SCTP your assignment will start with a building spatial design from over here and depicted on the left. Part of the assignment we ask you to think aloud this means we want you to say what you are thinking about each step of the process. Okey dokey and we start the assignment.

The screen displays your current building spatial design. Use the mouse to rotate the model and familiarize yourself with each unique number of space. The counter at the top left indicates your current location.

Five, six, four, nine, three, eight, ten, seven, two, one. The first step in the assignment is the creation of a structure model. You assign one of three each rectangle of the spatial model.

The available types are beam, truss, flat shell. In this next screen you have to assign a sticker type of each rectangle by clicking the corresponding option in the table. Choose the type you believe is best for each rectangle.

All horizontal rectangles, floors and roofs are assigned a flat shell default and cannot be changed. So we have to make a structure model with three possible structure types. So there's beam, truss or a flat shell.

Okay beam, truss structure or a flat shell structure. So let's see how this works. Oh f\*\*k can I choose? Okay so for the first one I think it's like a living room.

So I don't want to make a truss or a flat shell out of it. So I'm choosing beam structure. For the second one it is also an living room and I also want to have the biggest space available so I choose for beam.

This one also then you have a nice window at this side which is lovely. Yeah why not right? So I'm definitely going for a beam here otherwise you cannot walk and that's the area which is not very good. So let's just beam.

And this one, oh that is annoying. I'm going for a beam structure and I'm changing the first one to a, no not this one, the second one, no not the second one. I'm changing this one for a flat shell because you also need some stability aspects in this place.

So I'm thinking this will be my terrace. This will be my bedroom and I can just walk out of this living room into the terrace. Six.

Oh yeah definitely beam. No choice. Seven.

I'm gonna go for, you know, you want some climate. I think that's fun. In this part I am choosing I am going to choose beams.

Yes also inside the room so it will be beam of course. This one is going to be beam also because I can imagine you want to have a window in this area because otherwise it will be a dark area. Let's see the next one.

Where is it? Number 11. Ah well that's next to the other wall and I'm keeping this thing switched as this part will be like one big wall. So I like that.

I'm going for a plus structure in here because why not. And you have two terraces next to each other. I think that's lovely.

Also now yeah let's do this. I can maybe make a window somewhere or something and you can see my mouse in between the trusses. 13.

That will be a simple beam for the looks. And then this one. Ah look.

This will be also a flat wall. So for stability you need in this direction you want to have stability but also in this direction. So in the direction perpendicular to those big walls.

So this will be lovely. Oh that's inside the area. So simple beam.

Yeah this is what I like. Also simple beam. I think a truss will not have a very big angle on stability and this is pretty heavy.

Flat shells. So let's use beam. Also here beam.

Let's see. This part. So beam.

So I want to have here also a truss structure and possibility. So you have two structures. Yeah this will be.

No no no no no. Let's see. Where was this? Well let's make this a flat wall because then it's also more stable.

And this will also be. Yeah no this will be. Yeah this will be also a flat shell.

I don't want to solve this. Beam truss. Ah I'm sorry.

So no beam. I think it should be a beam. Let's see this one.

I want also beam here. And this one is inside. So also beam.

25. I don't see 25. There is an R inside.

Also beam. 26. Yes.

Also inside. That one. Yeah.

Also inside. Also inside. Yes.

Here she is. And this is more like it. Let's see.

Where was this? Ah it's at my bathroom. No I want to have a clear vision. I imagine this as my bathroom and to have a clear vision outside of this.

Yeah. Also beam inside the middle. Also there's a beam.

This will be. Let's see. Where was it? This.

Flat shell. Where are we? Ah no this is way too heavy for flat shell. So we use just a beam structure.

This will be also a beam structure. Yeah. Then.

Well. Yeah for maybe stability reasons let's make this a truss structure. I want to show beam.

Beam. This also be a beam. I want this to be a beam.

Ah yeah. And I also want here a wall. I envisioned.

Yes. I think that's more stable. Yeah that's good.

That's also good. Sure. Yeah.

47. Yeah. 48.

49. I think. Yeah.

I'm happy with this. I'm changing the flat shells to trusses. I'm changing my whole structure to more like a. I don't like the combination of the trusses with the flat shell.

So I am making every truss a flat shell. Or maybe I won't do that. Because that looks also quite uneffectly.

And you don't have a clear view anymore of the surroundings. So I don't like that. And this is.

And that's just this. Yeah. Okay.

I'm happy with this. Let's. Let's confirm this structure model.

You'll ask to remove a maximum of one space. Think aloud about your reason for choosing a particular space to remove. Enter the space ID below and press enter to confirm.

Please think aloud as you decide which space to remove. Explain your reasoning for the choice of your making. So I actually quite like the overhanging part.

So I will not remove that one. And I'm gonna remove I think part six. Because it's.

Yeah. It's just like this little weird thing that is hanging. Not really hanging.

But is hanging outside of. Yeah. The structure.

And it has like a little space not needed for maybe space storage or something. So I think I'm gonna remove space number six. And then I'm placing enter.

And why. So space is deleted. Click to continue.

Thank you. You will ask to split a maximum of one space as you decide which space to split. Please explain your reasoning aloud.

Enter the space ID or the space you wish to split and press enter. So I'm gonna split space number nine. And why I am going to do that.

Because I want to have a little palace. I think that. So imagine splitting it.

That would be nice I think. And there's no need for stability. So I think number nine will be good.

Enter. Why. Yeah.

Thank you. Iteration one complete. First iteration complete.

The building space model has been adjusted to recover the initial floor area. View all previous slabs on the screen to your left. The design will be now serve as starting point for the second iteration.

Okay. So I removed that one and I divided 11. Oh yeah that's good.

So now iteration number two. I'm now leaving for a little bit. Okay continue.

Okay create a new structural design with my second iteration. So what I'm doing as I'm doing more or less the same. So the first one is inside the building.

So it will be a beam. The second one is also. I know that this will be a truss.

I know that. This will be a beam. Yeah that's good for me.

That's also good. Let's see. Yeah that's good.

I'm not making a truss but otherwise it will be too heavy and that will not make any sense I think. I don't see where this is. It's inside the building should also have been.

So you don't want to interfere with the space inside. Number seven. I don't see where that is.

It's also inside. So that's good. Number nine.

Also inside. Yeah. That will be a beam.

Then we'll also be. Now let's go for a flat shell. Just for a little bit of stability.

Why a flat shell you might ask. Well why not. I think when you have this little partial you don't maybe need any windows there.

So it's also more architectural. My ambitions are flat shell. No that's inside the building.

That's a beam. This is also inside the building. So there will be a beam.

It's also inside the building. No there's not inside the building. Let's see.

It's on this side of the of the Oshiz Kebab. Let's make a truss out of this. Why not right.

Master making. No this will be a beam. I have a truss next to it.

Also here I have a truss next to it. And this I want to be a truss. So we have two nice trusses next to each other which is nice.

There's also a truss. Yeah that is fine. Well I don't want to make a truss out of this one actually.

Why not you might ask. No no I don't want to do this. So this will be a beam.

This is the. Oh I'm facing this as my entrance. So yeah I'm going to this building here.

So not to make any sense to make it a truss or a flat shell. This will be a flat shell for stability. Okay here.

And then also I see me because inside the building. I'm going to make a truss here. I'm going to make a beam here.

So this will be my truss because it will go up again eventually. Eventually. It's on this side of the building.

I don't think I need a truss there. So there'll be a beam because it's more convenient. I'm placing a beam here.

I'm also making a beam here. This will be my little terrace. So for architecture reasons no beam.

Beam here. Let's see. A truss here.

Yeah that's fine. And this is also inside the building. So a beam.

This will be a flat shell. So I encounter this as my wall. Then now for the two.

Yeah inside the building. So a beam. Then a... Let's make it also a flat shell.

All right. I think that's lovely. This will be a beam.

This will be a beam. So it can go outside of here. A beam.

Yeah it's in the building. It's also not needed I think for stability. I'm now doubting a little bit if I have enough stability in this direction.

So in the long direction of the building I only have two walls. Or this one. And yeah I don't know if that's enough actually.

So what I'm doing. A beam here. Also a... I don't see where it is.

Now let's do a beam here. No let's do a truss. No no no.

Beam there. I want to have a truss in this section. And that makes more sense I think.

And not here. No also a beam. This will be a beam.

Otherwise it will be too heavy. Let's see where it is. Yeah here I want to have a truss.

This will be my flat shell. Also for stability. Great.

And then this one is a beam here. It was also a bit too heavy. If that is cantilevering out of the thing.

Also a beam. This will be a truss. Yeah this will be a truss.

Since it's cantilevering it needs some kind of stability. There's cantilevering so that's why I'm choosing a truss. It's also adjusted in other things I think.

And then this side. Also cantilever. I am doubting a little bit now.

If this is actually even stable. And because of cantilever here. You have a truss here.

Then also cantilever here. And then also but I don't want to have trusses inside my building. Because then you cannot walk and you won't have.

So I think you want to have a truss on this part. So that you have to see where that is again. So I'm going through all beams and trusses again to find that one truss I want.

No that is the right truss. There's also a right truss. Not this one.

Let's go not this one either. No. This one maybe.

No. I'm not changing anything right to my virtual screen. Because no.

No. No. No.

No. No. No.

No. No. Also last one.

Thank you very much. This is what I want. So anyway.

That is confirmed. I think I'm happy with that. So I have the cantilever.

The only thing that worries me a little bit is this part. and yeah where does this part go to and yeah yeah yeah yeah yeah i think that this might not be the best thing so i might need also a truss there i think to make it stable then i have to go to again and see it should be more easy if there are numbers to each rectangle but never mind almost you know or it will like a little bit of order to this no yeah i'm making this also was it unstable i think this will be a truss notice not needed yeah this is what i meant so i'm confirming this social model um again i'm asked to remove um a space in my building so now i am removing i think i don't want to move number seven there's a lot number seven um i'm removing no not number two because obviously we too much cantilevering from the number 12 i think yeah number 12 that's still number 12 why number 12 might not as well um i feel like this is the most useless part of house if you look at functions um for us the build is not exactly needed i think then it will be like this and i can make him um rectangle 11 where now my wall is also another wall make it more stable i guess and pressing enter pressing y and now i'm asked to remove one oh that wasn't already click continue okay i'm asked to split one space well i want to split number seven because it's quite a big space i'm choosing i'm clicking y and then i continue and then assignments complete okay