said |
| 0:55:21.3  PERSON 3 | Mhm |
| 0:55:22.0  PERSON 2 | For example when you know, you have these traffic lights then for example right. Then cars are waiting in front of it, well you have multiple intersections, and every intersection has its own light right? So then you have of course, yeah well, for example, have two of them stay red on the same time, just saying some things, then you have a very large queue for example, right. Very large, well, a lot of cars of course, waiting for a red light, for example |
| 0:55:53.2  PERSON 1 | Yeah, but how do- are there two intersections- interact with each other. |
| 0:55:58.5  PERSON 2 | Yeah because- |
| 0:55:59.4  PERSON 1 | Does it really, yeah, it does matter |
| 0:56:01.7  PERSON 2 | Yeah because, yeah, you have an intersection and every part of it, because we have four, four way intersection right. |
| 0:56:08.7  PERSON 1 | Yeah |
| 0:56:10.2  PERSON 2 | So then on every lane you have traffic lights of course |
| 0:56:15.5  PERSON 1 | Yeah |
| 0:56:18.0  PERSON 2 | And yeah, that must be a efficiently handled in order of course to have- |
| 0:56:23.9  PERSON 1 | So for example we have two intersections next to one each other here |
| 0:56:28.3  PERSON 2 | Yeah exactly yeah. And each of them have of course [inaudible] |
| 0:56:38.6  PERSON 3 | It’s also when you use one [inaudible] design |
| 0:56:43.4  PERSON 1 | Yeah for example, we can take a picture of this one |
| 0:56:47.6  PERSON 2 | Yeah |
| 0:56:48.7  PERSON 1 | So, what is exactly queue. Queue per intersection or as a whole. |
| 0:57:01.3  PERSON 2 | I think both right. Because eventually the lights must decide, like what is the best, in fact the most effective way of course, to lead the traffic right. |
| 0:57:10.6  PERSON 1 | Yeah |
| 0:57:11.7  PERSON 2 | So in fact these lights are then, in fact related to some queuing, I think |
| 0:57:18.0  PERSON 1 | Yeah. And now do we really need to think out this queuing or just, can we use a kind of sort algorithm |
| 0:57:26.3  PERSON 3 | It says that the [inaudible] that the number of cars that already [inaudible] |
| 0:57:31.8  PERSON 1 | Yeah but that’s also low level really. Might be a solution of the- not for a FAM, but does it really- |
| 0:57:38.4  PERSON 2 | Yeah but a FAM, I think that this is already too low detailed right. If you have the simulation then you only really have a functionality that supports queuing for example. A queuing model and I think that is the [inaudible] you can make |
| 0:57:55.4  PERSON 1 | Based on the intersections you have on the [inaudible] that are- that still need an intersection |
| 0:57:58.5  PERSON 2 | Yeah |
| 0:57:59.9  PERSON 1 | Yeah? Ok fine |
| 0:58:01.1  PERSON 2 | So that is something in fact that for the FAM already, right? The level of FAM I guess |
| 0:58:10.0  PERSON 3 | How to visualize- let’s say we have [inaudible] here |
| 0:58:14.1  PERSON 2 | Yeah |
| 0:58:15.3  PERSON 3 | And then when the cars stop, that’s the part of the developers |
| 0:58:21.7  PERSON 2 | Yeah yeah |
| 0:58:22.4  PERSON 1 | Yeah |
| 0:58:24.5  PERSON 3 | How to detect the traffic |
| 0:58:26.2  PERSON 2 | Yeah, but for right now [inaudible] I think it’s only important that we show that there are some modules that need to support it right. You need something that takes into account what is the most efficient way to lead the traffic. And that is [inaudible] for example by queuing. But for the FAM you would only say, ok here is a model that support that functionality, and yeah, deeper than that |
| 0:58:53.9  PERSON 1 | So queuing is part of the simulation |
| 0:58:55.7  PERSON 2 | Yeah |
| 0:58:56.2  PERSON 1 | Right |
| 0:58:56.3  PERSON 2 | Yeah. Then of course we have other relations that we might come across maybe |
| 0:59:07.7  PERSON 1 | So would you send all the data we have in the map at the client, send it to the server |
| 0:59:12.8  PERSON 2 | Yeah |
| 0:59:14.4  PERSON 1 | That parses the input, does it really matter |
| 0:59:18.8  PERSON 3 | Mhm |
| 0:59:20.1  PERSON 1 | Creates queues. What else does it need to do |
| 0:59:31.5  PERSON 3 | Analyse collision or something like that |
| 0:59:35.2  PERSON 2 | Yeah there are some things also in it right |
| 0:59:37.7  PERSON 1 | Yeah but it doesn’t really say anything about collisions I believe. I mean that |
| 0:59:47.0  PERSON 2 | The traffic signal timing has on traffic |
| 0:59:48.9  PERSON 1 | That individual- |
| 0:59:58.2  PERSON 2 | The basic effect of traffic [inaudible] yeah, you could also maybe, right, maybe just [inaudible] it down more. Into functionality then or something like. There should be some functionality that calculates the- what’s in here. For example to illustrate the basic effect that traffic signal timing has on traffic. [inaudible] functionality that could, well that could calculate this right. I mean, you have like several of these traffic lights. So calculate traffic [inaudible] yeah exactly [inaudible] it also had to simulate the- it also needed to have functionality to simulate the traffic itself right, or something or |
| 1:01:08.5  PERSON 1 | Yeah simulate traffic flows on the map [inaudible] |
| 1:01:25.9  PERSON 2 | Shit, that can also be right. Like for example if you have, well it simulates traffic |
| 1:01:30.0  PERSON 1 | Yeah yeah [inaudible] in the visualization |
| 1:01:34.0  PERSON 2 | Oh you- |
| 1:01:34.5  PERSON 1 | Should already be part of it |
| 1:01:37.1  PERSON 2 | Ok |
| 1:01:39.3  PERSON 1 | Animate traffic |
| 1:01:40.4  PERSON 3 | Yeah, animate traffic |
| 1:01:40.6  PERSON 2 | Animate traffic yeah |
| 1:01:44.2  PERSON 3 | What do you mean with the animate traffic it’s like- |
| 1:01:46.7  PERSON 1 | That is animate the traffic flows so. It just updates every second or so, the state, and then you actually see the cars moving for example, as an animation. It’s very simple |
| 1:02:01.4  PERSON 3 | Mhm it’s not part of the visualization at least |
| 1:02:06.4  PERSON 1 | Yeah it is visualization. |
| 1:02:10.9  PERSON 3 | Oh yeah yeah, sorry. So the simulation is all about the calculation or something like that |
| 1:02:20.4  PERSON 2 | Yeah it’s only about the mathematical functionality but |
| 1:02:22.9  PERSON 1 | Preparing for calculation actually. So, you collect all your data and you create queues, do probably some other things, and then run the actual simulation and then output that, and send it back to the client [inaudible] something |
| 1:02:45.7  PERSON 3 | So we are thinking just like [inaudible] something that [inaudible] connector. Something that [inaudible] everything in the engine |
| 1:02:56.7  PERSON 2 | You’re still in the [inaudible] state [laugh]. No, but we can also maybe just search for it and calculate the traffic load |
| 1:03:07.2  PERSON 1 | You have the queuing |
| 1:03:12.7  PERSON 2 | Wait, now you have simulate car then, no choose intersection |
| 1:03:17.2  PERSON 3 | Yeah is from the [inaudible] |
| 1:03:23.2  PERSON 2 | Well that could of course also be part of them right. I mean like, the users first of course drops the intersections in the- maybe just add roads in the map, for example. And you can also maybe decide, ok, what part of the intersections, or what part of the roads do I want to have simulated right. Or yeah that’s- |
| 1:03:48.4  PERSON 1 | [inaudible] to simulate |
| 1:03:49.8  PERSON 2 | Yeah ok |
| 1:03:50.6  PERSON 1 | Cause everything might give influence on other parts of your map |
| 1:03:56.0  PERSON 2 | Yeah ok. Yeah, but if you have for example just a very back map. Of all intersections for example. You only want to simulate a part of it. That could be right |
| 1:04:04.2  PERSON 1 | Yeah but that’s just an additional requirement I think, we should [inaudible] |
| 1:04:07.9  PERSON 2 | Yeah ok yeah |
| 1:04:11.3  PERSON 1 | Not at this point |
| 1:04:19.4  PERSON 2 | Well we can also just leave it here maybe, for this right now |
| 1:04:25.6  PERSON 3 | Is what? Sorry? |
| 1:04:29.3  PERSON 2 | For the simulation, that we can leave it maybe for here right now, for the things that we have right now |
| 1:04:36.3  PERSON 3 | [inaudible] |
| 1:04:38.8  PERSON 2 | I think that it eventually is maybe better to then just focus on the visualization side, because we have more information on that |
| 1:04:45.7  PERSON 3 | Mhm |
| 1:04:46.0  PERSON 2 | Right |
| 1:04:47.6  PERSON 1 | Yeah I agree |
| 1:04:52.4  PERSON 2 | So then [inaudible] and make traffic and maybe we can also draw a scenario of the [inaudible] maybe |
| 1:04:57.6  PERSON 3 | Of the simulations, on the calculate traffic load and the queuing? |
| 1:05:00.8  PERSON 2 | Yeah |
| 1:05:12.8  PERSON 3 | Queuing, traffic lights calculate. And since we also communicate to external systems, should we put in the simulation maybe. |
| 1:05:34.2  PERSON 2 | Yeah but it’s [inaudible] right. So first we decided to use an external server for it, but now we have decided to just- that everything runs on the same server right. So it doesn’t have to- so everything in fact happens inside the simulation |
| 1:05:56.5  PERSON 3 | So what is this arrow |
| 1:05:57.6  PERSON 2 | Yeah we can get rid of it I think. Because that was our first design decision, but right now we changed the-. Yeah, we can start, draw how they interact maybe with one another then. So for example, yeah exactly user comes in, then interacts with animate traffic. Or don’t? [inaudible] then of course- yeah from set parameters like this is choosing intersection. Everybody’s choosing the section then |
| 1:07:05.5  PERSON 3 | Sorry? This one? |
| 1:07:06.7  PERSON 2 | Yeah. What’s that |
| 1:07:09.9  PERSON 3 | Choose intersection |
| 1:07:10.7  PERSON 2 | Yeah |
| 1:07:12.9  PERSON 3 | What is the choose intersection |
| 1:07:18.0  PERSON 1 | What is the choose |
| 1:07:19.2  PERSON 1 | Yeah you have default intersections right in the program. Intersections delivered with the program so the student can directly play with something, intersections |
| 1:07:28.9  PERSON 2 | Yeah ok |
| 1:07:29.9  PERSON 3 | So something like this |
| 1:07:31.9  PERSON 1 | Yeah just choose yeah [inaudible] |
| 1:07:32.3  PERSON 3 | [inaudible] |
| 1:07:34.1  PERSON 1 | I’m not sure |
| 1:07:35.1  PERSON 2 | Then I first would say like, this is what I mean, first it needs to choose it’s intersections and then- |
| 1:07:43.2  PERSON 1 | Choose intersection or create a new one. Or build further on an existing one, that should be the first step right. |
| 1:07:50.8  PERSON 3 | Well there’s a [inaudible] |
| 1:07:52.7  PERSON 1 | Yeah I think yeah. Choose intersection or you start to [inaudible] to the roads |
| 1:07:58.4  PERSON 3 | Yeah |
| 1:07:59.4  PERSON 2 | So you have either one of the two then right |
| 1:08:01.6  PERSON 1 | But that- this sounds more like something of a petri net |
| 1:08:05.3  PERSON 2 | Yeah. Yeah we can also leave it then like this, because you have roads and you have intersections then. But- no no you can’t put it back because you have then roads and you have then intersections. But- |
| 1:08:23.5  PERSON 3 | [inaudible] flows |
| 1:08:26.0  PERSON 2 | Mhm. Set parameters, set was- like these two, they are related to the simulation then right. So you can maybe, yeah. Yeah wait |
| 1:08:41.7  PERSON 3 | Who’s going to do it? I mean [inaudible] |
| 1:08:50.5  PERSON 2 | [Inaudible] interactions, and that one, yeah, there’s some- |
| 1:08:55.0  PERSON 3 | [inaudible] |
| 1:08:59.0  PERSON 2 | No yeah, but lane and traffic is done by this one right. Support by traffic lights |
| 1:09:05.5  PERSON 3 | Yeah. What is in the-this one is in a different simulation [inaudible] |
| 1:09:13.4  PERSON 2 | Yeah, but they need to do it to interact right so |
| 1:09:36.6  PERSON 3 | You mean that something like this [ Person 2]? |
| 1:09:39.2  PERSON 2 | Sorry? What is going to create this queue. |
| 1:09:48.4  PERSON 1 | Yeah I’m trying to create the visualization. Can’t really take a picture of it and explain it. Do some multitask |
| 1:10:27.0  PERSON 3 | Let me just give [inaudible] come in like this |
| 1:10:45.2  PERSON 2 | And we should lead that one to the calculating [inaudible] maybe right right. The queuing as well maybe |
| 1:12:27.0  PERSON 2 | These are all that’s needed right, are they |
| 1:12:30.9  PERSON 3 | So when the visualization, communicates with the simulation |
| 1:12:44.1  PERSON 2 | You have a- there’s a [inaudible] in this one as well? Alright. And then the traffic flows. I’m not certain, do you also want to connect this one then. This one to which one, we can connect this one to this one, then this one just to that one maybe right. Or calculate traffic flow then |
| 1:14:07.5  PERSON 3 | So the animate traffic modules |
| 1:14:12.7  PERSON 2 | Yeah. These are just- yeah |
| 1:14:15.0  PERSON 3 | Communicate the queuing model |
| 1:14:16.7  PERSON 2 | It could be, yeah, animate traffic. I would say maybe then this one is over here, maybe then. Cause on its first calculating the traffic flow, and then it might- yeah but then just connect these one here maybe on its own |
| 1:14:34.6  PERSON 3 | So we only have one |
| 1:14:36.6  PERSON 2 | Yeah |
| 1:14:39.6  PERSON 3 | Ok |
| 1:14:41.7  PERSON 2 | We have to evaluate the traffic, then we have to calculate, and then until it also interacts with the queuing. Then- just here |
| 1:14:50.4  PERSON 3 | Ok |
| 1:14:50.9  PERSON 2 | I would say. And then a queuing just interacts with the traffic flow. Right so |
| 1:15:19.8  PERSON 3 | Sorry [Person 1] cause I have the simulator |
| 1:15:21.1  PERSON 1 | No no no [inaudible] |
| 1:15:26.2  PERSON 2 | So what did you draw |
| 1:15:27.8  PERSON 1 | Density was the basic vision of the [inaudible] interface. So you can simulate components to build your intersections, so you can simulate from each road, and then inside its properties. Such as traffic light timings, red, green and yellow. Density for the road and the max queue, and when the number of cars in that queue becomes larger. Such as here, you get a sort of notification of it, the colour of the road becomes red or something, so that the user knows there is some kind of a problem, and I should maybe change the timings of that traffic light. |
| 1:16:23.2  PERSON 2 | Yes, these are the timings and what |
| 1:16:25.2  PERSON 1 | So these are- yeah for example, 20 seconds red, 5 seconds green and 3 seconds yellow. |
| 1:16:35.2  PERSON 2 | Yeah exactly |
| 1:16:35.2  PERSON 1 | Ok |
| 1:16:40.0  PERSON 2 | Ok |
| 1:16:41.3  PERSON 1 | Then, move on. So what did you have |
| 1:16:47.6  PERSON 2 | [inaudible] visualizations so, yeah well, right now we did it in this way then. And also try to choose intersections [inaudible] and choose in fact what to do then, but- then they set the parameters after fixing the intersections, and then animate traffic. But animate traffic interacts with the functionality of the simulation |
| 1:17:10.5  PERSON 1 | Yeah ok. |
| 1:17:12.9  PERSON 3 | I’m still confused what is |
| 1:17:15.2  PERSON 2 | Yeah that’s [inaudible] also yeah. You calculate the traffic flow then, then you have this queuing of course but- |
| 1:17:33.2  PERSON 1 | I think animate traffic should maybe be called visualize simulation or something. Cause traffic- it’s only traffic and not the roads or the traffic lights. |
| 1:17:45.5  PERSON 2 | Visualize simulation [inaudible] you should do simulation, yeah |
| 1:17:53.7  PERSON 1 | Yeah queuing, I’m not sure |
| 1:17:57.0  PERSON 2 | Yeah, me too. It’s a bit of, still vague of course now but- yeah you could say that, ok the traffic- |
| 1:18:05.3  PERSON 1 | Yeah |
| 1:18:07.4  PERSON 2 | Yeah it first looks at the traffic for example, ok how many cars are in each intersection or something like that. But then it maybe just applies to queuing [inaudible] on that. So it interacts with the queuing, you could say something like that maybe. And then it decides ok, like, to find for example where the largest queue is for example, and where the, yeah well, what the most and efficient intersection is. Or something like that maybe. Based on the [inaudible] |
| 1:18:35.3  PERSON 1 | [inaudible] Functioning the traffic load. The simulation doesn’t have to do that right. Because the simulation just has to do what it’s told. Based on the parameters and the map, given by the client, and just runs it, and doesn’t really think for itself. The user can change the settings based on the output of the simulation |
| 1:18:53.5  PERSON 2 | Yeah ok. It actually needs to send, the thing right, a response back. |
| 1:18:58.3  PERSON 1 | Yeah yeah, but |
| 1:18:58.8  PERSON 2 | So, but yeah, it should do something with the, yeah of course but- |
| 1:19:02.9  PERSON 1 | Yeah but not really [inaudible] not just based on its own output, and then do some graphic stuff |
| 1:19:08.9  PERSON 2 | No no, that happens here right |
| 1:19:11.7  PERSON 1 | Yeah |
| 1:19:12.7  PERSON 2 | So visualize simulation, that just in fact entails that the user first makes a thing like that for example. And when it clicks on run or something like that, right. Then this stuff [inaudible] work |
| 1:19:25.5  PERSON 1 | Yeah yeah yeah I agree |
| 1:19:27.5  PERSON 2 | And with this it can use, maybe add the queuing to it to decide that ok, what are the most yeah, inefficient intersections right now for example. If you have multiple intersections, and you have multiple, you have loads of cars right. |
| 1:19:41.4  PERSON 1 | Mhm yeah |
| 1:19:41.9  PERSON 2 | Some, sort of like that. And then the response will be given back of course, but how the response is given back. That’s still a bit of, yeah, how would you go- |
| 1:19:52.3  PERSON 1 | But calculate traffic load, what is that exactly |
| 1:19:57.2  PERSON 3 | Is the calculator, something like this [inaudible] |
| 1:20:05.6  PERSON 1 | Yeah ok |
| 1:20:06.2  PERSON 3 | I think it’s something we can give [inaudible] |
| 1:20:08.4  PERSON 1 | But that’s only that quite specific. That’s only one thing it has to do right. Just compare the number of cars in a queue with a given queue of the road property |
| 1:20:24.2  PERSON 2 | Yeah [inaudible] |
| 1:20:25.9  PERSON 1 | Yeah it has to do the timings, for example, look at the traffic light timings and see, ok, the green light burns only 5 seconds, how many cars can pass through. It might, yeah [inaudible] But I assume there’s some kind of a speed which is general known on which- how fast the car goes when it’s at the traffic light or something |
| 1:20:45.7  PERSON 2 | Yeah |
| 1:20:47.4  PERSON 1 | That is the basic thing it does, and based on that it can do the queuing calculations. |
| 1:20:55.3  PERSON 2 | But maybe it’s better to just give this a more general name right, now |
| 1:20:58.2  PERSON 1 | Yeah. So right now it’s traffic load, but maybe we should just call it, yeah, calculate traffic properties or something like that. And then with traffic properties we [inaudible] traffic loads more as a separate- this is queuing, I think it should be that but there needs to be another base function from where it starts |
| 1:21:19.0  PERSON 2 | Yeah |
| 1:21:19.0  PERSON 3 | Mhm |
| 1:21:20.2  PERSON 1 | And which it really runs the simulation, and which cars |
| 1:21:24.7  PERSON 2 | Yeah but then the problem of that is that we have like, several modules for each thing then maybe |
| 1:21:28.3  PERSON 1 | Yeah |
| 1:21:29.0  PERSON 3 | Also |
| 1:21:30.0  PERSON 2 | So then you might say like, ok just take one general module that takes into account all these properties [inaudible] based on the properties it can just calculate it. Hey |
| 1:21:41.3  Instructor | Hello I just wanted to remind you guys that at the two hour mark your design session ends, and you can go further with documenting your rationale. And then after that you have to go to [Professor] for your feedback and such, which is at [office] |
| 1:21:54.8  PERSON 2 | [office], already two hours? |
| 1:21:57.4  Instructor | No two hours since you start recording to, you have to watch the time |
| 1:22:00.7  PERSON 1 | Yeah ok |
| 1:22:01.6  Instructor | Alright |
| 1:22:01.8  PERSON 1 | Yeah |
| 1:22:02.4  Instructor | Ok |
| 1:22:03.6  PERSON 2 | Ok. What time did we start |
| 1:22:10.1  PERSON 3 | 59 [inaudible] |
| 1:22:12.7  PERSON 1 | We first had 30 minutes of discussion, or at least reading the assignment. And then we started |
| 1:22:20.4  PERSON 2 | So we still have |
| 1:22:21.5  PERSON 3 | 30 minutes |
| 1:22:22.2  PERSON 2 | Yeah 30 minutes, so it’s a good time to- ok, make this general then right |
| 1:22:26.1  PERSON 1 | Yeah. So queuing, so maybe just simulation as the only module then , just leave it empty |
| 1:22:33.1  PERSON 2 | Just leave that out then yeah |
| 1:22:34.7  PERSON 1 | Just delete those two elements |
| 1:22:37.1  PERSON 2 | Because we’re also not really sure about what to do with it, right. So |
| 1:22:41.0  PERSON 1 | No |
| 1:22:41.3  PERSON 2 | And then just maybe draw [inaudible] direction with the simulation |
| 1:22:46.5  PERSON 1 | Yeah, especially for this two hour session. It’s not really doable to really dive into the simulation. We have some global ideas of how it might work |
| 1:22:54.2  PERSON 2 | yeah if they really wanted to know, then we need to dive into the queuing. What is there [inaudible] of course |
| 1:22:57.8  PERSON 1 | Yeah |
| 1:22:58.4  PERSON 3 | Also, how to change the speed of the car. Because when the [inaudible] like A7, A1. Would also have to be slower |
| 1:23:18.0  PERSON 1 | Yeah. But that’s outside of our scope |
| 1:23:24.2  PERSON 3 | Yeah I mean if we have to- |
| 1:23:26.0  PERSON 1 | [inaudible] already add something in the context view about the open source software package. For example, for doing some simulations or just |
| 1:23:34.5  PERSON 2 | [inaudible] I thought that we did first [inaudible], not quite sure if it’s still in there |
| 1:23:40.7  PERSON 1 | We’ll have to check it |
| 1:23:41.4  PERSON 2 | Is that normal here. The traffic lights are based on weight right. You [inaudible] weight, on how much weight there is also |
| 1:23:49.1  PERSON 1 | I’m not sure exactly how these sensors work |
| 1:23:52.9  PERSON 2 | Yeah yeah yeah the sensors yeah. For example if you’re [inaudible] for example in [inaudible] what it’s based upon, here in the Netherlands it’s based on- |
| 1:24:01.4  PERSON 3 | But how about if we- if somebody touched the- somebody wants to cross the road and he push the |
| 1:24:11.5  PERSON 2 | Yeah yeah yeah ok, but if you drive the car [inaudible] because I also once had a problem when I was still driving my bike. Sometimes I couldn’t get to the light, because my bike was too light for it. So that’s the difference between Belgium and the Netherlands also, so here it is based on weight for example, depends on how much weight is in there, this lane in fact, it just measures that. So that also influences the- yeah when the traffic lights are on. Of course green or red or [inaudible] |
| 1:24:42.1  PERSON 3 | Somebody step here and he push the- he wants to cross the road |
| 1:24:49.0  PERSON 1 | On the side, is it, as a progression |
| 1:24:51.9  PERSON 3 | Interrupt there, the pedestrian, is it going to interrupt the |
| 1:24:56.7  PERSON 2 | Yeah that’s true, yeah that might also be a [inaudible] that’s true, but |
| 1:25:04.2  PERSON 3 | So, also in the [inaudible] |
| 1:25:05.8  PERSON 2 | Yeah so select sensor theme is a good one maybe, and then, yeah like, yeah because you were right about that of course, you have multiple factors which determine when a light goes green, of course. But |
| 1:25:19.1  PERSON 1 | Yeah a lot |
| 1:25:19.5  PERSON 2 | A lot |
| 1:25:20.1  PERSON 1 | Yeah or it just keeps to its own timing scheme |
| 1:25:24.0  PERSON 2 | Yeah that’s because |
| 1:25:26.3  PERSON 1 | [inaudible] because it’s just a basic simulator |
| 1:25:28.5  PERSON 2 | Yeah because this could influence this one and of course, [inaudible] like pedestrians and all these kind of things, yeah. But you are right, it’s not the case. Maybe we shouldn’t think that [inaudible] |
| 1:25:41.4  PERSON 1 | Yeah [inaudible] the user must have an option to add a sensor or not |
| 1:25:46.7  PERSON 2 | Yeah. So we can be [inaudible] but |
| 1:25:50.2  PERSON 1 | Ok just- then we can move on to the information |
| 1:25:53.8  PERSON 2 | Exactly. And I’m not, yeah, not really happy with the naming of the visualization |
| 1:26:01.1  PERSON 1 | Yeah. Because it’s more of a petri net, cause there’s some kind of a flow |
| 1:26:10.0  PERSON 2 | Yeah that’s true |
| 1:26:12.8  PERSON 1 | Yeah it’s not really- yeah it constructs roads ok, with choose intersection as kind of a user action and not really a module name |
| 1:26:19.6  PERSON 2 | Yeah exactly |
| 1:26:22.9  PERSON 1 | So yeah that’s- not sure how to name it but- choose intersections, yeah |
| 1:26:28.0  PERSON 3 | I have here the [inaudible] or the example of the lecture |
| 1:26:33.9  PERSON 2 | Mhm |
| 1:26:35.1  PERSON 3 | They put the name of the [inaudible] is like something that- the things that you can do with it, like [inaudible] payment, to payment, something like that. It’s not like- |
| 1:26:49.9  PERSON 2 | Yeah ok but just let, yeah well. |
| 1:26:53.1  PERSON 3 | It’s like a state |
| 1:26:54.8  PERSON 2 | Yeah you could call it, for example, the intersection module or something, road module or something like that. But then you can also ask yourself like, do we need all these arrows then. Because you can also just model it like this and something comes in, and then no arrows, and then only the simulation tracks to visualization. That’s it |
| 1:27:13.6  PERSON 1 | Yeah [inaudible] arrows in |
| 1:27:17.7  PERSON 2 | But you’re allowed to use no arrows, in the FAM, so |
| 1:27:22.2  PERSON 1 | But do you want to keep this name in |
| 1:27:27.4  PERSON 2 | Right now it’s more sort of process in fact, right. |
| 1:27:30.2  PERSON 3 | Yeah |
| 1:27:30.2  PERSON 1 | Yeah |
| 1:27:31.2  PERSON 2 | Sort of process flow [inaudible] |
| 1:27:32.3  PERSON 1 | Because you do not have to- really necessary to choose an intersection |
| 1:27:35.8  PERSON 2 | Oh yeah, you can always choose what you want to do of course. But then I wouldn’t- then I just would get rid of these arrows right |
| 1:27:44.4  PERSON 1 | Maybe just call it build intersection, and that entails either selecting an existing one, or [inaudible] |
| 1:27:53.0  PERSON 2 | Yeah |
| 1:27:58.4  PERSON 1 | Then move the [inaudible] roads |
| 1:28:00.4  PERSON 2 | Yeah |
| 1:28:01.1  PERSON 1 | Yeah |
| 1:28:02.0  PERSON 2 | And then like that [inaudible] |
| 1:28:18.1  PERSON 3 | Ok then |
| 1:28:19.1  PERSON 2 | Ok |
| 1:28:24.3  PERSON 3 | Should we go to that |
| 1:28:25.3  PERSON 2 | Yes |
| 1:28:27.3  PERSON 1 | [inaudible] things go to the- keep a 5 minute break |
| 1:28:30.0  PERSON 2 | Oh yeah. And then we still need to do one session right. Of that |
| 1:28:34.6  PERSON 1 | Yeah |
| 1:28:35.3  PERSON 2 | So we have then, we can do another break then and then |
| 1:28:38.9  PERSON 1 | In about ten minutes yeah |
| 1:28:40.9  PERSON 2 | Yeah but we do not have to report the break right |
| 1:28:43.2  PERSON 1 | No |
| 1:28:44.2  PERSON 2 | So then we right after we can do the game or something |
| 1:28:47.2  PERSON 1 | Yeah |
| 1:28:50.3  PERSON 3 | Pause |
| 1:28:51.4  PERSON 2 | Pause |
| 1:28:56.4  PERSON 3 | Thanks |
|  | Second recording 31:50 |
| 0:00:02.2  PERSON 2 | So here we are again [laugh] |
| 0:00:08.2  PERSON 1 | Ok, the information viewpoint |
| 0:00:09.4  PERSON 3 | Yes |
| 0:00:11.7  PERSON 1 | And I would create a petri net or a class diagram or |
| 0:00:16.0  PERSON 2 | The whole point is in fact like, that the information flow- |
| 0:00:20.0  PERSON 1 | I think a petri net |
| 0:00:21.6  PERSON 3 | Petri net, oh no [laugh] |
| 0:00:26.5  PERSON 1 | Because yeah |
| 0:00:27.4  PERSON 2 | But then we need to look at from what viewpoint we are doing it. Because are we doing it then, or from the use of [inaudible] for example. For example he has to - |
| 0:00:37.3  PERSON 1 | Yeah I think so, I think from the user interface |
| 0:00:38.9  PERSON 2 | Yeah. Start with a blank pane. And then exactly all the steps with that |
| 0:00:46.6  PERSON 1 | Yeah |
| 0:00:47.0  PERSON 3 | Yes |
| 0:00:48.3  PERSON 1 | So I can wipe this now |
| 0:00:50.4  PERSON 2 | Yeah |
| 0:00:51.9  PERSON 1 | Work simultaneously |
| 0:01:03.4  PERSON 2 | Yeah. And a whiteboard |
| 0:01:07.5  PERSON 1 | So, we have these steps then right. |
| 0:01:11.3  PERSON 2 | First we start with the, of course with the- creating a view right. Creating a map. Creating a view, or yeah, or creating a pane or something on which everything can be drawn right. So create a visual map of an area, layouts, roads and patterns of their choosing. So- so first the map right |
| 0:01:40.4  PERSON 1 | Yeah but you can select a map or you can create a map |
| 0:01:44.2  PERSON 2 | Yeah, create a new one yeah. So you can- so you have choices actually right now |
| 0:01:48.7  PERSON 1 | Yeah but you start with one point. |
| 0:01:51.0  PERSON 3 | Yeah and [inaudible] intersection or at- |
| 0:01:51.6  PERSON 2 | So you start first at one point |
| 0:01:56.1  PERSON 3 | A road or at intersection |
| 0:01:59.2  PERSON 2 | That’s for later then right? |
| 0:02:01.1  PERSON 1 | Cause first they have to make a decision, choose an existing- |
| 0:02:03.8  PERSON 2 | Exactly yeah. So you have a choice right, the choice goes to replace |
| 0:02:08.7  PERSON 1 | Yeah but what is this state just [inaudible] |
| 0:02:10.4  PERSON 2 | Oh just something [inaudible] your start state right |
| 0:02:13.2  PERSON 1 | Yeah but |
| 0:02:13.7  PERSON 3 | E |
| 0:02:14.9  PERSON 2 | E |
| 0:02:14.9  PERSON 3 | E |
| 0:02:16.4  PERSON 2 | It goes from E to C right |
| 0:02:17.3  PERSON 3 | Yeah |
| 0:02:17.3  PERSON 1 | Yeah [inaudible] select one or create one right |
| 0:02:24.8  PERSON 2 | Ah yeah. In fact this one should first go to- yeah that doesn’t matter. The [inaudible] |
| 0:02:30.4  PERSON 3 | [inaudible] also |
| 0:02:31.8  PERSON 1 | You can also, yeah build, or edit, because you can select but you can also edit one. Just extend the select one |
| 0:02:42.1  PERSON 2 | Yeah |
| 0:02:43.3  PERSON 1 | So- |
| 0:02:43.5  PERSON 3 | [inaudible] modifier |
| 0:02:44.7  PERSON 1 | Yeah yeah what to name this then |
| 0:02:46.8  PERSON 3 | Modifier |
| 0:02:48.7  PERSON 2 | Yeah |
| 0:02:48.7  PERSON 1 | Yeah but it’s also the startup state so |
| 0:02:52.7  PERSON 2 | Yeah but you can just- you can build a new one then right. Go to build |
| 0:02:57.5  PERSON 1 | So this one can also come to that one right. Actually you have |
| 0:03:02.9  PERSON 3 | Is it open or sealed |
| 0:03:07.7  PERSON 1 | What then. I said [inaudible] configuration |
| 0:03:11.8  PERSON 3 | Well, construct the [inaudible] it may [inaudible] |
| 0:03:12.9  PERSON 2 | Yeah yeah exactly |
| 0:03:14.2  PERSON 3 | [inaudible] |
| 0:03:14.8  PERSON 2 | Exactly yeah |
| 0:03:15.5  PERSON 1 | So the- there is also already this one right. Build is building the roads and |
| 0:03:22.2  PERSON 2 | Yeah, well then set parameter if you can look at it from that way. So then you are going to decide what is the density or what is the, well, the times, or are there any [inaudible] etcetera. That should be set |
| 0:03:33.6  PERSON 3 | [inaudible] detail then? |
| 0:03:34.7  PERSON 2 | What? |
| 0:03:35.0  PERSON 3 | Since this is an information view, so do you want it in [inaudible] |
| 0:03:40.5  PERSON 1 | Nah I’m not too sure |
| 0:03:43.0  PERSON 2 | No heh no heh. Because at the beginning is [inaudible] the information so. Information flow from which step you go to what step. Right. So you have the parameter set and then the simulation can start right. You set the parameters, then from parameters you go to the |
| 0:03:58.3  PERSON 1 | You press some button |
| 0:03:59.0  PERSON 2 | You press a button yeah, and then it can start calculating right |
| 0:04:04.2  PERSON 1 | [inaudible] |
| 0:04:08.6  PERSON 2 | Yeah |
| 0:04:09.4  PERSON 1 | And then the simulation starts |
| 0:04:11.8  PERSON 2 | Exactly. And eventually the simulation |
| 0:04:15.9  PERSON 1 | So simulation is kind of like a box then |
| 0:04:17.7  PERSON 2 | Yeah |
| 0:04:19.6  PERSON 1 | Yeah just general [inaudible] |
| 0:04:21.7  PERSON 3 | It’s already by [inaudible] minutes |
| 0:04:23.4  PERSON 2 | Heh, what [inaudible]. Then the simulation goes back [inaudible] right |
| 0:04:28.9  PERSON 1 | Yeah you visualize |
| 0:04:29.8  PERSON 2 | You visualize the thing. Yeah so visualize map maybe or |
| 0:04:34.4  PERSON 1 | Yeah visualize traffic and- |
| 0:04:36.3  PERSON 2 | Populate traffic |
| 0:04:43.2  PERSON 1 | Yeah, I’m just [inaudible] that explain it in the document heh |
| 0:04:47.1  PERSON 2 | So you don’t really [inaudible] visualize and then, yeah, you should [inaudible] right. Add some [inaudible] point. Because after visualization then everything is |
| 0:05:02.5  PERSON 3 | But the information viewpoint is about the content |
| 0:05:07.4  PERSON 2 | Yeah but the information flow heh. You have two kind of models. |
| 0:05:10.9  PERSON 3 | What kind of information that flows from here |
| 0:05:13.8  PERSON 2 | Yeah |
| 0:05:15.6  PERSON 3 | [inaudible] |
| 0:05:20.8  PERSON 1 | We have not really one piece of information. But what did you say of the visualization. |
| 0:05:28.3  PERSON 2 | Well [inaudible] |
| 0:05:28.9  PERSON 1 | Yeah yeah |
| 0:05:29.7  PERSON 2 | Some sort [inaudible] but, like for example so we are here |
| 0:05:33.7  PERSON 1 | I’d actually go back to here probably. To the starting state, cause then you can see, ok, this is what happened and I want to [inaudible] |
| 0:05:44.1  PERSON 3 | [inaudible] |
| 0:05:44.5  PERSON 2 | [inaudible] the [inaudible] |
| 0:05:47.3  PERSON 1 | Yeah but you can also again |
| 0:05:49.9  PERSON 2 | Build a [inaudible] yeah ok, that’s true. Yeah of course, because0- |
| 0:05:52.8  PERSON 1 | Actually |
| 0:05:53.5  PERSON 2 | Because you are building the roads |
| 0:05:54.1  PERSON 1 | And you have two arrows. So- and for example here |
| 0:06:00.1  PERSON 3 | Well then [inaudible] do the builder. Not to the [inaudible] |
| 0:06:05.4  PERSON 1 | Yeah. Or actually you can select another one, if you want to right |
| 0:06:09.1  PERSON 2 | Yeah but then you have to go to [inaudible] right. Cause then you have to make another choice |
| 0:06:12.8  PERSON 1 | Yeah |
| 0:06:13.2  PERSON 2 | Alright |
| 0:06:13.2  PERSON 1 | Yeah fine |
| 0:06:14.4  PERSON 2 | So then if you- between |
| 0:06:21.0  PERSON 1 | You can hide the set parameter of your current set or you can start the whole process all over again. And editor [inaudible] create any more |
| 0:06:26.6  PERSON 2 | Yeah but you could not [inaudible] choice. So you then- won’t let you choose, won’t let. It plays from here and it goes to there, or it can either go to there |
| 0:06:34.9  PERSON 1 | [inaudible] |
| 0:06:37.8  PERSON 2 | Yeah no, just [inaudible] |
| 0:06:38.3  PERSON 3 | Yeah you can , if you build form this. This part |
| 0:06:40.5  PERSON 2 | Exactly |
| 0:06:41.3  PERSON 1 | Yeah alright, for [inaudible] editing and everything else so |
| 0:06:46.1  PERSON 2 | [inaudible] place |
| 0:06:47.7  PERSON 1 | So is this it then. Seems a bit compact [laugh] |
| 0:06:52.0  PERSON 2 | Well at least it has an information flow alright. But in fact right now we are of course looking from the user’s perspective right. |
| 0:06:59.7  PERSON 1 | Yeah |
| 0:07:01.0  PERSON 2 | And that’s also possible. Because in the FAM here we currently focus on the modules right. And this is yeah a whole other process again right. We’re focusing on the user perspective |
| 0:07:12.8  PERSON 1 | Yeah |
| 0:07:14.9  PERSON 2 | [inaudible] information flow, which is a separate- cause we have structures for storage and for flow. Like this is an information flow as well right. |
| 0:07:26.9  PERSON 3 | Mhm |
| 0:07:27.4  PERSON 2 | Then where is the [inaudible] in storage, they’d access them, all the [inaudible] are enriched and this one, the petri net is just a way to visualize it. It’s just an imitation, of course. That you can just walk through. But you can for example, also use this one. This is a sort of [inaudible] I guess, and then you can really see it like ok, where is information going to. Within a FAM you don’t annotate your arrows right. You only say there is a place and you go to a certain state in fact. That’s what happens right. Did you capture the whole process? With this? |
| 0:08:06.0  PERSON 3 | About this, why are you |
| 0:08:09.3  PERSON 2 | Based on requirements [inaudible] this is updated, yeah yeah |
| 0:08:29.2  PERSON 1 | Yeah [inaudible] left hand turns but |
| 0:08:36.0  PERSON 2 | Should be modelled- this was for [inaudible] person maybe. Observing properties [inaudible] maps timing schemes, alternate [inaudible] results. Yeah well |
| 0:08:44.6  PERSON 3 | Yes but |
| 0:08:44.9  PERSON 1 | Yeah |
| 0:08:47.7  PERSON 2 | Yeah exactly [inaudible] we write |
| 0:08:50.8  PERSON 1 | Yeah I was thinking about left hand turn |
| 0:08:52.7  PERSON 3 | I still am not sure but- back to the [inaudible] can we use that, back to the start note, but, let me try first |
| 0:09:05.0  PERSON 2 | Because this is just a place and you have then just a choice right. You can either go to the set parameters or you can either go to an- |
| 0:09:10.2  PERSON 3 | Oh we cannot do that |
| 0:09:12.6  PERSON 2 | Or should we have an end state then |
| 0:09:14.4  PERSON 3 | Mhm. We have to- we can just between [inaudible] maybe |
| 0:09:24.0  PERSON 2 | So there should be always an end state |
| 0:09:26.7  PERSON 3 | Mhm |
| 0:09:26.7  PERSON 1 | Yeah. But then we can’t – oh you cannot point back to the beginning |
| 0:09:29.8  PERSON 3 | Oh |
| 0:09:33.0  PERSON 2 | So then you should have an end state then but |
| 0:09:35.7  PERSON 3 | But if you- I think that maybe it will be better that we just back to the [inaudible] just- select maybe like an open file, did you mean. Open template, but maybe [inaudible] |
| 0:09:50.8  PERSON 2 | Yeah for example |
| 0:09:53.3  PERSON 1 | Yeah but we can point to separate build and select all three |
| 0:09:57.9  PERSON 3 | Mhm |
| 0:09:58.7  PERSON 1 | Or just end here, and just let the user start the process all over again. And also add an arrow directly to , set parameters that thing. |
| 0:10:08.8  PERSON 2 | Yeah but first you have to either [inaudible] right. You can’t go from this to this state. You don’t have- |
| 0:10:16.4  PERSON 1 | Yeah if you do [inaudible] |
| 0:10:17.7  PERSON 2 | [inaudible] think you haven’t opened something right. So this arrow is not available then I would say so |
| 0:10:25.8  PERSON 1 | Yeah |
| 0:10:26.8  PERSON 2 | But this- I think this is a good solution |
| 0:10:29.0  PERSON 1 | Yeah we have to bring- you stop here, you cannot |
| 0:10:32.4  PERSON 2 | Yeah you can [inaudible] |
| 0:10:33.7  PERSON 1 | [inaudible] know |
| 0:10:37.0  PERSON 2 | Yeah |
| 0:10:37.0  PERSON 1 | Then you have to point to those and have an additional here that does end. So three arrows, and fourth is the end state |
| 0:10:56.0  PERSON 2 | Yeah. But can you have for example- it’s possible to, for example, have a choice, so you have a choice then- because now you would have a choice with four options right. |
| 0:11:08.8  PERSON 1 | Yeah |
| 0:11:09.3  PERSON 2 | So you could either end the process or you can either do one of these three |
| 0:11:13.0  PERSON 1 | Yeah, yeah I’m not sure whether this is possible [inaudible] |
| 0:11:14.6  PERSON 2 | Yeah exactly. We should look at that |
| 0:11:19.1  PERSON 3 | Which one |
| 0:11:20.5  PERSON 2 | Well that the user here |
| 0:11:23.0  PERSON 1 | That you have four outgoing arrows, one |
| 0:11:26.5  PERSON 3 | I think that’s possible |
| 0:11:35.7  PERSON 2 | [Person 3] is petri net expert so |
| 0:11:37.8  PERSON 3 | No, just the [inaudible] |
| 0:11:39.7  PERSON 1 | [inaudible] Doing his magic [laugh] |
| 0:11:44.6  PERSON 3 | [inaudible] is the creator of the- which is as you said. We are not an expert |
| 0:11:55.8  PERSON 2 | Yeah exactly. Then it goes to the [inaudible] and then it goes to the [inaudible] process, then simulation |
| 0:12:06.6  PERSON 3 | So it goes back to |
| 0:12:07.8  PERSON 2 | Yeah, you still need to have one over here then |
| 0:12:09.6  PERSON 3 | This one, oh sorry |
| 0:12:09.9  PERSON 2 | Then go back |
| 0:12:12.0  PERSON 3 | Cause this is |
| 0:12:12.7  PERSON 2 | This is set parameters, and then you should have another one which is set run, and then model on, simulation and then it goes back in fact |
| 0:12:22.7  PERSON 3 | This is [inaudible] |
| 0:12:25.9  PERSON 2 | [inaudible] select yeah |
| 0:12:26.7  PERSON 3 | [inaudible] yeah it’s ok. Build. And then? Press button |
| 0:12:39.8  PERSON 2 | It’s that one. Then you go to simulation |
| 0:12:44.1  PERSON 3 | Simulation. What is the difference between simulate and visualize |
| 0:12:52.4  PERSON 2 | No, because the simulation process outputs to the visualization function in fact. And then it |
| 0:13:02.2  PERSON 3 | [Inaudible] traffic. So I put the [inaudible] in the [inaudible] |
| 0:13:08.0  PERSON 1 | Yeah I did that |
| 0:13:11.8  PERSON 3 | Right |
| 0:13:21.1  PERSON 1 | I’m still thinking about that left hand turn. We didn’t include it anywhere. How can you model it |
| 0:13:31.9  PERSON 3 | So create part of the logic |
| 0:13:33.7  PERSON 1 | Yeah I think so. Yeah, it´s actually a property of your road |
| 0:13:41.5  PERSON 3 | Mhm, maybe we should add, maybe something |
| 0:13:45.4  PERSON 2 | Should we really go to such a deep level then |
| 0:13:49.1  PERSON 1 | Yeah |
| 0:13:50.4  PERSON 2 | Right, I mean, this is |
| 0:13:51.6  PERSON 1 | I do not think so but |
| 0:13:52.8  PERSON 3 | [inaudible] split it between parameters and rules, let´s say, this intersection has rules that we can |
| 0:14:02.6  PERSON 2 | Yeah I |
| 0:14:03.7  PERSON 1 | Just call it configuration then |
| 0:14:04.9  PERSON 2 | Right, because it´s really at that level right. I mean if you |
| 0:14:08.9  PERSON 1 | Just can name them that it has property road then set that in the paint properties |
| 0:14:13.7  PERSON 2 | Yeah exactly right, I mean |
| 0:14:15.6  PERSON 1 | Yeah, then that´s set |
| 0:14:17.6  PERSON 2 | Should we, because the you should really model the process of someone really constructing intersection right. In fact, then you are already modelling all other processes as we do right now. |
| 0:14:31.9  PERSON 1 | Yeah. But also how, how does it simulate what a single car will do. Is it just at random, cause left, right or make U turn. Or |
| 0:14:42.6  PERSON 2 | Yeah |
| 0:14:43.8  PERSON 1 | That is not explained here, it´s just part of the black box of simulation but |
| 0:14:50.8  PERSON 2 | Well |
| 0:14:51.5  PERSON 3 | It´s like randomized [inaudible] |
| 0:14:54.2  PERSON 1 | You cannot decide for every car where to go for example, not in this basic simulation. So, should we make it randomized |
| 0:15:02.8  PERSON 3 | Or maybe we can add in the simulation box, like, randomized car movement, something like that [inaudible] |
| 0:15:11.1  PERSON 1 | Yeah then we would need the random number generator. Also in the context view |
| 0:15:16.8  PERSON 2 | Yeah. But that could also be part of the simulation then right. Because the simulation [inaudible] another intersection |
| 0:15:23.0  PERSON 1 | Yeah we can have that. But then we can also add [inaudible] |
| 0:15:27.6  PERSON 2 | Yeah, so that´s why |
| 0:15:29.3  PERSON 1 | But just pointing arrows to the global simulation box, no to an exact, because it´s still too vague |
| 0:15:34.6  PERSON 2 | Then it could model it as dependencies on a simulation package |
| 0:15:38.9  PERSON 1 | Yeah in the context |
| 0:15:40.4  PERSON 2 | Yeah the context, but in the context we already have a simulation package right. |
| 0:15:43.8  PERSON 1 | Yeah maybe, maybe we have removed it |
| 0:15:47.1  PERSON 2 | No no, I checked it. We still have it |
| 0:15:48.1  PERSON 1 | Ok |
| 0:15:49.1  PERSON 2 | So in fact, with the simulation package we have the random number generator for queuing |
| 0:15:52.9  PERSON 1 | Ok that´s fine then, we just have to explain it in the report |
| 0:15:55.6  PERSON 2 | Yeah [inaudible] |
| 0:16:04.5  PERSON 3 | I forgot, which one is choice or [inaudible] |
| 0:16:16.4  PERSON 2 | No no but wait [Person 3] then this one should be- or yeah wait, because you have like. This one, this is choice right, this one goes to there, there, and there, and then there should be another choice |
| 0:16:29.6  PERSON 3 | Oh yeah |
| 0:16:29.6  PERSON 2 | Directly into the C |
| 0:16:34.2  PERSON 1 | Yeah but it cannot directly- it has to go- oh you mean, I guess, oh ok |
| 0:16:36.8  PERSON 2 | Yeah like that. Because eventually the user can just choose between all these |
| 0:16:42.6  PERSON 1 | Yeah right |
| 0:16:46.4  PERSON 3 | Fire |
| 0:16:47.4  PERSON 2 | Fire |
| 0:16:49.3  PERSON 3 | Oops so |
| 0:16:52.1  PERSON 2 | That’s how it works. It’s just the |
| 0:16:53.2  PERSON 3 | Oy |
| 0:16:57.4  PERSON 2 | It’s gonna do both. Think it’s broken [laugh] |
| 0:17:09.4  PERSON 3 | Yeah let’s try |
| 0:17:13.1  PERSON 2 | You can either select on |
| 0:17:18.9  PERSON 3 | Why, is there something wrong. Try. Ok |
| 0:17:29.7  PERSON 2 | That’s what we would place, so it should. Yeah. And this one is also outgoing, and this one also |
| 0:17:39.6  PERSON 1 | Oh no, this one has |
| 0:17:40.3  PERSON 2 | Oh yeah |
| 0:17:40.9  PERSON 1 | Yeah oh fuck. This is not working |
| 0:17:44.5  PERSON 2 | No |
| 0:17:49.3  PERSON 3 | [inaudible] |
| 0:18:07.8  PERSON 1 | We have to revise it |
| 0:18:08.7  PERSON 2 | Yeah |
| 0:18:09.9  PERSON 3 | Well |
| 0:18:12.3  PERSON 2 | We need to now make another |
| 0:18:15.3  PERSON 3 | You want to split the |
| 0:18:17.2  PERSON 2 | But it goes wrong at the thing right. At the |
| 0:18:20.4  PERSON 1 | That’s two different places |
| 0:18:22.3  PERSON 2 | Two different places |
| 0:18:22.8  PERSON 3 | You want to make- if you want to make a [inaudible] something like this, you just click the |
| 0:18:34.2  PERSON 2 | Mhm |
| 0:18:36.1  PERSON 1 | This is a |
| 0:18:45.2  PERSON 2 | Yeah, there goes our petri net |
| 0:18:47.9  PERSON 1 | Yeah but how are we going to fix it, just let it end there |
| 0:18:54.2  PERSON 2 | I think that we don’t have enough, yeah |
| 0:18:58.2  PERSON 1 | Then there is no reversion or [inaudible] yeah |
| 0:19:01.0  PERSON 2 | But yeah you know it should be possible right, to [inaudible] |
| 0:19:06.5  PERSON 1 | [inaudible] because the user can start at the beginning again |
| 0:19:10.6  PERSON 2 | Yeah of course |
| 0:19:12.5  PERSON 1 | And then you have to build or select again |
| 0:19:14.1  PERSON 2 | Yeah. So then you have to go through all the process in fact. But the |
| 0:19:21.5  PERSON 1 | Yeah but the [inaudible] or we should add some kind of an instance that transitions from the start state to the set parameters. Just that you actually can edit your parameters but only when you have already some intersections.so that it’s in conditional mode |
| 0:19:44.9  PERSON 3 | Mhm, but this [inaudible] we do this, it’s something like this |
| 0:19:49.0  PERSON 2 | And then it’s possible, we should have |
| 0:19:56.2  PERSON 1 | But there are no conditionals in petri net right. |
| 0:20:01.2  PERSON 2 | By the way [Person 3], do you still have the old one or not, or is it already |
| 0:20:05.8  PERSON 1 | This one? |
| 0:20:06.8  PERSON 3 | This one? |
| 0:20:07.5  PERSON 2 | Or that one |
| 0:20:12.5  PERSON 3 | Maybe I remove this first, because this is making |
| 0:20:17.3  PERSON 2 | No wait, something of mine, I actually. Yeah, and then the thing begins |
| 0:20:34.8  PERSON 3 | But when we do something like this, maybe it’s not confused because |
| 0:20:47.0  PERSON 2 | No but wait, what did you connect this one to, another, wait if you just- yeah if you just put a transition between this one. So you get rid of that arrow |
| 0:21:06.6  PERSON 3 | Mhm |
| 0:21:07.0  PERSON 2 | And just put the transition here, instead of the arrow directly to the thing |
| 0:21:13.2  PERSON 3 | You mean like this? |
| 0:21:14.2  PERSON 2 | Yeah and then just put it over there |
| 0:21:17.6  PERSON 3 | Ok |
| 0:21:22.0  PERSON 2 | Oh yeah, it should lead of course to a thing right, to a |
| 0:21:25.0  PERSON 3 | [inaudible] the same I believe. [inaudible] |
| 0:21:30.5  PERSON 2 | Yeah |
| 0:21:30.5  PERSON 3 | So |
| 0:21:31.9  PERSON 2 | Yeah exactly. But we’re only allowed to model it to model transition again, why? For example if you have just like, set parameters, that you have again set parameters or, yeah |
| 0:22:06.3  PERSON 1 | Yeah that is possible, but you also want to be able to edit your intersections. Not just edit the parameters |
| 0:22:20.7  PERSON 2 | Yeah, and also the problem with that is that we [inaudible] that you only come over the process once. For example, you can do it like this, you have a choice, you can go to another set parameters or another build or select for example. And the end somewhere. But you can still model one iteration then in fact. |
| 0:22:41.2  PERSON 3 | Because the petri net thinks that we have to- with the token from the visualize |
| 0:22:52.5  PERSON 1 | Yeah |
| 0:22:55.1  PERSON 3 | [inaudible] to something like this |
| 0:22:58.1  PERSON 1 | We have 8 more minutes |
| 0:22:59.6  PERSON 2 | Oh should find a solution before- or yeah, we can yeah- if we really can’t find something then we should end it. And the it just ends with the end. With the final state |
| 0:23:13.2  PERSON 1 | Yeah, we can just do that and then |
| 0:23:18.0  PERSON 3 | Should I also put- in here? |
| 0:23:24.4  PERSON 2 | No no no because then |
| 0:23:28.6  PERSON 3 | [inaudible] |
| 0:23:30.7  PERSON 2 | Yeah |
| 0:23:32.5  PERSON 3 | [inaudible] |
| 0:23:34.3  PERSON 2 | Should just be a choice with- yeah |
| 0:23:36.8  PERSON 3 | [inaudible] |
| 0:23:38.1  PERSON 2 | And then yeah, then we just have one process right, I mean, then we just have this but ok yeah. It’s still the whole process but the thing that- this is- |
| 0:24:19.3  PERSON 3 | Because we always [inaudible] the token |
| 0:24:23.9  PERSON 2 | This is a solution |
| 0:24:25.3  PERSON 3 | What |
| 0:24:25.3  PERSON 1 | What |
| 0:24:26.2  PERSON 3 | [inaudible] |
| 0:24:26.9  PERSON 1 | Well, maybe not. When you add this one |
| 0:24:31.0  PERSON 3 | Mhm |
| 0:24:31.6  PERSON 2 | Hey |
| 0:24:31.8  PERSON 3 | Oh |
| 0:24:32.5  PERSON 2 | Yeah yeah yeah |
| 0:24:33.3  PERSON 1 | You go back |
| 0:24:35.3  PERSON 2 | Wait a minute |
| 0:24:35.7  PERSON 1 | Yeah, add it in the run. [inaudible] should go to you. You can do this one, this one, and you come back here. It doesn’t expect one from those |
| 0:24:44.4  PERSON 2 | Ah |
| 0:24:45.1  PERSON 3 | Mhm |
| 0:24:45.8  PERSON 2 | Aha |
| 0:24:46.3  PERSON 1 | So it just add another one, after the [inaudible] save, and then it splits to the other one |
| 0:24:51.9  PERSON 3 | Nice thanks [Person 1] |
| 0:24:55.0  PERSON 2 | So there are some really, another dynamic future right. [laugh] |
| 0:25:00.8  PERSON 1 | It’s also dynamic |
| 0:25:06.6  PERSON 3 | Oh, no no no |
| 0:25:11.8  PERSON 1 | These have to point to that one and this one splits to the select and the build |
| 0:25:19.5  PERSON 2 | Yeah, where is the builder |
| 0:25:20.7  PERSON 1 | No that one |
| 0:25:20.9  PERSON 3 | Nah. Like this? |
| 0:25:25.7  PERSON 1 | Then maybe yeah, give the [inaudible] a layout, because [inaudible] |
| 0:25:36.4  PERSON 3 | Yeah maybe also have to use that one |
| 0:25:42.2  PERSON 1 | Ah oh yeah, that’s what I want. Now you can point to the starting again |
| 0:25:46.8  PERSON 3 | This one to |
| 0:25:49.6  PERSON 1 | To the orange one, then you can start the whole process all over again at least |
| 0:25:54.2  PERSON 2 | Yeah, something for the set parameters still yeah |
| 0:25:59.0  PERSON 1 | Yeah, that is indeed a problem |
| 0:26:00.7  PERSON 2 | Yeah but, yeah ok, but then we at least have a- |
| 0:26:04.5  PERSON 1 | But then you can choose to directly go to |
| 0:26:08.3  PERSON 3 | Yeah |
| 0:26:11.2  PERSON 1 | Then you might have an empty |
| 0:26:13.3  PERSON 3 | I can just, this- and I still can just- to build new one |
| 0:26:19.3  PERSON 1 | Oh, that’s good |
| 0:26:22.2  PERSON 3 | Probably [clapping] [laugh] but |
| 0:26:26.1  PERSON 1 | Real expert at work |
| 0:26:26.6  PERSON 2 | Saved by [inaudible] at least this solution works then for |
| 0:26:34.6  PERSON 3 | But we also have to end the |
| 0:26:37.1  PERSON 2 | Yeah |
| 0:26:38.1  PERSON 3 | Just split in- from select to build. So, this one? |
| 0:26:44.6  PERSON 1 | No. you can at least start over here, and then you can either |
| 0:26:48.5  PERSON 2 | Choose right |
| 0:26:49.4  PERSON 1 | Yeah whether you want to build or select |
| 0:26:52.1  PERSON 2 | Yeah the only solution that we won’t have right now is for the set parameters |
| 0:26:55.3  PERSON 1 | But, yeah well that’s something we won’t have then, some problem I guess |
| 0:26:59.0  PERSON 3 | So this is enough? Or- because if I choose this one |
| 0:27:05.4  PERSON 1 | Yeah |
| 0:27:06.1  PERSON 3 | And I run to build |
| 0:27:09.8  PERSON 1 | Mhm, oh you mean |
| 0:27:10.7  PERSON 3 | Yeah it just goes to the |
| 0:27:12.6  PERSON 1 | Yeah you mean you cannot select them |
| 0:27:14.7  PERSON 2 | Yeah so |
| 0:27:16.1  PERSON 1 | Yeah but that’s just |
| 0:27:17.1  PERSON 2 | It’s not a choice anymore |
| 0:27:19.6  PERSON 1 | Yeah it might be |
| 0:27:22.7  PERSON 3 | Should I just do something like this |
| 0:27:26.6  PERSON 1 | Yeah because we, yeah but this is. Then we only have from select to build, just to see if we can |
| 0:27:35.1  PERSON 2 | Yeah but here it fires to both right. If you trigger this one if fires to both |
| 0:27:40.5  PERSON 1 | Yeah, maybe you have to [inaudible] one, and when you [inaudible] still green and transition then it fires to both. But that’s not the case here |
| 0:27:53.8  PERSON 3 | Mhm |
| 0:27:57.5  PERSON 2 | Well, how [inaudible] again? |
| 0:28:01.6  PERSON 1 | No not two |
| 0:28:04.7  PERSON 3 | three |
| 0:28:05.2  PERSON 2 | Oh three yeah ok. |
| 0:28:11.4  PERSON 1 | So yeah, you have two big [inaudible] action that you’re going to perform. Otherwise we have to go from set parameters again to that one. Then you have a loop there and you just |
| 0:28:21.3  PERSON 2 | Yeah that’s chosen, yeah. But the you should in fact when you are at set parameters, you should decide what |
| 0:28:28.8  PERSON 1 | Actually, you want after all those three actions, you want to go back to the beginning. |
| 0:28:36.4  PERSON 2 | Yeah well I’ll just leave it then like this right now so. It’s fine, and at least we |
| 0:28:45.5  PERSON 1 | But we can- maybe we can add that. From set parameters to the orange |
| 0:28:49.5  PERSON 3 | From the set parameters to the orange |
| 0:28:56.2  PERSON 2 | Yeah but then you still have a problem right, at the end of the process. Because now you have to decide whether, right, you select or build and then you can go from [inaudible] to either, you got to this one, or you can go back. Right. But normally, well it’s no use to do it like this right now right. Normally you watch the whole process and then you make - |
| 0:29:18.5  PERSON 1 | Decision what to do with it |
| 0:29:19.7  PERSON 3 | I create a token, that’s the problem |
| 0:29:23.0  PERSON 1 | Oh that’s not good. Yeah, that’s not really a problem but you can set some parameters and then think on a |
| 0:29:32.5  PERSON 2 | Yeah ok |
| 0:29:33.3  PERSON 1 | To build some extra |
| 0:29:34.9  PERSON 2 | Yeah |
| 0:29:34.9  PERSON 3 | But actually you want to go from select, build and set parameters back to the beginning, of the- any of these three |
| 0:29:45.1  PERSON 3 | Only from this one back to the |
| 0:29:48.8  PERSON 1 | Yeah |
| 0:29:50.2  PERSON 2 | Yeah, but should you really want that, because yeah you can also decide, ah well yeah, press run, yeah. Well if you go from set parameters you still could decide, oh I want to open another one. You can do that, but yeah you can do the same thing for press run maybe |
| 0:30:05.5  PERSON 1 | Yeah but then you have to wait |
| 0:30:06.7  PERSON 2 | Oh ok, then we have [inaudible] |
| 0:30:08.5  PERSON 3 | Yeah |
| 0:30:09.3  PERSON 2 | But I, no I , yeah. Should you really model that. |
| 0:30:23.8  PERSON 1 | Nah, we can just leave it like this |
| 0:30:25.1  PERSON 2 | Yeah I think that’s the best. Right now it’s [inaudible] to just do the whole process iteratively. |
| 0:30:33.2  PERSON 1 | Yeah but now you cannot [inaudible] petri net because when you select something you cannot build on it. You should just have to run it first and then you can |
| 0:30:43.1  PERSON 2 | Yeah |
| 0:30:44.4  PERSON 1 | Do it, but, I think we should create the documentation |
| 0:30:46.4  PERSON 2 | Yeah we’ve run out of time already |
| 0:30:50.9  PERSON 3 | [inaudible] |
| 0:30:53.2  PERSON 2 | We have our views right. It has been a nice session |
| 0:30:57.7  PERSON 1 | We are stupid |
| 0:31:04.7  PERSON 2 | Yes |
| 0:31:04.7  PERSON 3 | Should I open the document |
| 0:31:08.1  PERSON 2 | Yes, should we all document one view right. That’s fine I guess |
| 0:31:12.8  PERSON 1 | Exactly two hours |
| 0:31:17.4  PERSON 2 | The point is in fact, there’s just not, still not enough time I guess to write |
| 0:31:21.2  PERSON 1 | No |
| 0:31:23.4  PERSON 2 | What do we want to do with the draft then. It really takes a lot more time to do it but. Ok. Template, is the template also already on the |
| 0:31:41.0  PERSON 3 | Yeah, but with, few minutes, I |
| 0:31:45.3  PERSON 1 | Did you pause the recording [Person 3]? |
| 0:31:47.1  PERSON 3 | Huh? |
| 0:31:47.8  PERSON 1 | Did you pause the recording |
| 0:31:49.2  PERSON 3 | Ok |
| 0:31:50.6  PERSON 1 | Will you pause- |