BIM GAME OLDENBURG

Bellow are presented the students that make up the project and the role they are having.

Emanuela Borsci – ARCHITECT

Luca Favia - ARCHITECT

Antoine Delfosse - ARCHITECT

Sofía Madrigal Rubio - CIVIL ENGINEERING **(UCLM, Cuenca)**

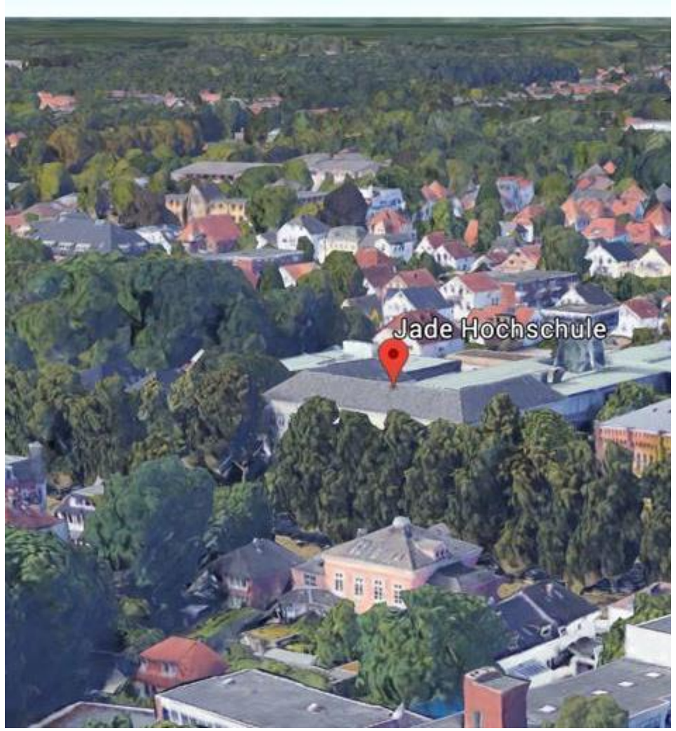
Jaime López Campos - CIVIL ENGINEERING **(UCLM, Cuenca)**

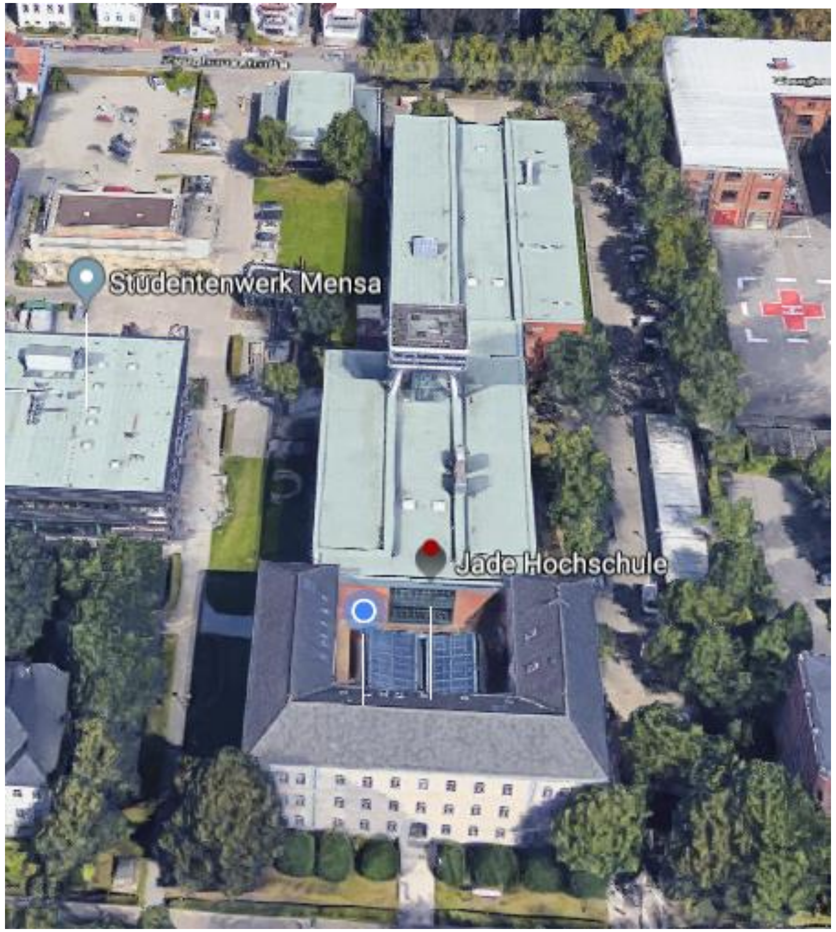
Encarnación Moya Molina - CIVIL ENGINEERING **(UCLM, Cuenca)**

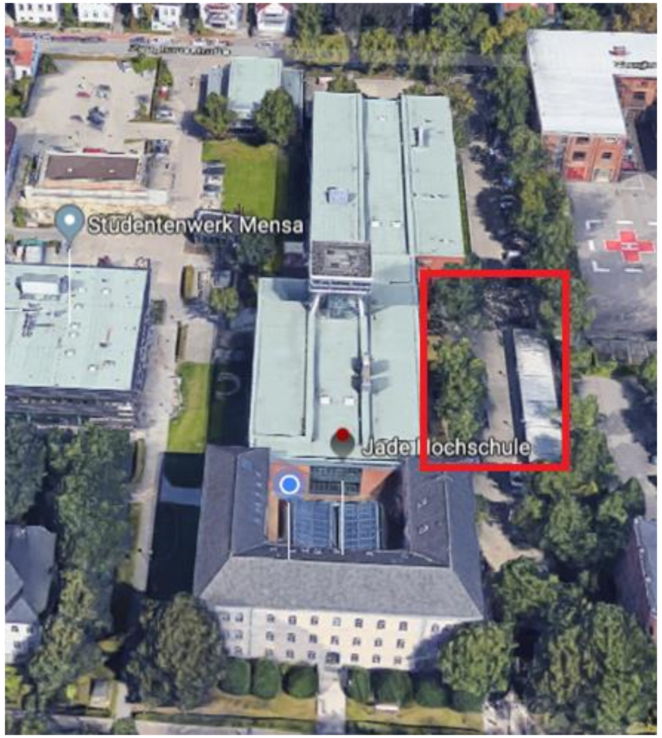
PROJECT LOCATION

Ofener Str. 16/19, 26121 Oldenburg

The project is located on the east side of the building.

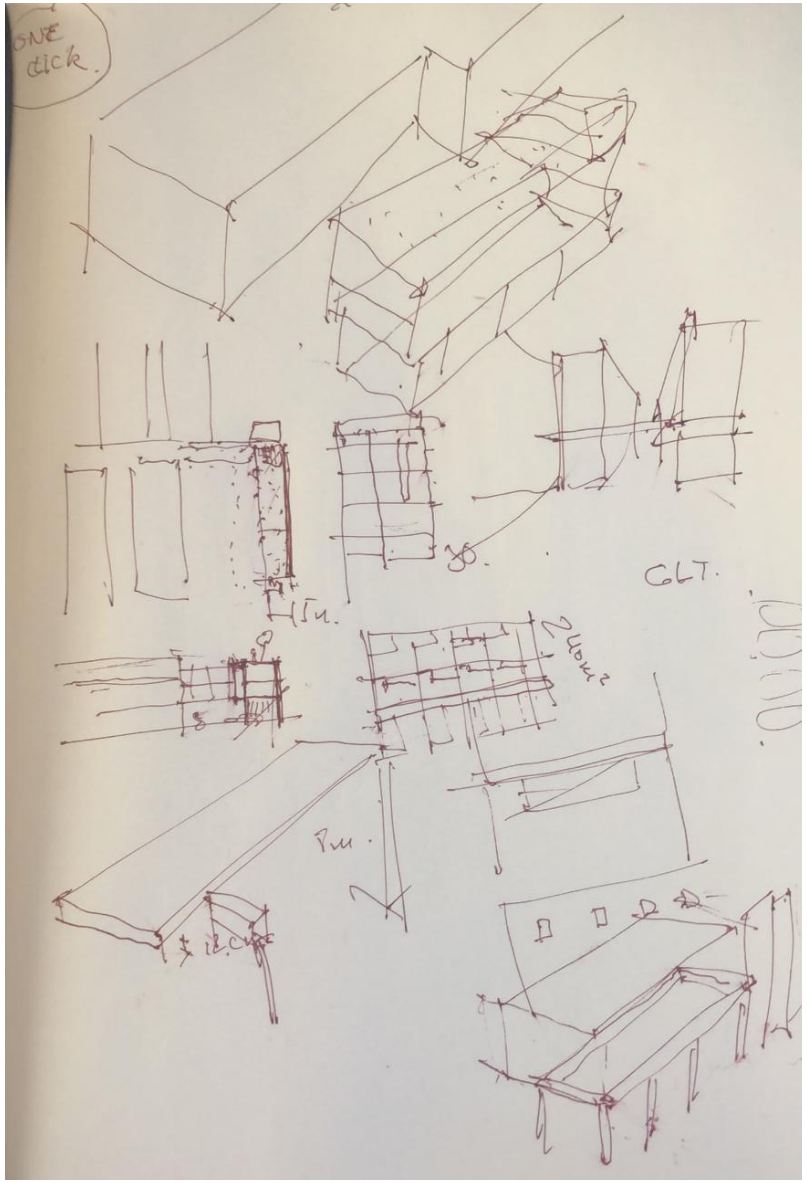

Jade Hochschule

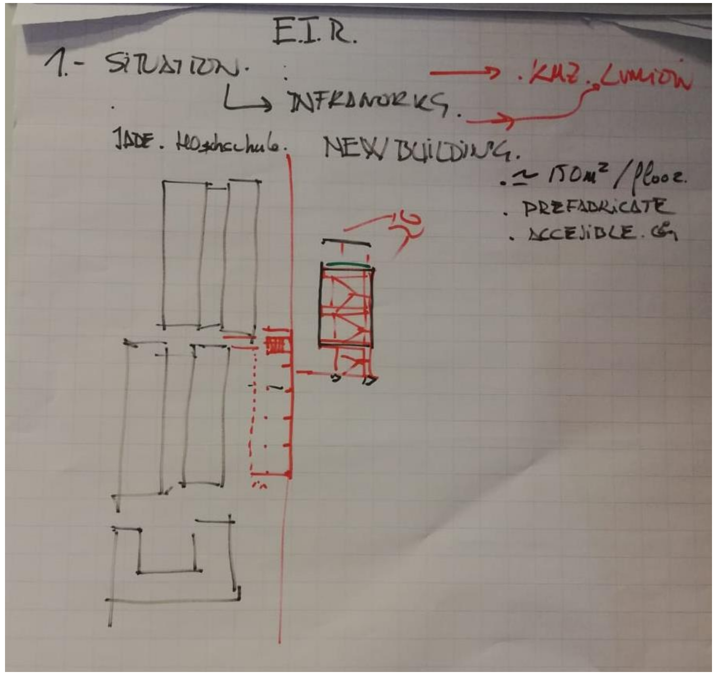

Studentenwerk Mensa
Jade Hochschule

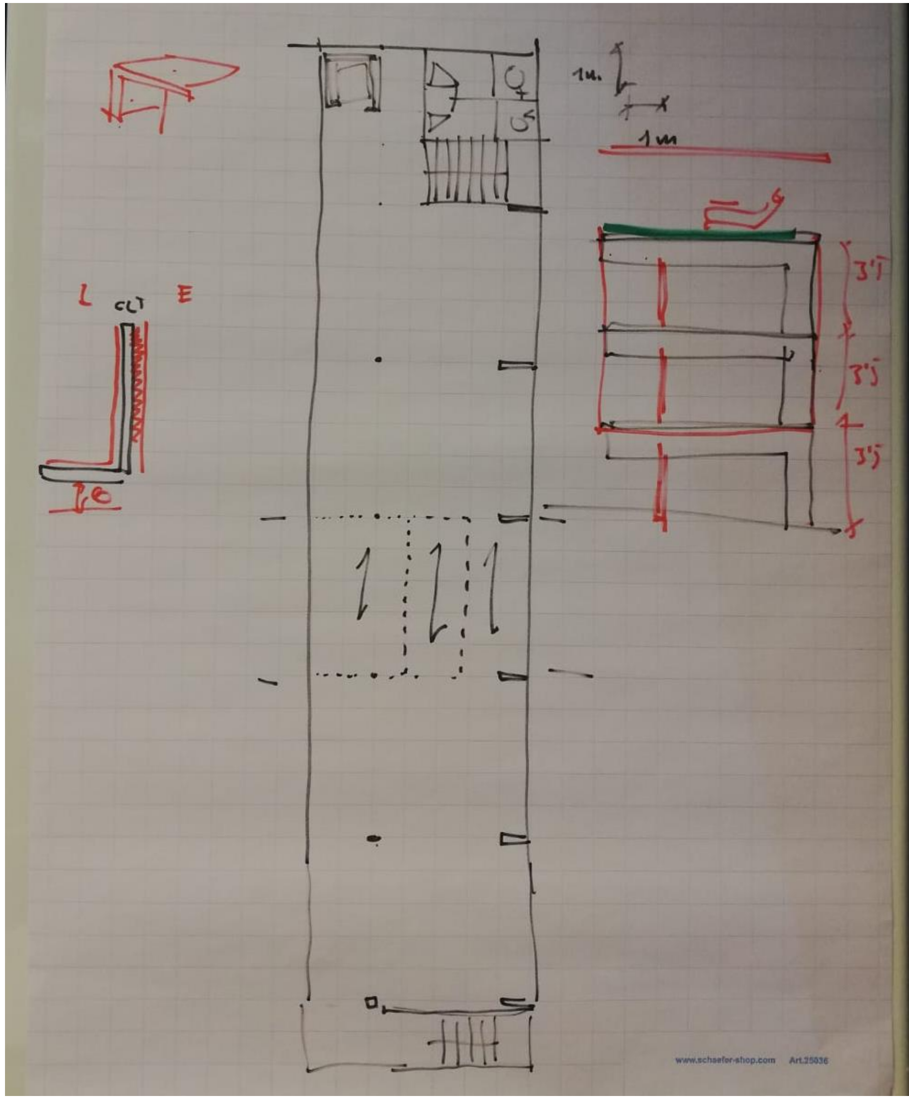

Studentenwerk Mensa
Jade Hochschule

CURRENT SITUATION

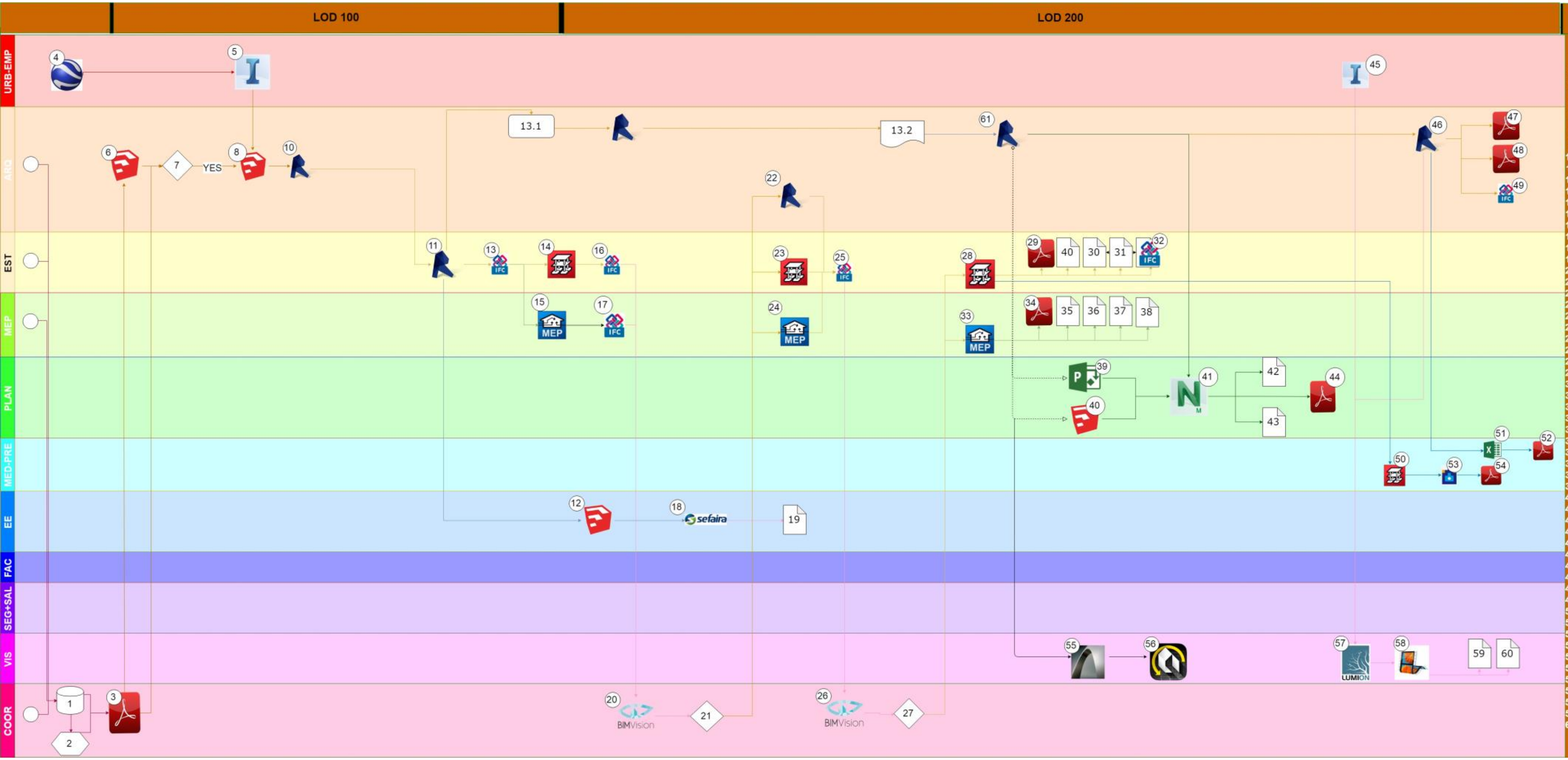
INITIAL APPROACH


ONE click
CLT.
2 floors


E.I.R.
1.- SITUATION.
↳ INFRAWORKS.
→ .KMZ. LUMION
JADE. Hochschule.
NEW BUILDING.
. ≃ 150m² / floor.
. PREFABRICATE
. ACCESIBLE.


1m.
1m
L
CLT
E
3'5
3'5
3'5
www.schaefer-shop.com Art.25036

BEP

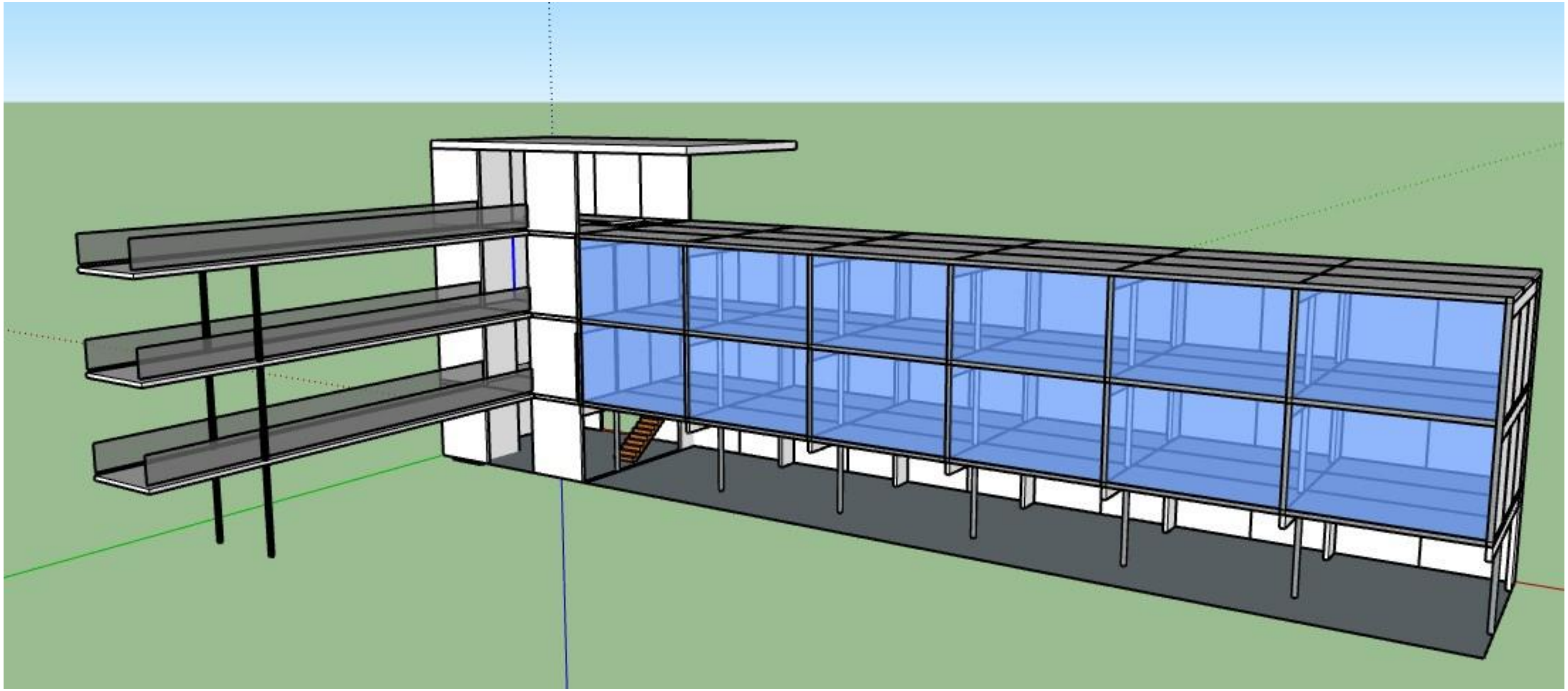


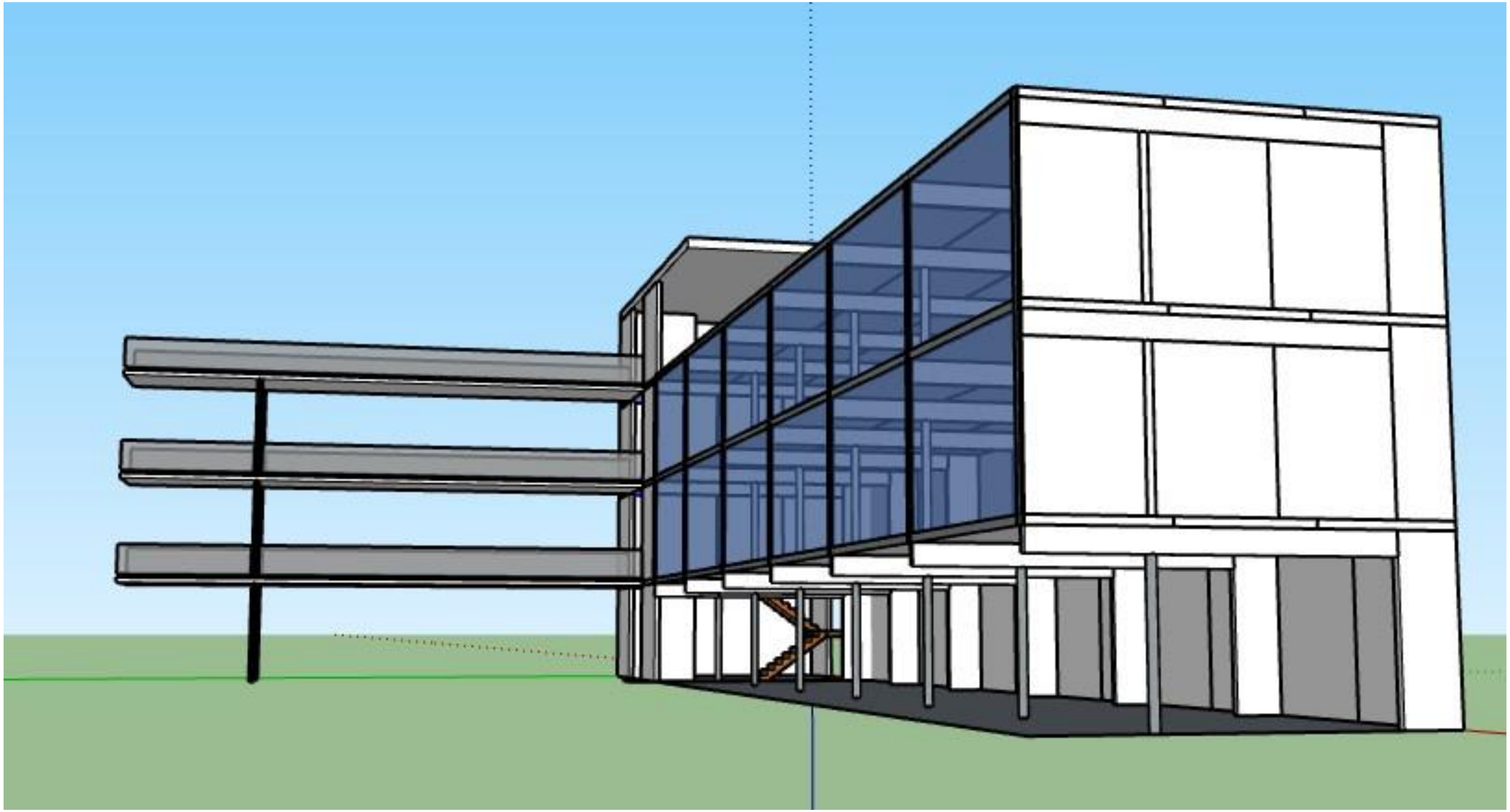
WORKFLOW STEPS

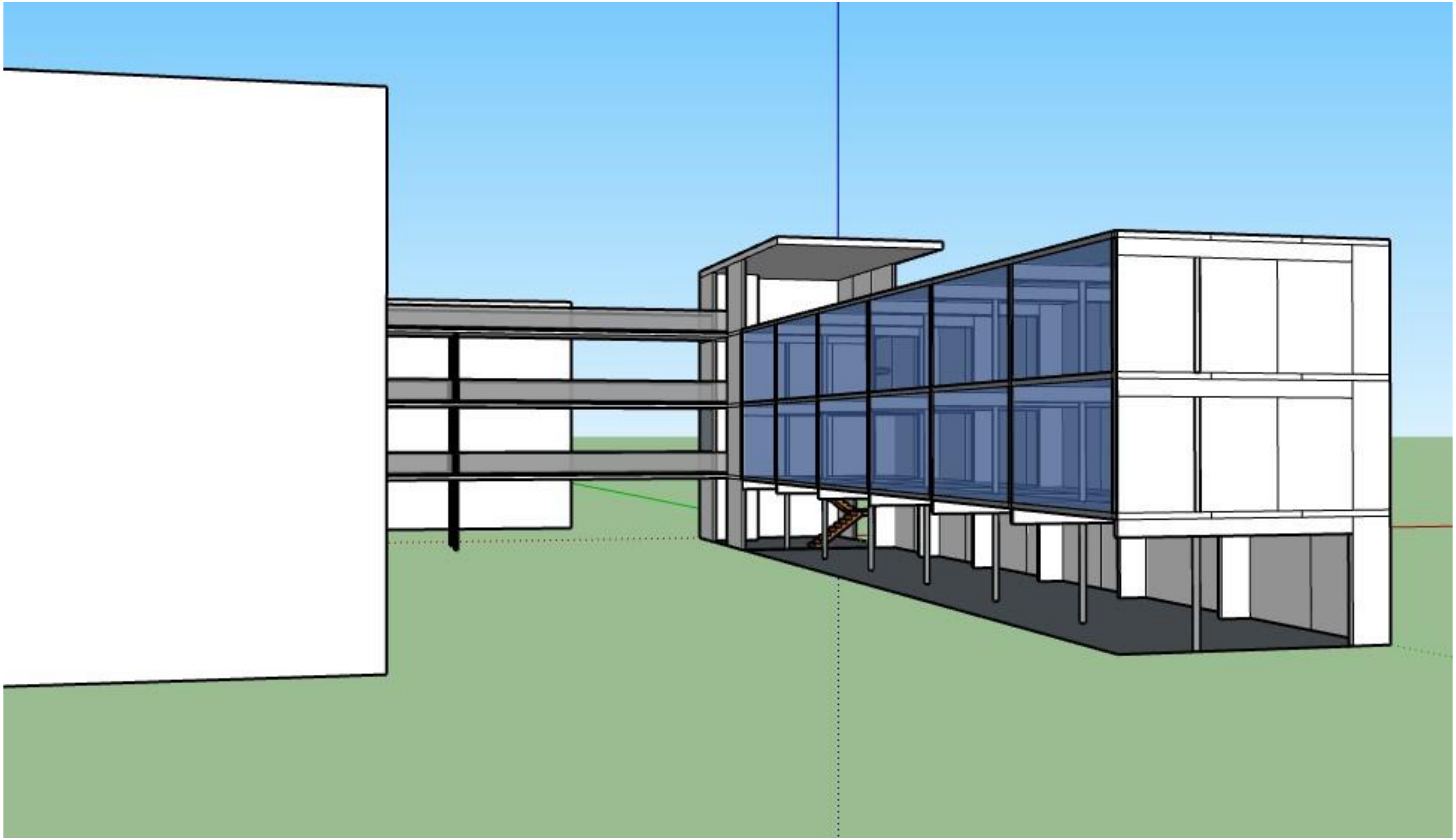
1. Study of competition rules and turkey regulations.
2. Study of the environment, urban and site location.
3. Presentation of a preliminary sketch.
4. Google Earth.
5. Ground model (INFRAWORKS).
6. Templates handout.
7. The model meets the requirements.
8. Orientation of the model in real location
9. Start SKETCHUP 3D Modelling. Brief Design.
10. REVIT LOD 100 Modelling. Brief Design.
11. REVIT LOD 200 Modelling. Developed Design.
12. SKETCHUP LOD 200 Modelling. Developed Design.
13. Export IFC data to CYPE software.
14. Export IFC data to CYPE software.
15. CYPECAD MEP Modelling. Brief design.
16. Export IFC data to BIM VISION.
17. EXport IFC data to BIM VISION.
18. SEFAIRA Sustainability strategy.
19. SEFAIRA Column diagrams.
20. Clash detection and resolution activities.
21. The model no meets the requirements.
22. REVIT LOD 200 Modeling. Detailed design.
23. CYPECAD MEP Modeling. Detailed design.
24. CYPECAD MEP.Modeling. Detailed design
25. Export IFC data to BIM VISION.
26. Second clash detection and resolution activities.
27. The model meets the requierements.
28. CYPECAD Model Update.
29. Floor plans.
30. Columns Diagrams.
31. Models created with related 3D program.
32. IFC export.
33. CYPECAD MEP Model Update
34. Floor plans.
35. Funtional system charts.
36. Colum diagrams.
37. Model created with related 3D program.
38. Reports.
39. MS. Project planning.
40. Export IFC data from Sketch Up
41. Navisworks generating data.
42. .mwd data.
43. .AVI data.
44. Planning tables.
45. Export model since Infraworks to Lumion.
46. Revit LOD 400 Modelling. Detalled design.
47. Floor plants. PDF format.
48. Planning Tables.
49. Export IFC data.
50. CYPECAD Model Update.
51. Excel Quantities.
52. PDF Quantities.
53. Presto Quantities.
54. PDF Quantities.
55. ARCHICAD Modeling.
56. Visualization 3D Model BIMX.
57. Export data to Lumion.
58. Export videos to WINDOWS MOVIE MAKER.
59. Data videos .AVI
60. Reders.

MODELING AND DESIGN.

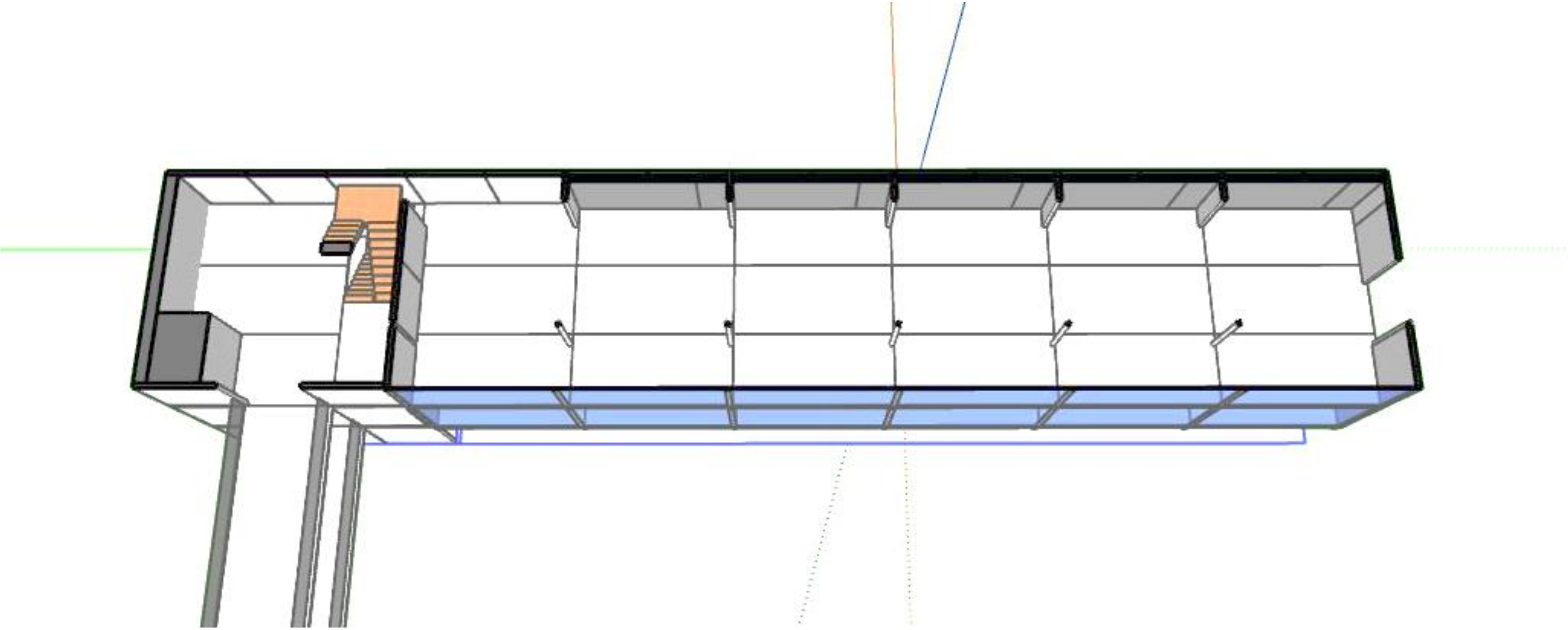
- Modeling decisions and architectural design.

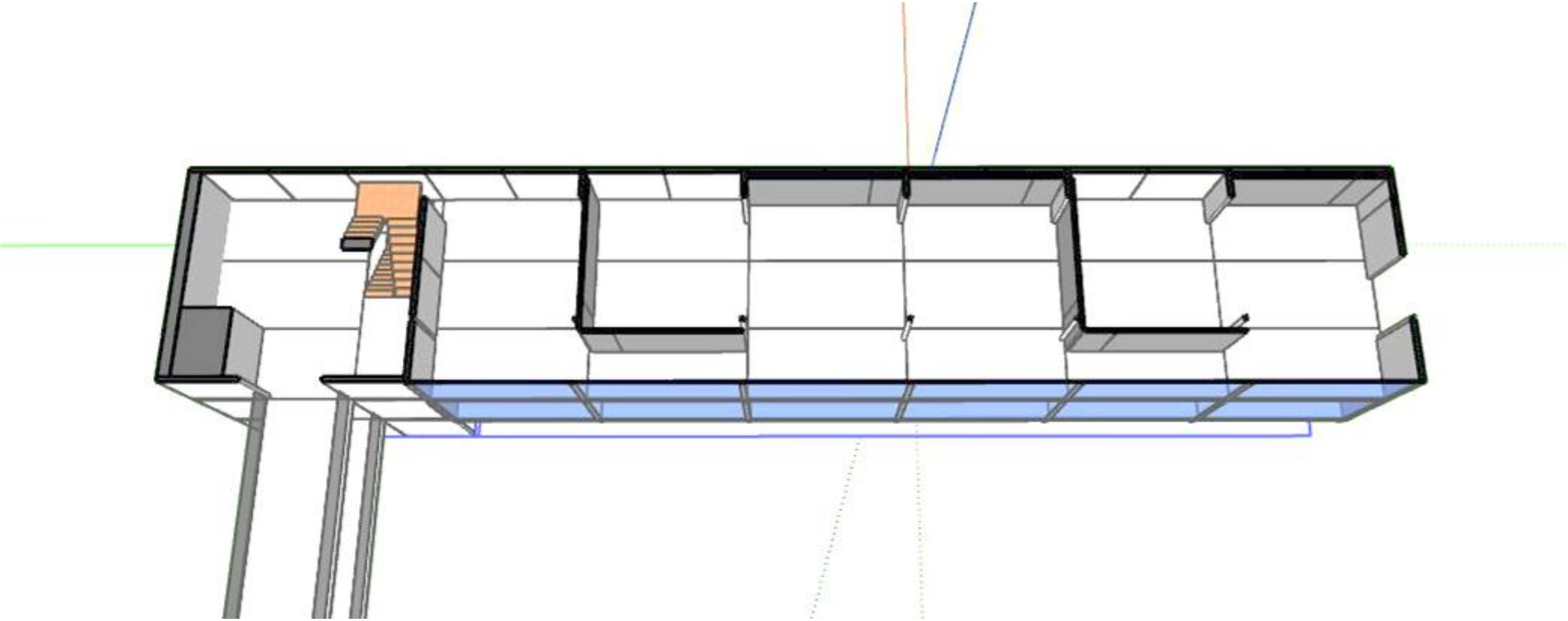


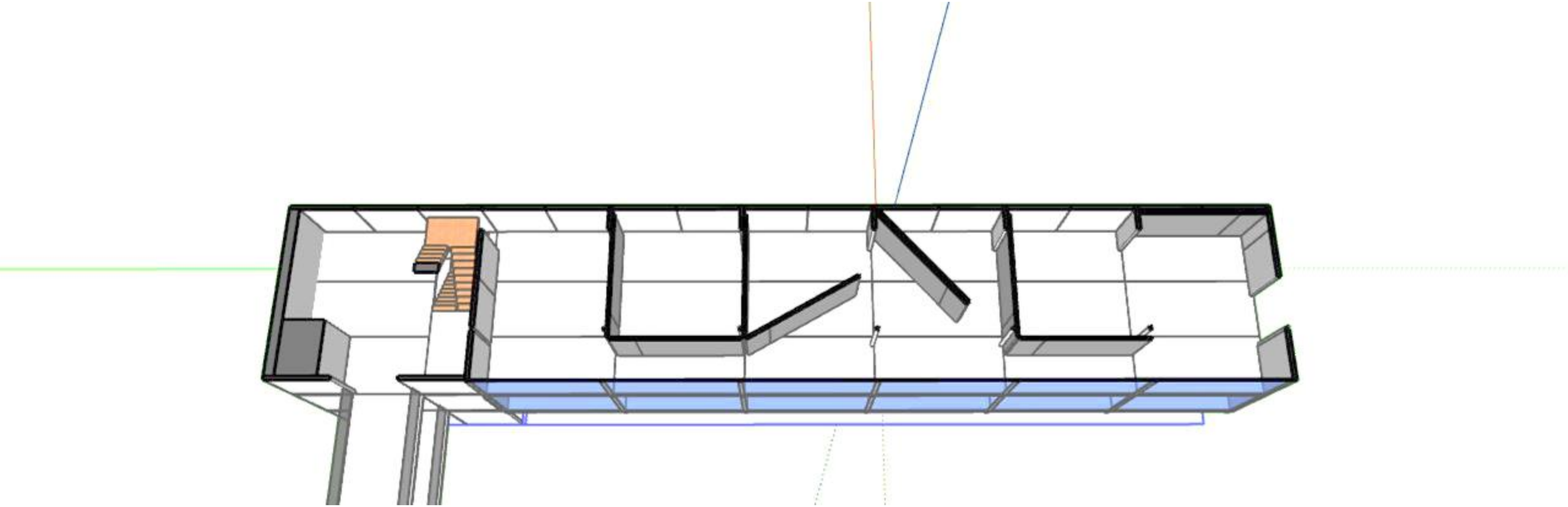


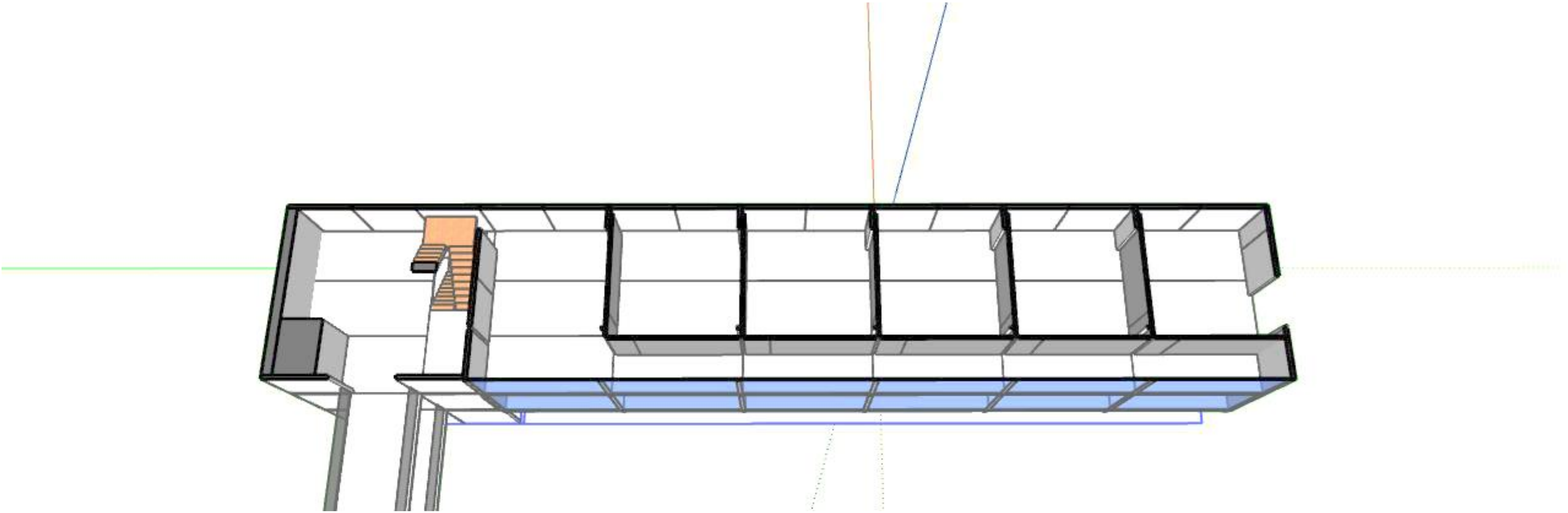


FLEXIBLE SPACES

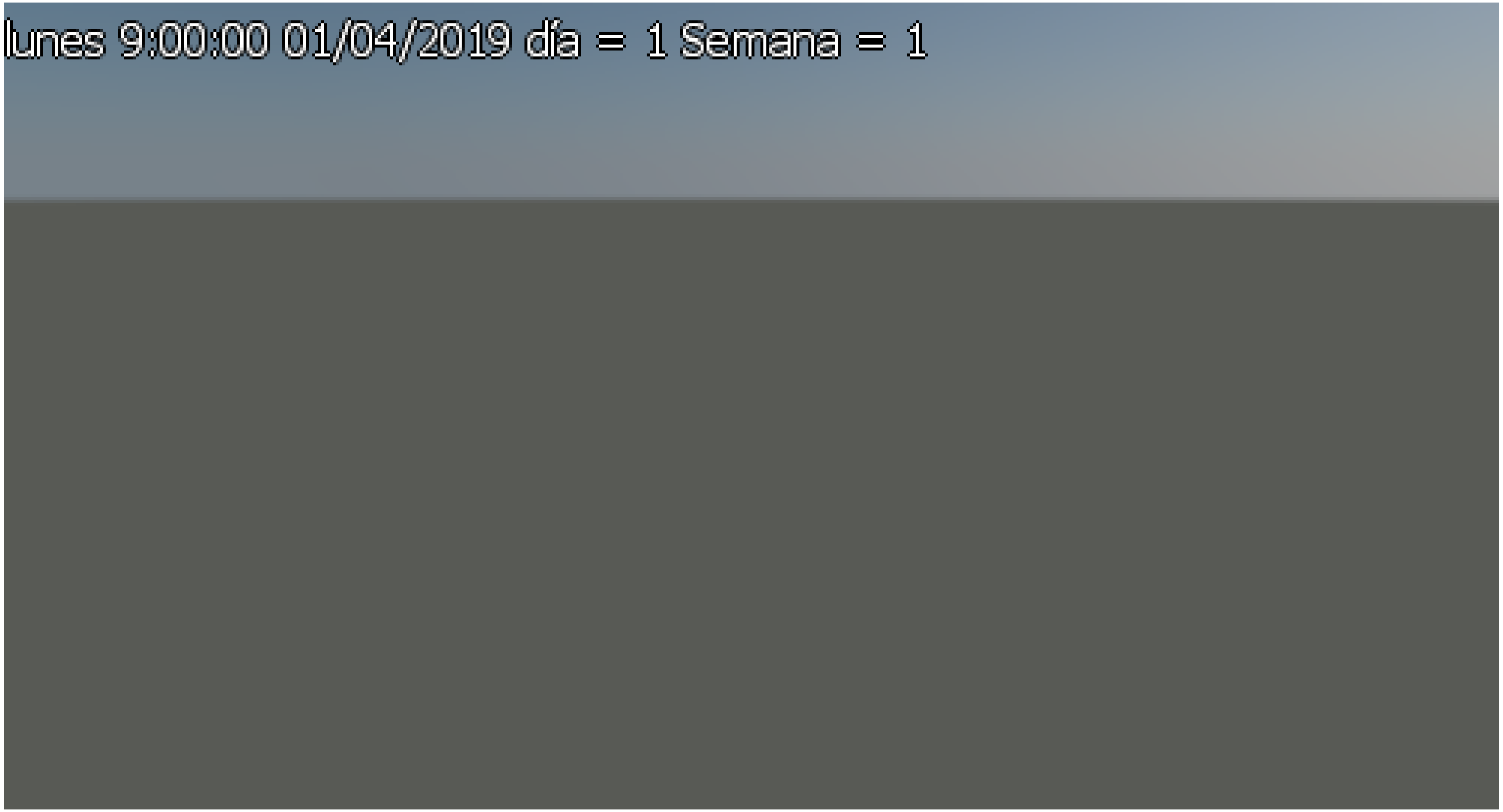




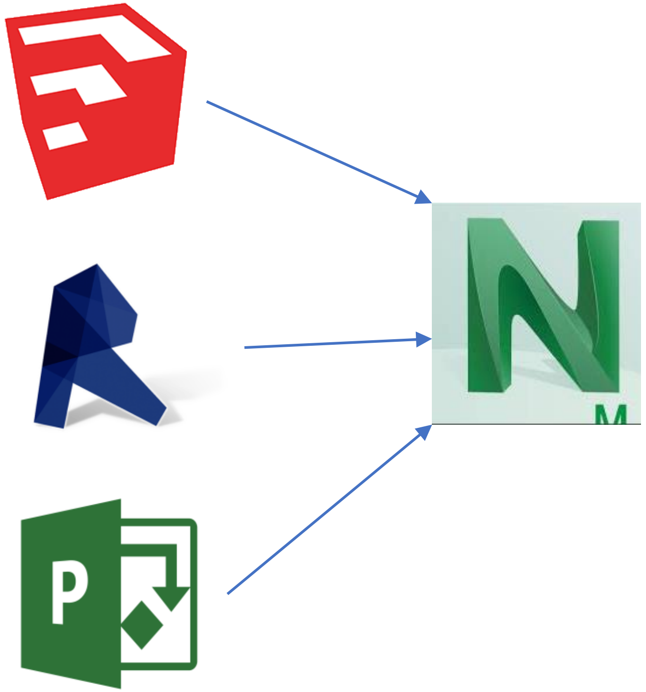


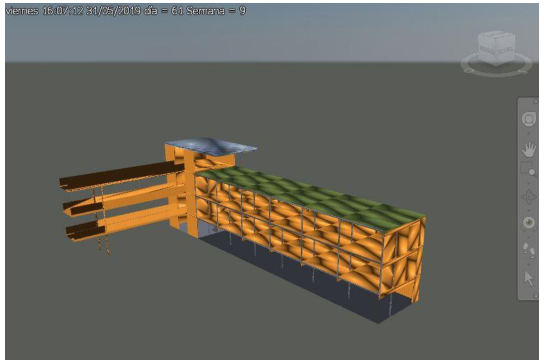


PLANNING 4D.



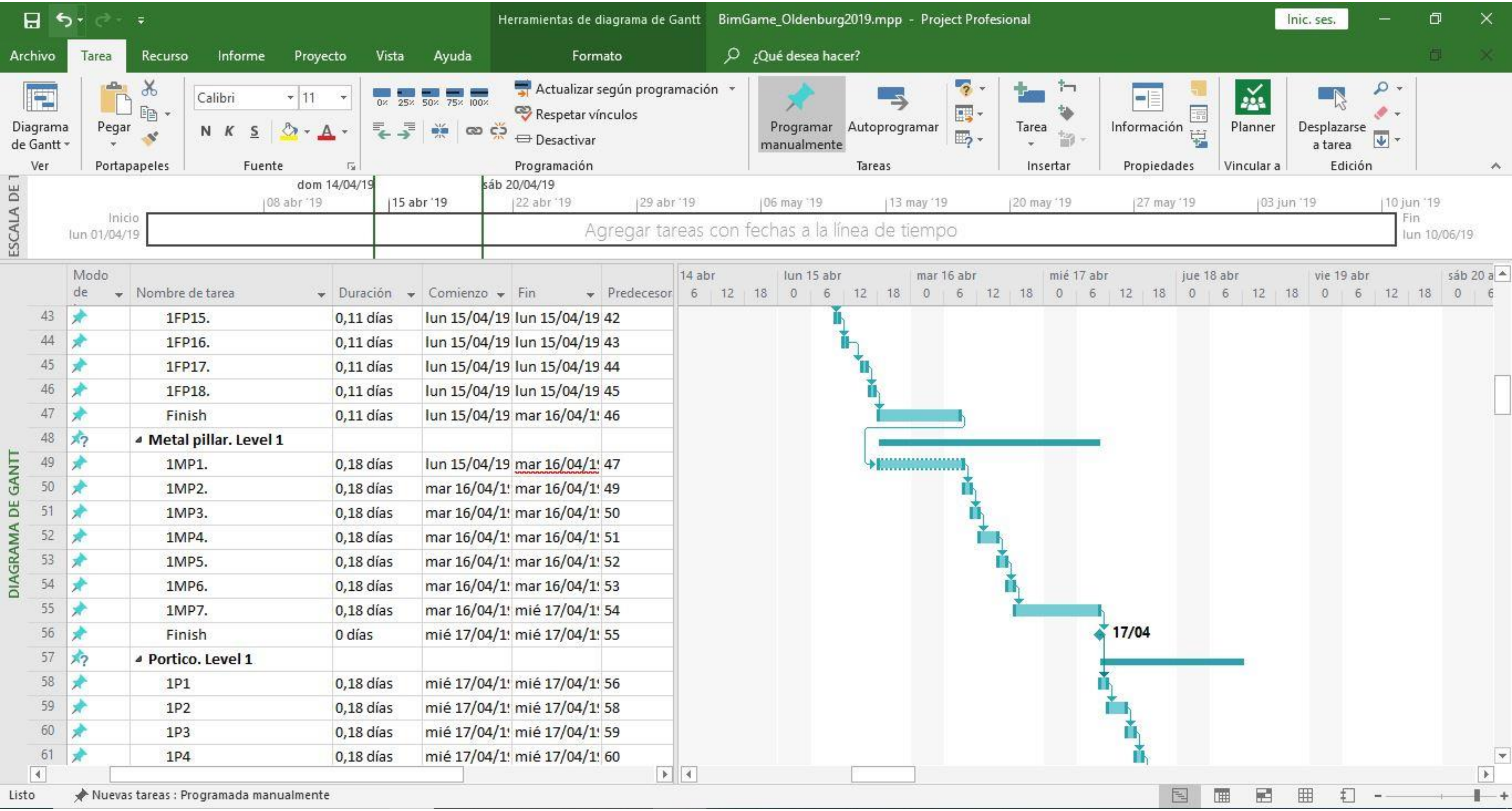
lunes 9:00:00 01/04/2019 día = 1 Semana = 1



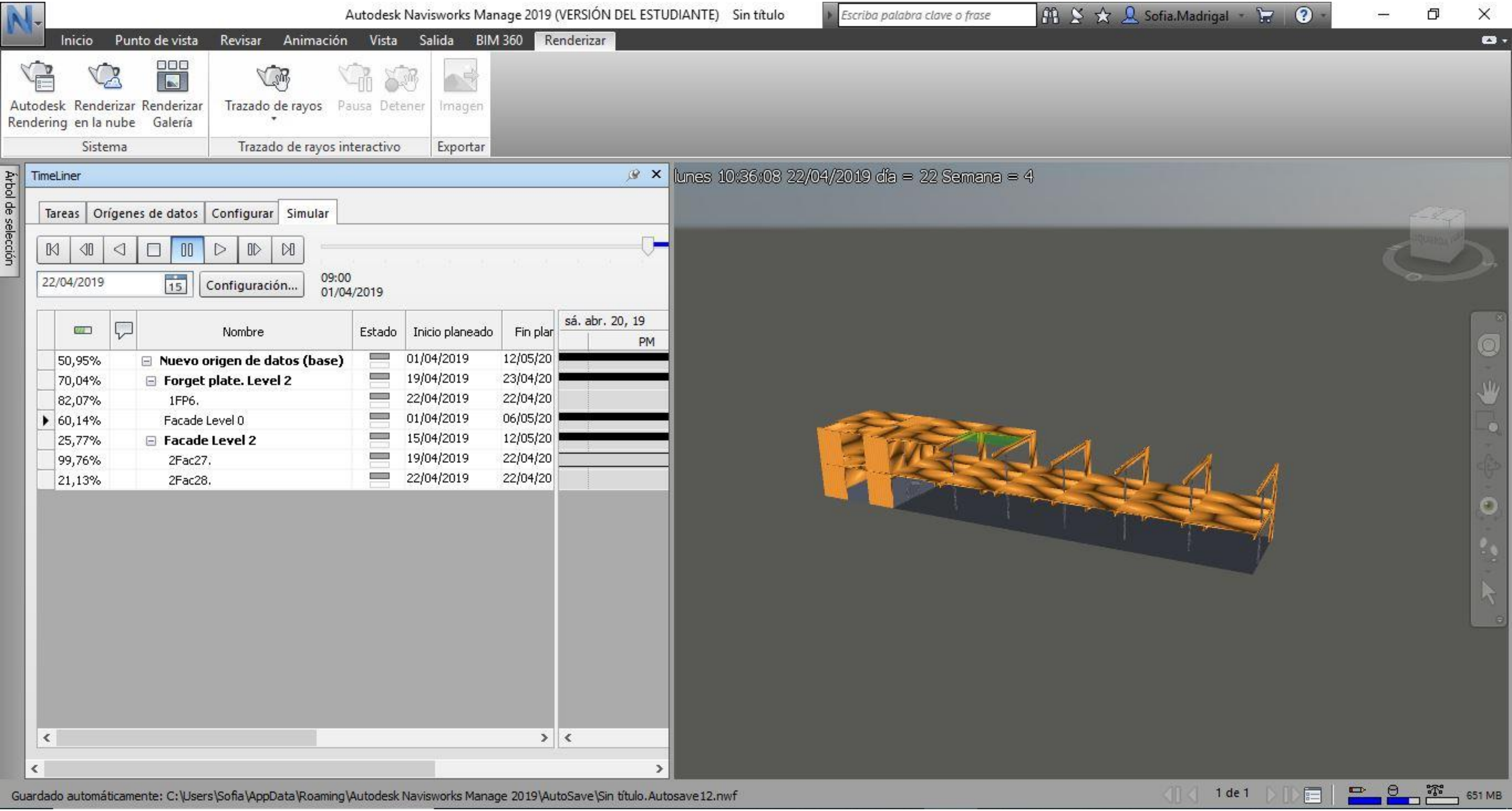


viernes 16:07:12 31/05/2019 día = 61 Semana = 9

THE WORK IS PLANNED TO BE EXECUTED IN TWO MONTHS, STARTING ON APRIL 1 UNTIL


Herramientas de diagrama de Gantt
BimGame_Oldenburg2019.mpp - Project Profesional
Inic. ses.
Archivo
Tarea
Recurso
Informe
Proyecto
Vista
Ayuda
Formato
¿Qué desea hacer?
Diagrama de Gantt
Ver
Pegar
Portapapeles
Calibri
11
N K S
Fuente
0% 25% 50% 75% 100%
Actualizar según programación
Respetar vínculos
Desactivar
Programación
Programar manualmente
Autoprogramar
Tareas
Tarea
Insertar
Información
Propiedades
Planner
Vincular a
Desplazarse a tarea
Edición
ESCALA DE T
dom 14/04/19
sáb 20/04/19
08 abr '19
15 abr '19
22 abr '19
29 abr '19
06 may '19
13 may '19
20 may '19
27 may '19
03 jun '19
10 jun '19
Inicio
lun 01/04/19
Agregar tareas con fechas a la línea de tiempo
Fin
lun 10/06/19
DIAGRAMA DE GANTT
14 abr
lun 15 abr
mar 16 abr
mié 17 abr
jue 18 abr
vie 19 abr
sáb 20 a
6 12 18 0 6 12 18 0 6 12 18 0 6 12 18 0 6 12 18 0 6 12 18 0 6
17/04
Listo
Nuevas tareas : Programada manualmente

	Modo de	Nombre de tarea	Duración	Comienzo	Fin	Predecesor
43	📌	1FP15.	0,11 días	lun 15/04/19	lun 15/04/19	42
44	📌	1FP16.	0,11 días	lun 15/04/19	lun 15/04/19	43
45	📌	1FP17.	0,11 días	lun 15/04/19	lun 15/04/19	44
46	📌	1FP18.	0,11 días	lun 15/04/19	lun 15/04/19	45
47	📌	Finish	0,11 días	lun 15/04/19	mar 16/04/1!	46
48	📌?	**Metal pillar. Level 1**				
49	📌	1MP1.	0,18 días	lun 15/04/19	mar 16/04/1!	47
50	📌	1MP2.	0,18 días	mar 16/04/1!	mar 16/04/1!	49
51	📌	1MP3.	0,18 días	mar 16/04/1!	mar 16/04/1!	50
52	📌	1MP4.	0,18 días	mar 16/04/1!	mar 16/04/1!	51
53	📌	1MP5.	0,18 días	mar 16/04/1!	mar 16/04/1!	52
54	📌	1MP6.	0,18 días	mar 16/04/1!	mar 16/04/1!	53
55	📌	1MP7.	0,18 días	mar 16/04/1!	mié 17/04/1!	54
56	📌	Finish	0 días	mié 17/04/1!	mié 17/04/1!	55
57	📌?	**Portico. Level 1**				
58	📌	1P1	0,18 días	mié 17/04/1!	mié 17/04/1!	56
59	📌	1P2	0,18 días	mié 17/04/1!	mié 17/04/1!	58
60	📌	1P3	0,18 días	mié 17/04/1!	mié 17/04/1!	59
61	📌	1P4	0,18 días	mié 17/04/1!	mié 17/04/1!	60

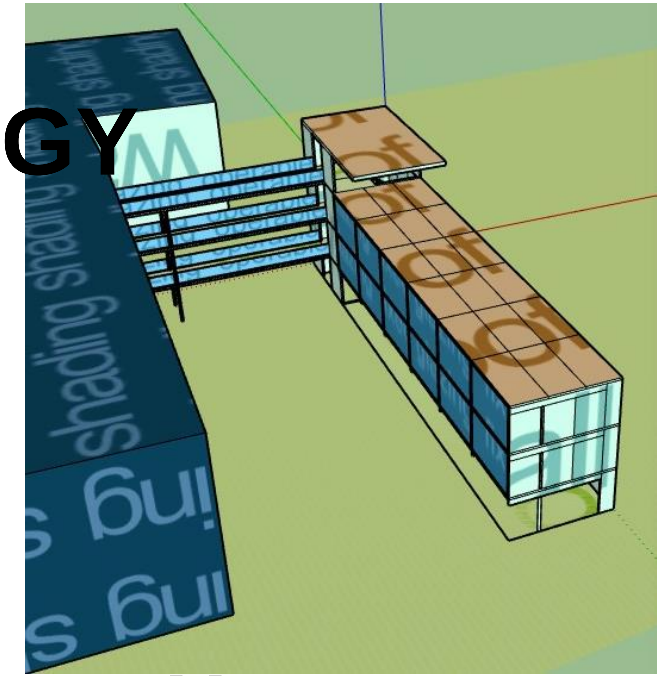

Autodesk Navisworks Manage 2019 (VERSIÓN DEL ESTUDIANTE) Sin título
Escriba palabra clave o frase
Sofia.Madrigal
Inicio
Punto de vista
Revisar
Animación
Vista
Salida
BIM 360
Renderizar
Autodesk Rendering
Renderizar en la nube
Renderizar Galería
Sistema
Trazado de rayos
Pausa
Detener
Trazado de rayos interactivo
Imagen
Exportar
Árbol de selección
TimeLiner
Tareas
Orígenes de datos
Configurar
Simular
22/04/2019
Configuración...
09:00
01/04/2019
sá. abr. 20, 19
PM
1 de 1
651 MB

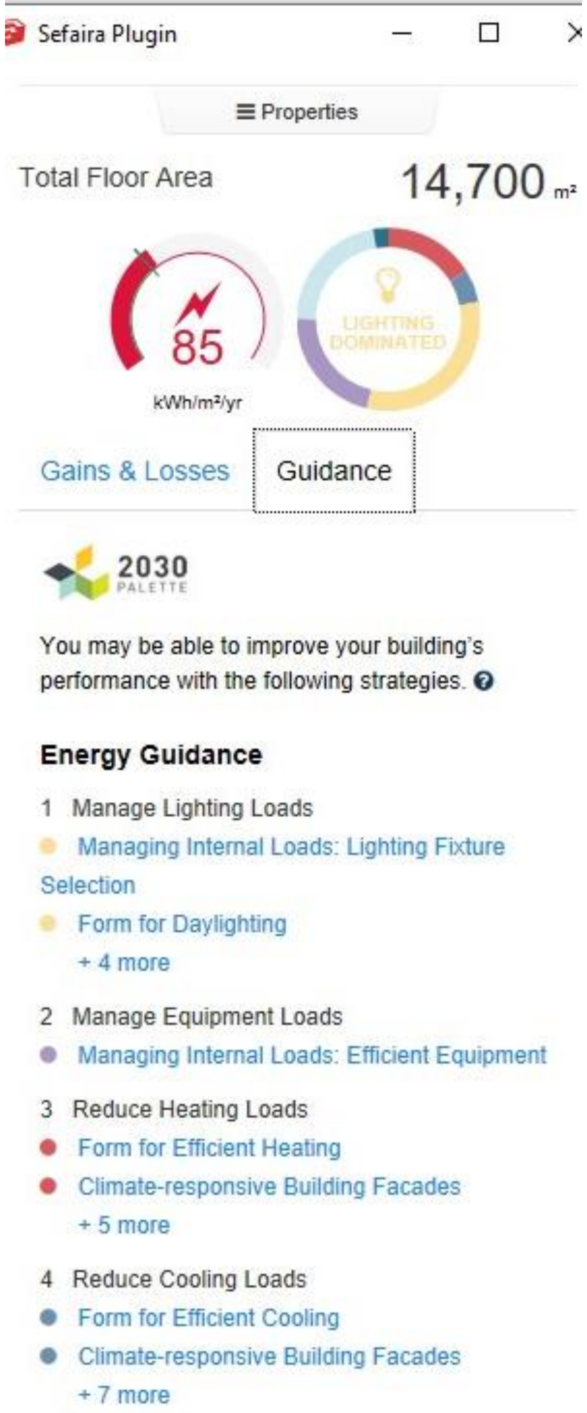
lunes 10:36:08 22/04/2019 día = 22 Semana = 4

		Nombre	Estado	Inicio planeado	Fin plar
50,95%		⊟ **Nuevo origen de datos (base)**		01/04/2019	12/05/20
70,04%		⊟ **Forget plate. Level 2**		19/04/2019	23/04/20
82,07%		1FP6.		22/04/2019	22/04/20
60,14%		Facade Level 0		01/04/2019	06/05/20
25,77%		⊟ **Facade Level 2**		15/04/2019	12/05/20
99,76%		2Fac27.		19/04/2019	22/04/20
21,13%		2Fac28.		22/04/2019	22/04/20

Guardado automáticamente: C:\Users\Sofia\AppData\Roaming\Autodesk Navisworks Manage 2019\AutoSave\Sin título.Autosave12.nwf

SUSTAINABILITY STRATEGY


shading shading
shading
s bui
s bui


Sefaira Plugin
☰ Properties
85
kWh/m²/yr
LIGHTING DOMINATED
Gains & Losses
Guidance
2030 PALETTE

Total Floor Area 14,700 m²

You may be able to improve your building's performance with the following strategies.

Energy Guidance

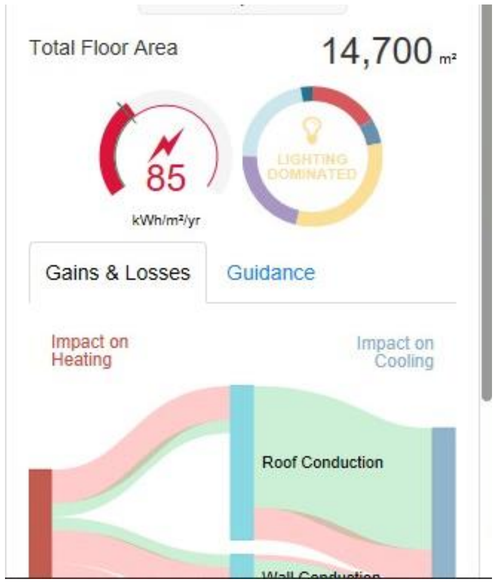
1 Manage Lighting Loads
- Managing Internal Loads: Lighting Fixture Selection
- Form for Daylighting
- + 4 more

2 Manage Equipment Loads
- Managing Internal Loads: Efficient Equipment

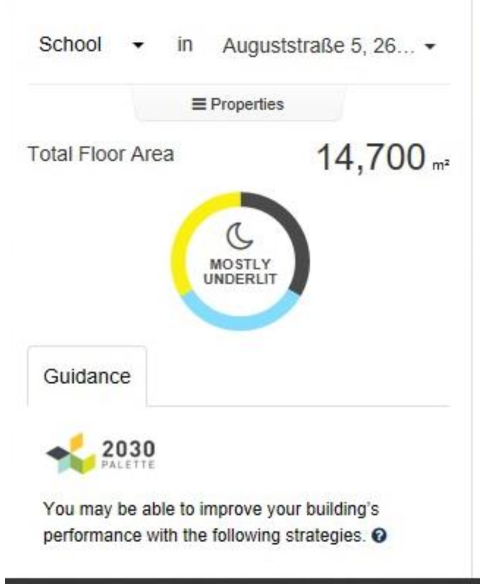
3 Reduce Heating Loads
- Form for Efficient Heating
- Climate-responsive Building Facades
- + 5 more

4 Reduce Cooling Loads
- Form for Efficient Cooling
- Climate-responsive Building Facades
- + 7 more

SEFAIRA analysis,Annual Energy Use:


85
kWh/m²/yr
LIGHTING DOMINATED
Gains & Losses
Guidance
Impact on Heating
Impact on Cooling
Roof Conduction
Wall Conduction

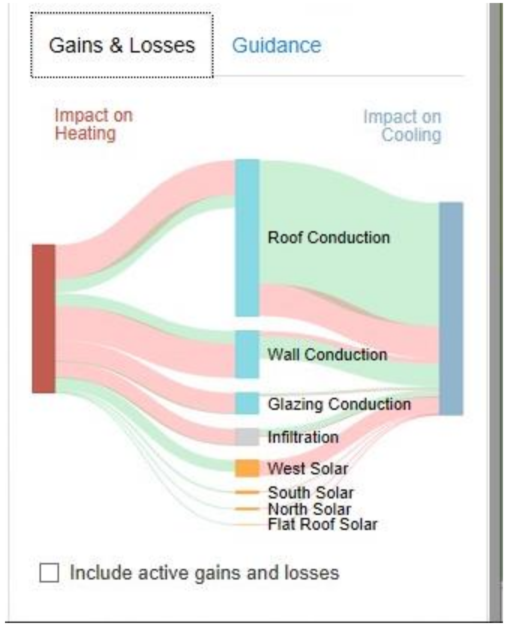
Total Floor Area 14,700 m²


☰ Properties
MOSTLY UNDERLIT
Guidance
2030 PALETTE

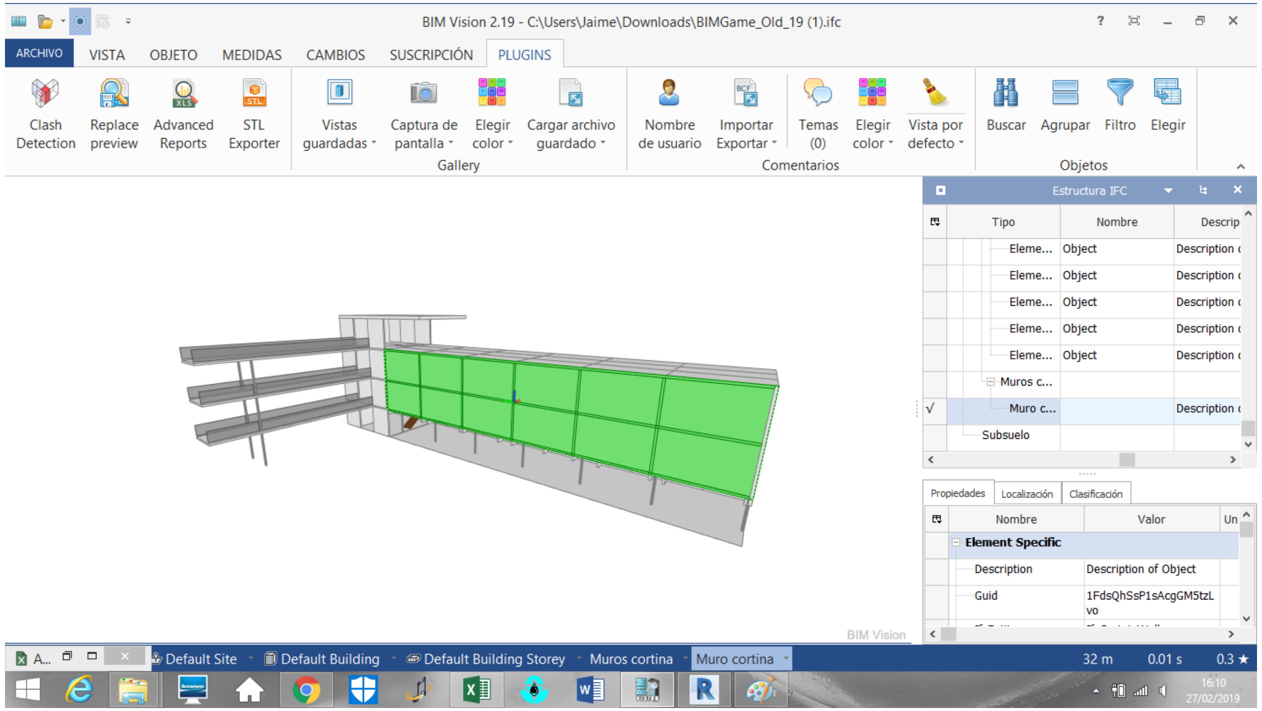
School in Auguststraße 5, 26…

Total Floor Area 14,700 m²

You may be able to improve your building's performance with the following strategies.

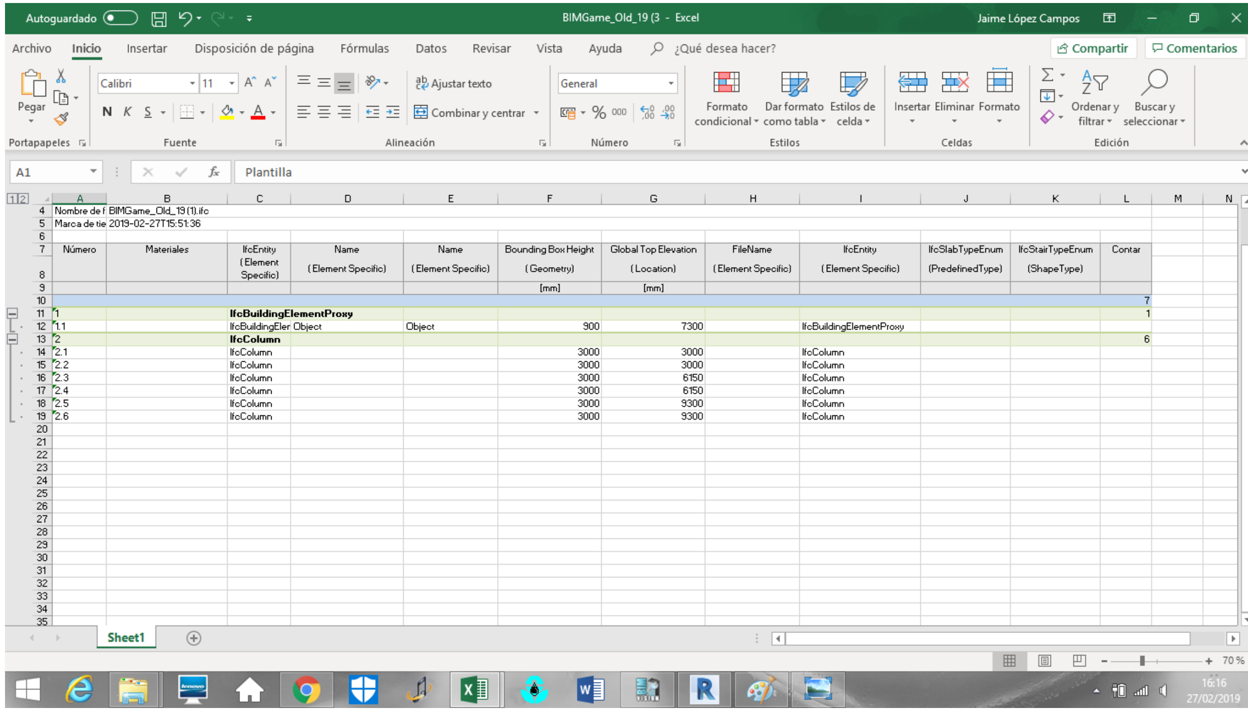

Gains & Losses
Guidance
Impact on Heating
Impact on Cooling
Roof Conduction
Wall Conduction
Glazing Conduction
Infiltration
West Solar
South Solar
North Solar
Flat Roof Solar

☐ Include active gains and losses


BIM Vision 2.19 - C:\Users\Jaime\Downloads\BIMGame_Old_19 (1).ifc

ARCHIVO
VISTA
OBJETO
MEDIDAS
CAMBIOS
SUSCRIPCIÓN
PLUGINS
Clash Detection
Replace preview
Advanced Reports
STL Exporter
Vistas guardadas
Captura de pantalla
Elegir color
Cargar archivo guardado
Gallery
Nombre de usuario
Importar Exportar
Temas (0)
Elegir color
Vista por defecto
Comentarios
Buscar
Agrupar
Filtro
Elegir
Objetos
Estructura IFC
Tipo
Nombre
Descrip
Eleme...
Object
Muros c...
Muro c...
Subsuelo
Propiedades
Localización
Clasificación
BIM Vision
Default Site
Default Building
Default Building Storey
Muros cortina
Muro cortina
32 m
0.01 s
0.3 ★
16:10
27/02/2019

Nombre	Valor
Element Specific	
Description	Description of Object
Guid	1FdsQhSsP1sAcgGM5tzLvo

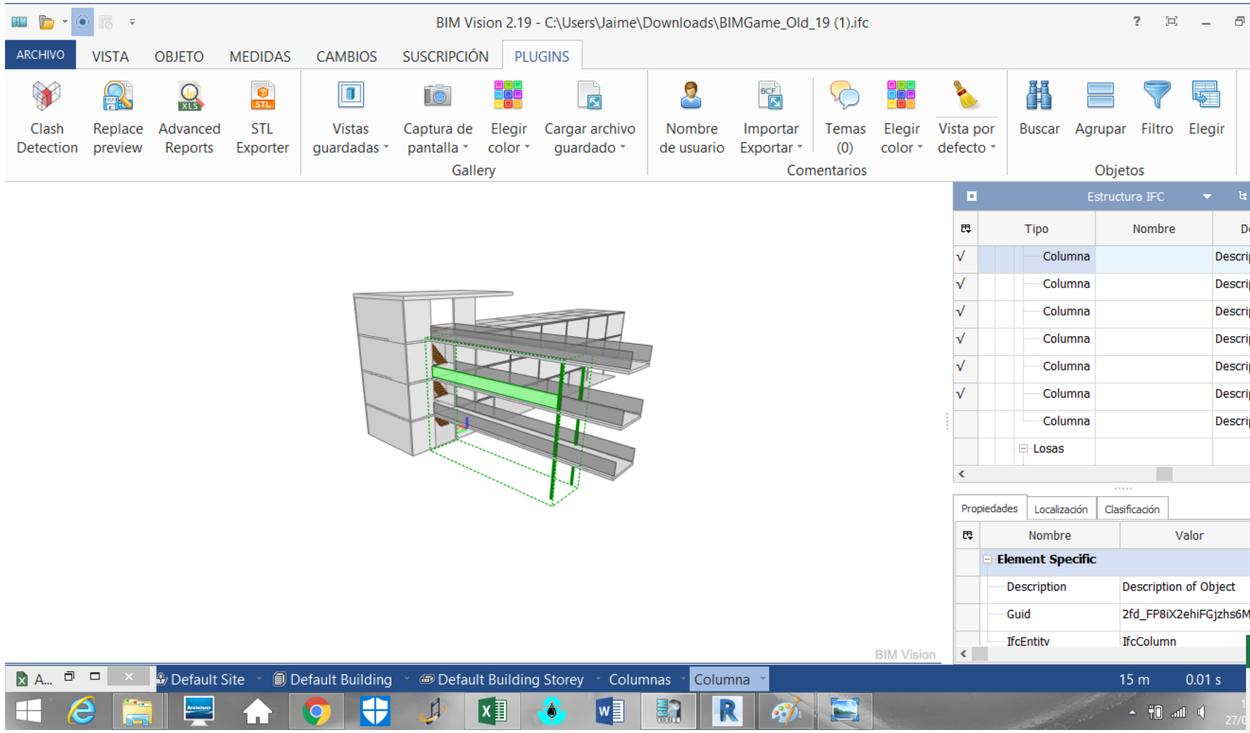

BIMGame_Old_19 (3 - Excel

Autoguardado
Jaime López Campos
Archivo
Inicio
Insertar
Disposición de página
Fórmulas
Datos
Revisar
Vista
Ayuda
¿Qué desea hacer?
Compartir
Comentarios
Pegar
Portapapeles
Calibri
11
Fuente
Ajustar texto
Combinar y centrar
Alineación
General
Número
Formato condicional
Dar formato como tabla
Estilos de celda
Estilos
Insertar
Eliminar
Formato
Celdas
Ordenar y filtrar
Buscar y seleccionar
Edición
Sheet1
70 %
16:16
27/02/2019

A1 Plantilla

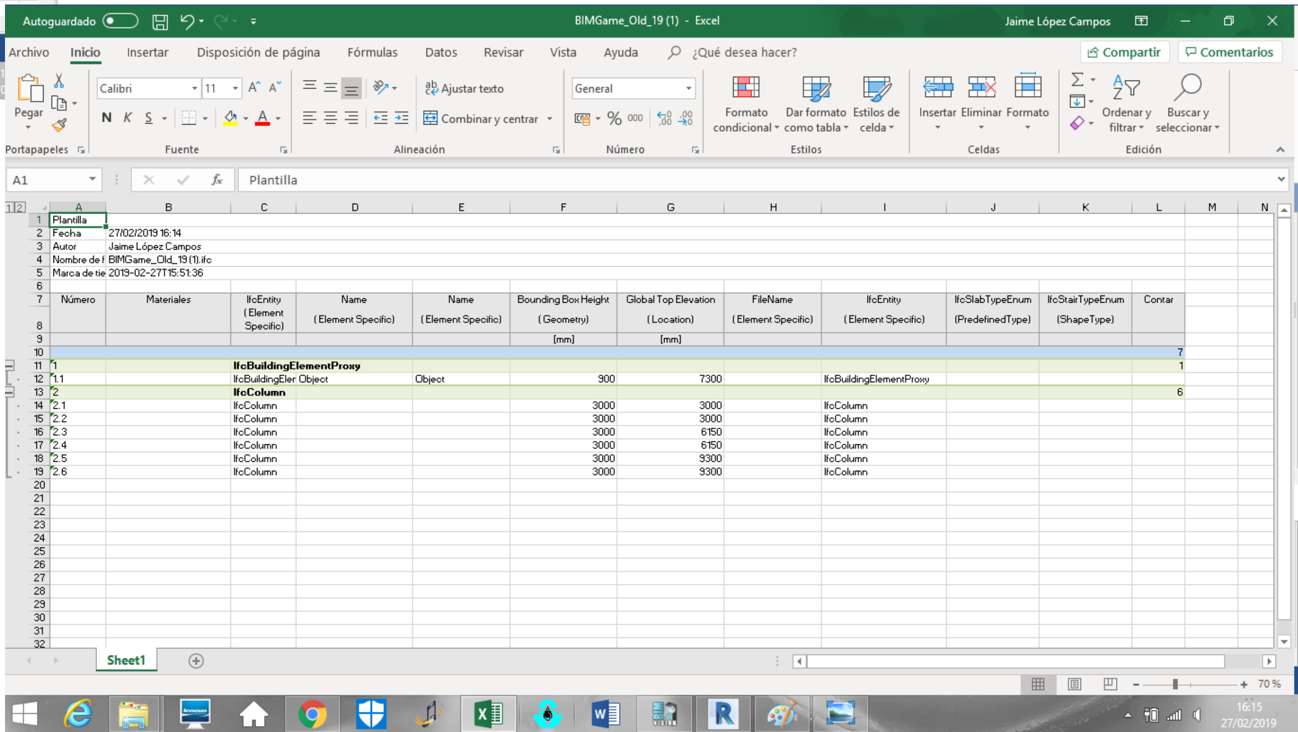
Nombre de f BIMGame_Old_19 (1).ifc
Marca de tie 2019-02-27T15:51:36

Número	Materiales	IfcEntity (Element Specific)	Name (Element Specific)	Name (Element Specific)	Bounding Box Height (Geometry) [mm]	Global Top Elevation (Location) [mm]	FileName (Element Specific)	IfcEntity (Element Specific)	IfcSlabTypeEnum (PredefinedType)	IfcStairTypeEnum (ShapeType)	Contar
											7
1		**IfcBuildingElementProxy**									1
1.1		IfcBuildingEler	Object	Object	900	7300		IfcBuildingElementProxy			
2		**IfcColumn**									6
2.1		IfcColumn			3000	3000		IfcColumn			
2.2		IfcColumn			3000	3000		IfcColumn			
2.3		IfcColumn			3000	6150		IfcColumn			
2.4		IfcColumn			3000	6150		IfcColumn			
2.5		IfcColumn			3000	9300		IfcColumn			
2.6		IfcColumn			3000	9300		IfcColumn			


BIM Vision 2.19 - C:\Users\Jaime\Downloads\BIMGame_Old_19 (1).ifc
ARCHIVO
VISTA
OBJETO
MEDIDAS
CAMBIOS
SUSCRIPCIÓN
PLUGINS
Clash Detection
Replace preview
Advanced Reports
STL Exporter
Vistas guardadas
Captura de pantalla
Elegir color
Cargar archivo guardado
Gallery
Nombre de usuario
Importar Exportar
Temas (0)
Elegir color
Vista por defecto
Comentarios
Buscar
Agrupar
Filtro
Elegir
Objetos
Estructura IFC
Propiedades
Localización
Clasificación
BIM Vision
Default Site
Default Building
Default Building Storey
Columnas
Columna
15 m
0.01 s

	Tipo	Nombre	Descrip
√	Columna		Description (
√	Columna		Description (
√	Columna		Description (
√	Columna		Description (
√	Columna		Description (
√	Columna		Description (
	Columna		Description (
	⊟ Losas		

Nombre	Valor	Un
⊟ **Element Specific**		
Description	Description of Object	
Guid	2fd_FP8iX2ehiFGjzhs6M1	
IfcEntity	IfcColumn	


Autoguardado
BIMGame_Old_19 (1) - Excel
Jaime López Campos
Archivo
Inicio
Insertar
Disposición de página
Fórmulas
Datos
Revisar
Vista
Ayuda
¿Qué desea hacer?
Compartir
Comentarios
Pegar
Calibri
11
General
Ajustar texto
Combinar y centrar
Formato condicional
Dar formato como tabla
Estilos de celda
Insertar
Eliminar
Formato
Ordenar y filtrar
Buscar y seleccionar
Portapapeles
Fuente
Alineación
Número
Estilos
Celdas
Edición
Sheet1
70 %

A1 Plantilla

	A	B	C	D	E	F	G	H	I	J	K	L
1	Plantilla											
2	Fecha	27/02/2019 16:14										
3	Autor	Jaime López Campos										
4	Nombre de f	BIMGame_Old_19 (1).ifc										
5	Marca de tie	2019-02-27T15:51:36										
6												
7-8	Número	Materiales	IfcEntity (Element Specific)	Name (Element Specific)	Name (Element Specific)	Bounding Box Height (Geometry)	Global Top Elevation (Location)	FileName (Element Specific)	IfcEntity (Element Specific)	IfcSlabTypeEnum (PredefinedType)	IfcStairTypeEnum (ShapeType)	Contar
9						[mm]	[mm]					
10												7
11	1		**IfcBuildingElementProxy**									1
12	1.1		IfcBuildingEler	Object	Object	900	7300		IfcBuildingElementProxy			
13	2		**IfcColumn**									6
14	2.1		IfcColumn			3000	3000		IfcColumn			
15	2.2		IfcColumn			3000	3000		IfcColumn			
16	2.3		IfcColumn			3000	6150		IfcColumn			
17	2.4		IfcColumn			3000	6150		IfcColumn			
18	2.5		IfcColumn			3000	9300		IfcColumn			
19	2.6		IfcColumn			3000	9300		IfcColumn			

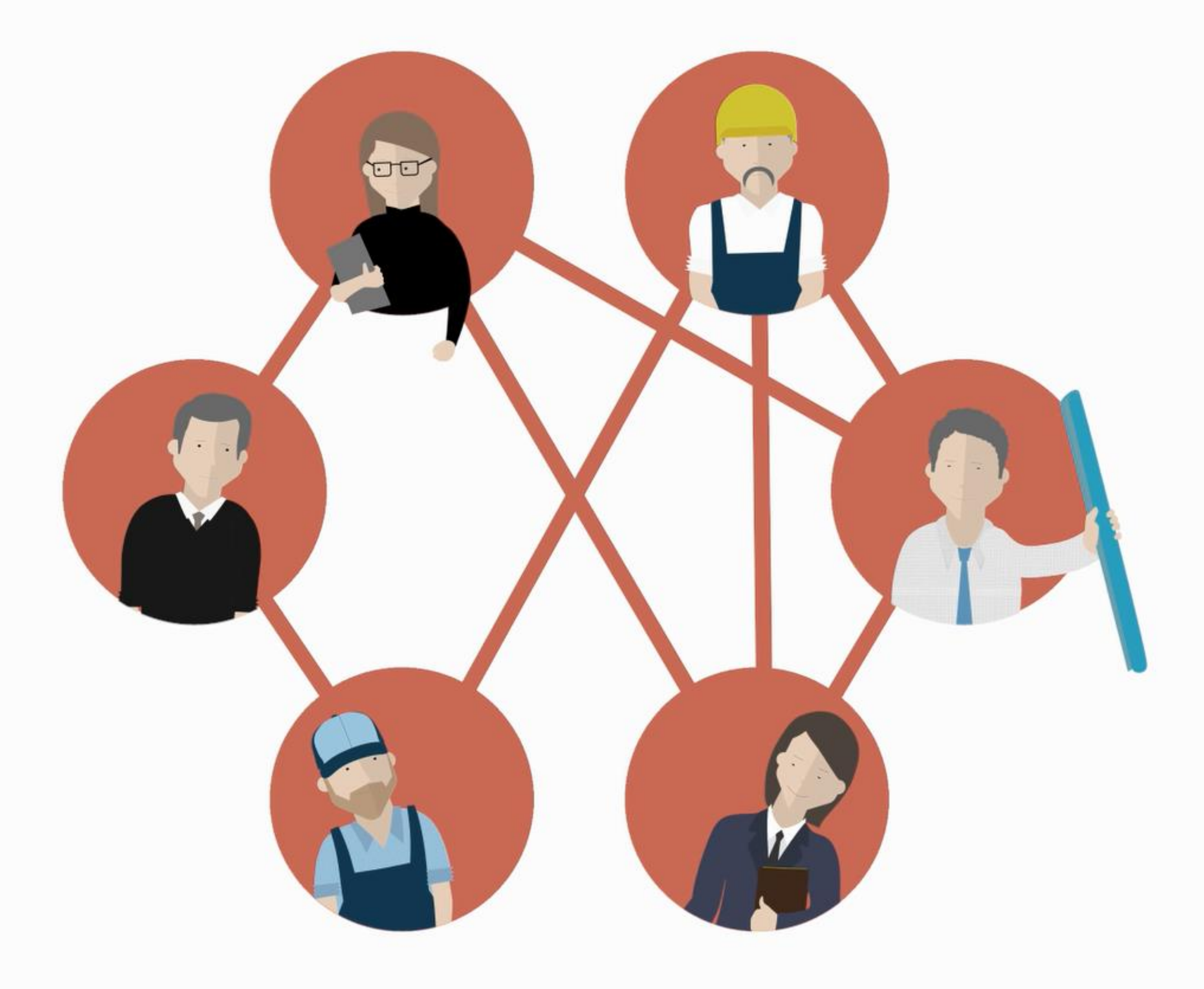
3D MODEL

BIM Game

Oldenburger BIMTag, 28.02.2019

Another way to learn BIM

BIM GAME
// Ausgangslage



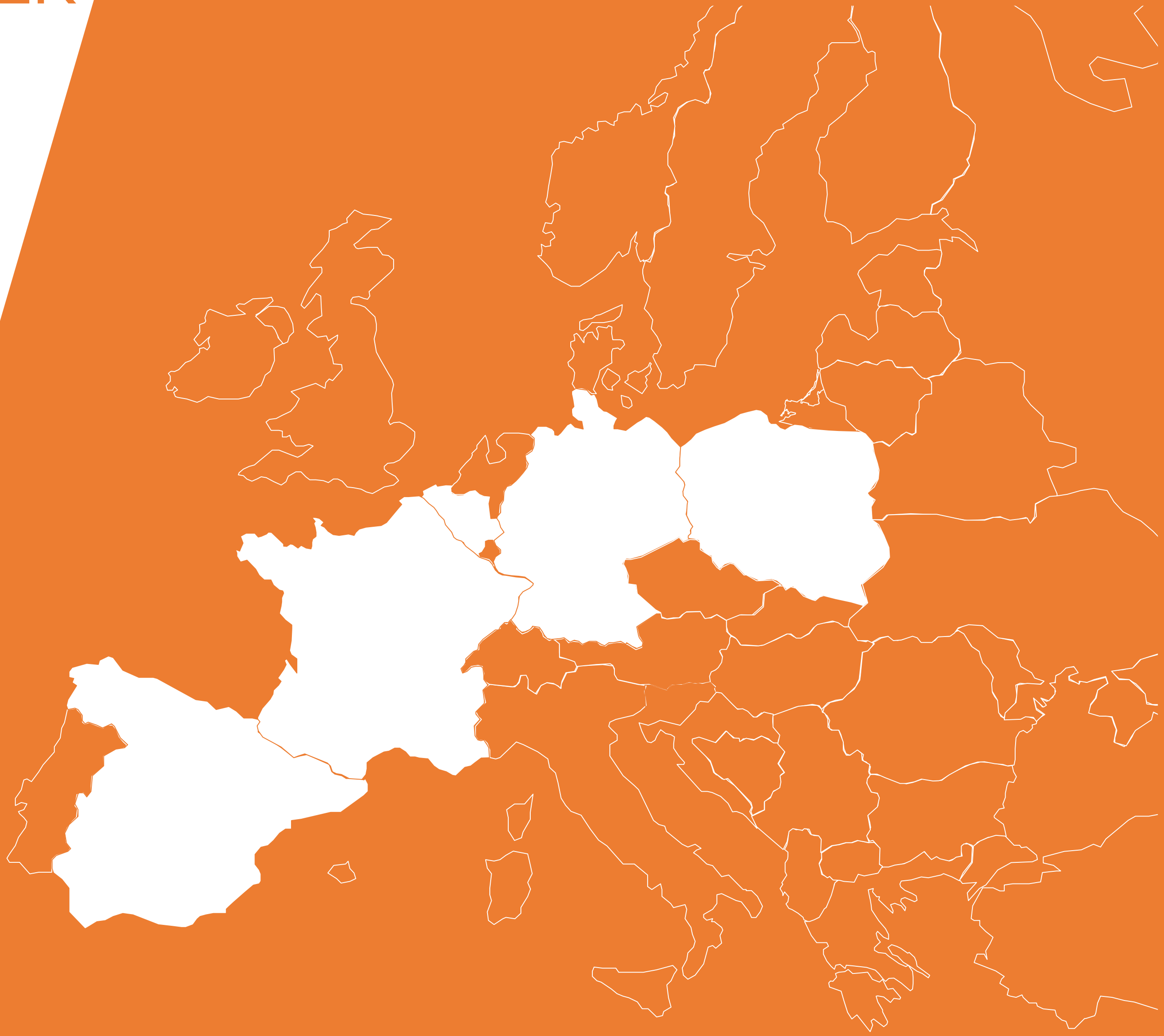
ARBEIT MIT BIM

- Erfordert Kollaboration
- Hohen Grad an Informationsaustausch

→ Wie wird das Personal darauf vorbereitet?

DAS FORSCHUNGSPROJEKT

- Laufzeit: September 2016 – September 2019
- Förderung über Erasmus+
- Partner aus Frankreich, Belgien, Polen, Spanien und Deutschland



DAS FORSCHUNGSPROJEKT
// Projektteam

JADE HOCHSCHULE
Wilhelmshaven Oldenburg Elsfleth

LYCÉE DU BOIS

UCLM
UNIVERSIDAD DE CASTILLA-LA MANCHA

Université de Liège
ulg

BERGISCHE UNIVERSITÄT WUPPERTAL

académie de Besançon
Éducation nationale
FTLV
gip
Formation Tout au Long de la Vie

datacomp
POLSKA

Pôle énergie
Franche-Comté

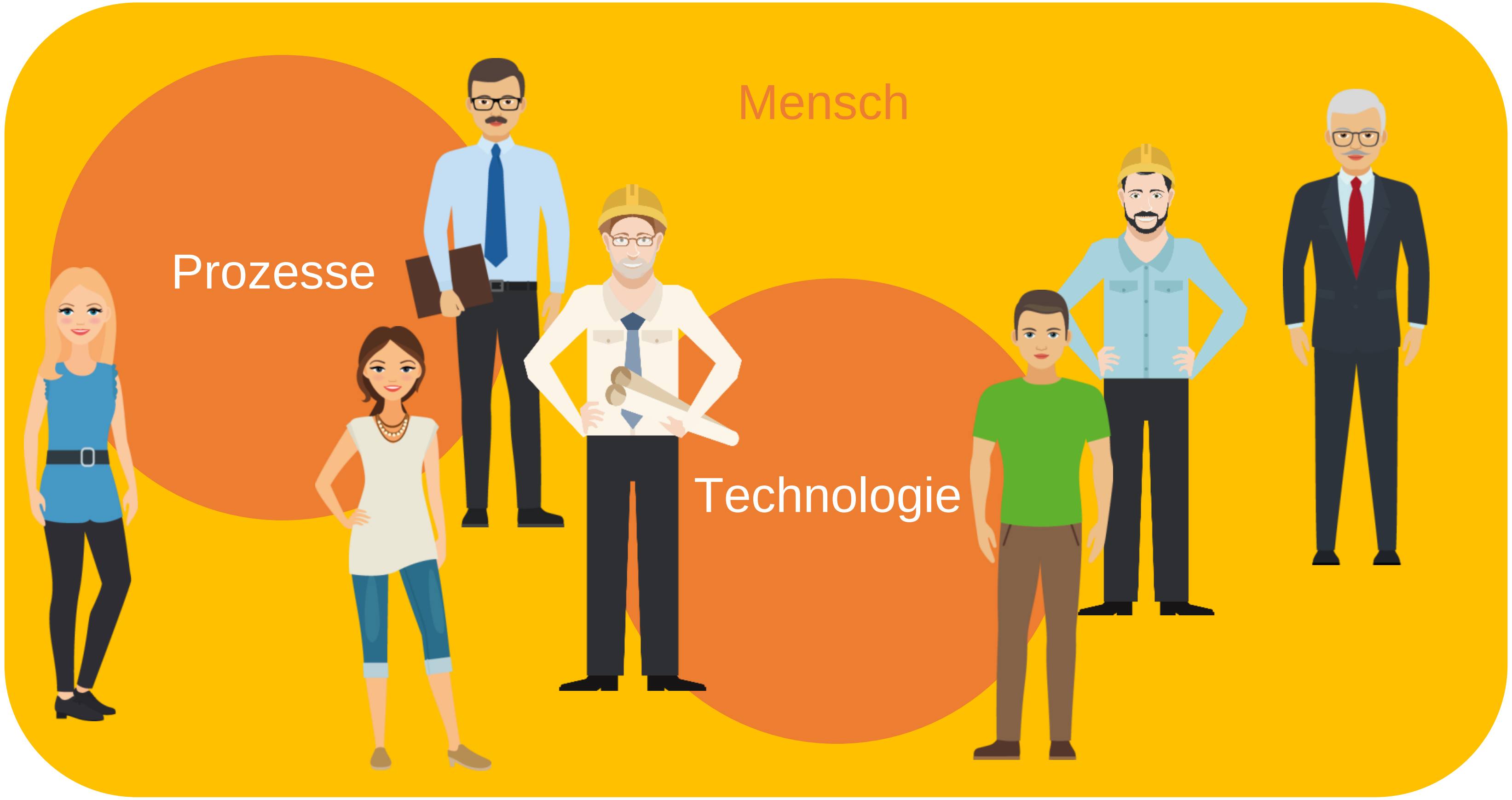
DAS FORSCHUNGSPROJEKT
// Projektteam

PROF. DR.-ING. JÖRG HÄRTEL
Professor
joerg.haertel@jade-hs.de
0441 7708 3129
www.jade-hs.de/bim

CARLA PÜTZ
Wissenschaftliche Mitarbeiterin
puetz@uni-wuppertal.de
0202 439 4190
www.biminstitut.de

Video_BIM Game\BIM-Game_Final.mp4

DIGITALISIERUNG DER BAUWIRTSCHAFT
// Worauf kommt es an?


Mensch
Prozesse
Technologie

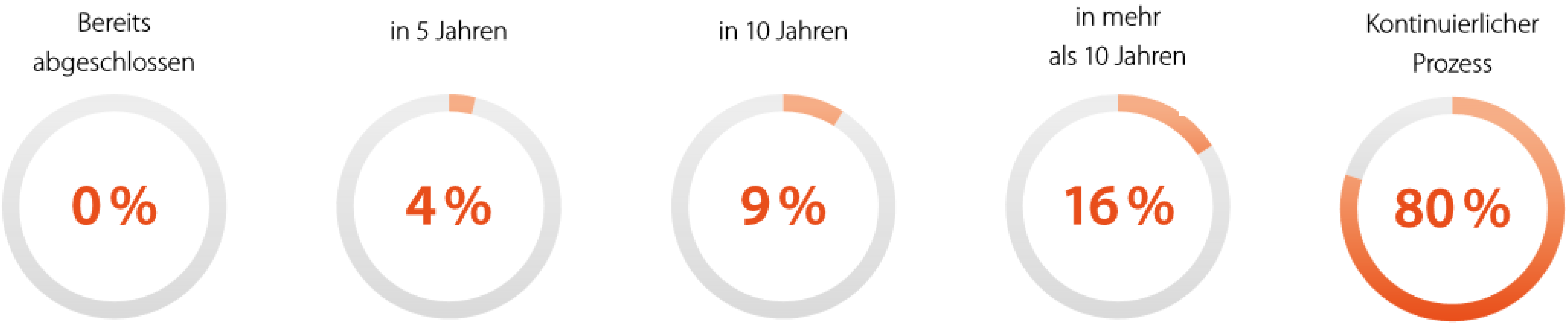
VERÄNDERUNG

// PROZESSE
// TECHNOLOGIE
// MENSCH

DIGITALISIERUNG DER BAUWIRTSCHAFT
// Worauf kommt es an?

Abschluss der digitalen Transformation

Vier von fünf Unternehmen sehen die digitale Transformation als kontinuierlichen Prozess, der über die nächsten zehn Jahre hinaus laufen wird.



Trendstudie von Tata Consultancy Services (TCS) und Bitkom Research

DIE EIGENE DIGITALISIERUNGS-STRATEGIE FINDEN

DER MENSCH SCHEUT DEN WANDEL

AB MORGEN
NURNOCH
BIM

DIGITALISIERUNG DER BAUWIRTSCHAFT
// Worauf kommt es an?

TECHNOLOGIE

Funktioniert nicht ohne die Menschen

DIGITALISIERUNG DER BAUWIRTSCHAFT
// Schulung der Mitarbeiter

NACHTEIL

1 **NEUE MITARBEITER mit IT- Kenntnissen rekrutieren**

- Ggf. fehlende Berufserfahrung
- Einarbeitung in die Prozesse und Unternehmensstruktur
- Nachwuchskräftemangel
- Rekrutierungskosten

2 **Mit IT-KOMPETENZPARTNERN kooperieren**

- Abhängigkeit
- Kosten
- Vertraulichkeit

3 **EIGENE MITARBEITER um IT-Kenntnisse weiterbilden**

- Weiterbildungsaufwand
- Akzeptanzhürden

Girls
go to
career
Diplomlehrgang
Diplomlehrgang
Beraterinnen
Arbeits-
bericht

KLASSISCHES SCHULUNGSFORMAT

WENIG AUFMERKSAMKEIT
WENIG BLEIBT HÄNGEN

BIM SPIELERISCH ERLERNEN

NATÜRLICHER SPIELTRIEB
→ MEHR MOTIVATION

KLARE ZIELE
DIREKTES FEEDBACK

BIM GAME
// Was ist das?

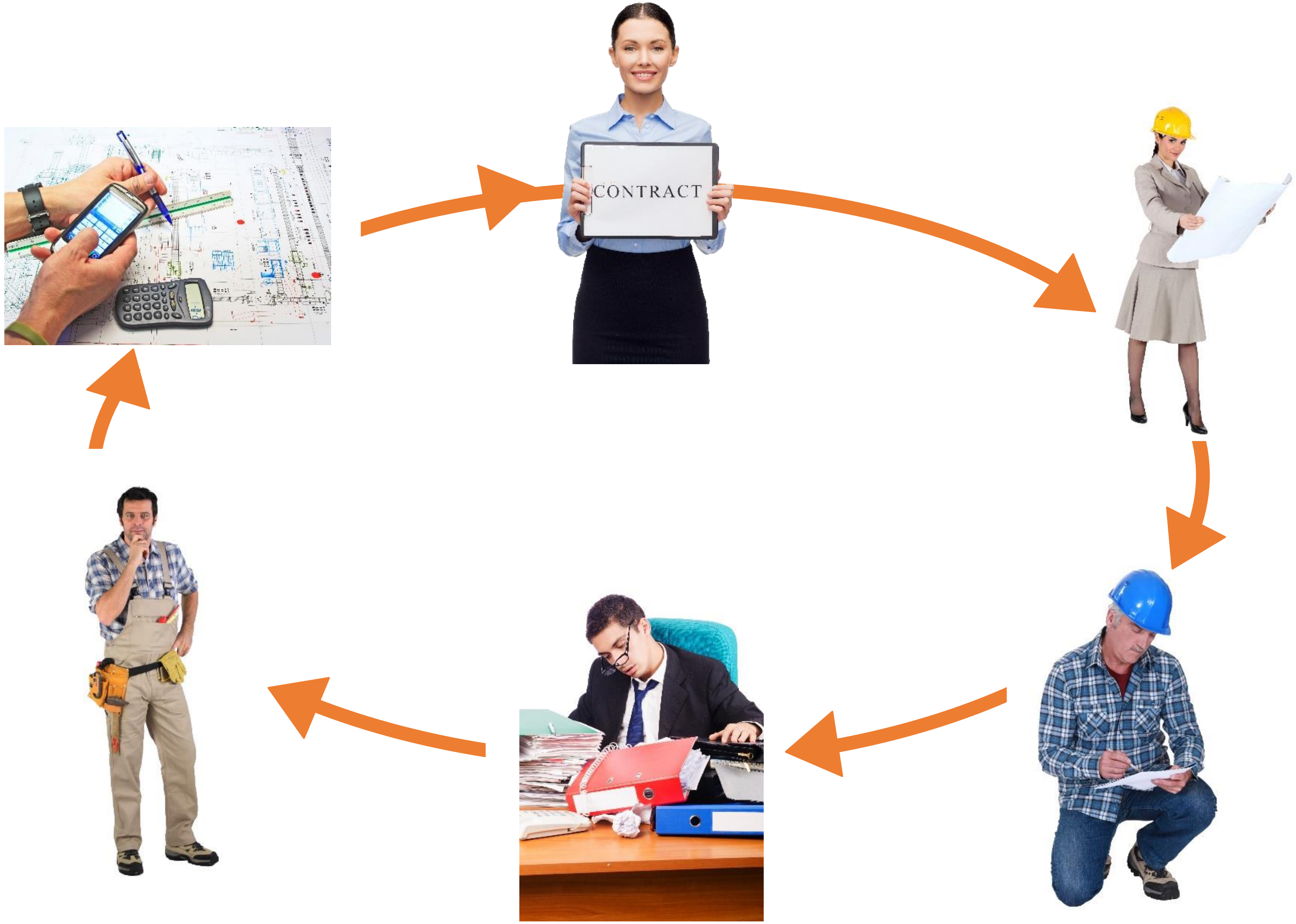
GAMIFICATION

- ÜBERTRAGUNG VON **SPIELTYPISCHEN ELEMENTEN** IN **SPIELFREMDE ZUSAMMENHÄNGE**
- ZIEL: VERHALTENSÄNDERUNG UND **MOTIVATIONSSTEIGERUNG**
- BEWÄLTIGUNG VON AUFGABEN DURCH INDIVIDUELLE UND **KOLLABORATIVE** LEISTUNGEN.

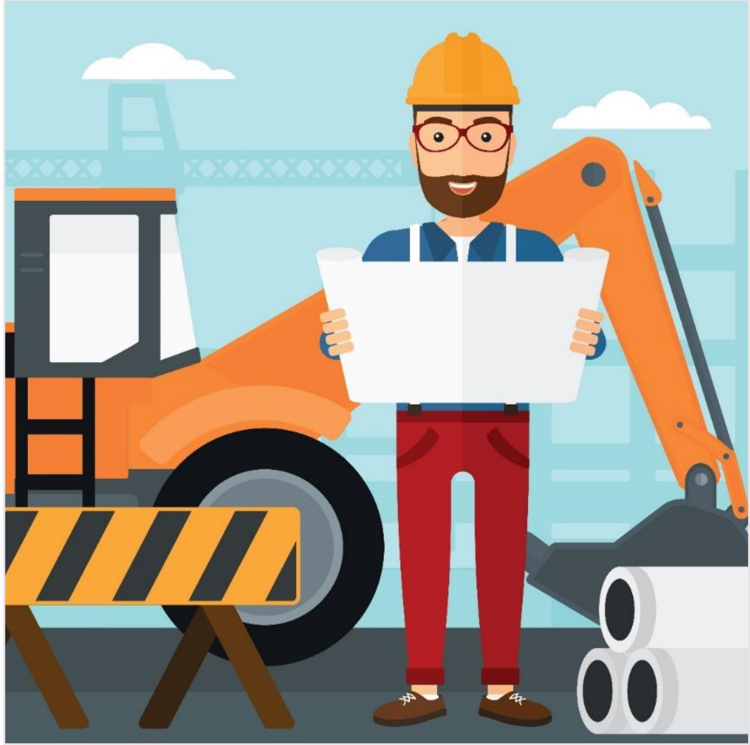
BIM GAME
// Zielgruppe

Studenten beim
&
&

BIM GAME
// Zielgruppe



BIM GAME
// Szenarien



≙

BIM GAME
// e-learning vs. klassisch vor Ort

&

Einsatz kostenloser Software

TEKLA
BIMsight

BIMVision

XBIM
The BIM Toolkit

SOLIBRI
A NEMETSCHEK COMPANY

BIM GAME
// nextcloud (e-learning Plattform)

Creativity

Technologies

Collaboration

Flexibility

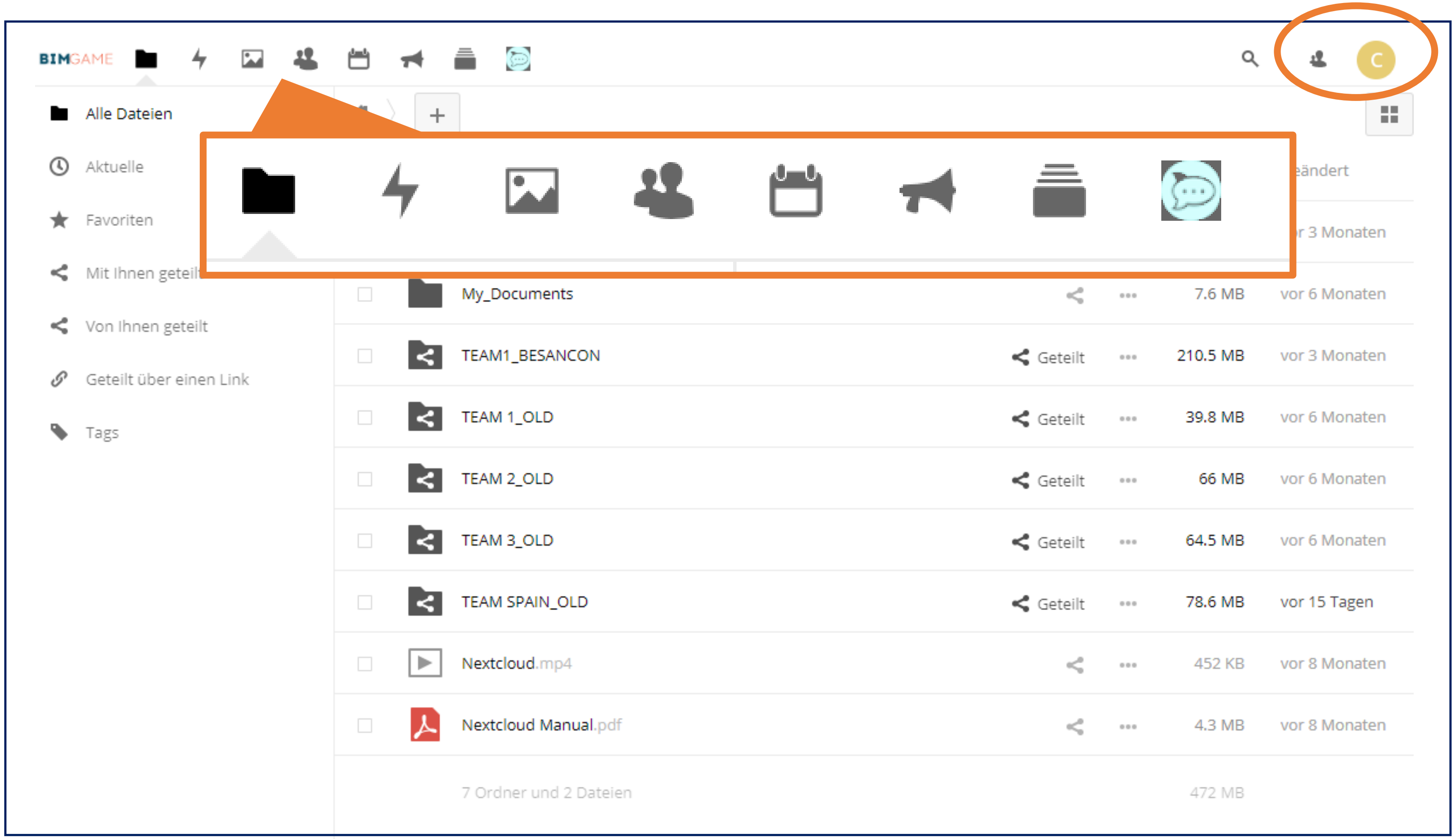
BIM GAME
// nextcloud (e-learning Plattform)

Chat

Mail

File deposit

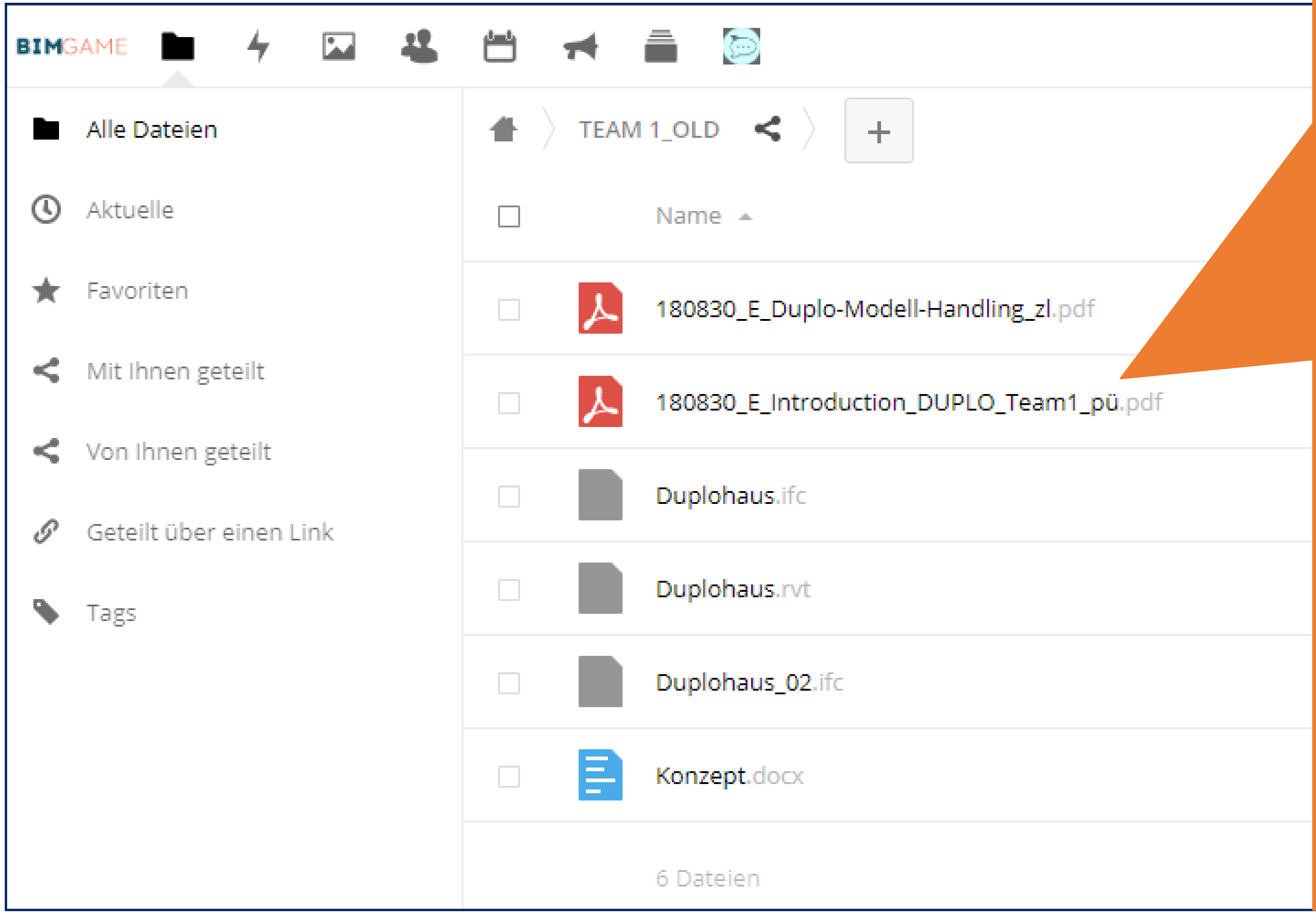
BIM GAME
// nextcloud (e-learning Plattform)



- Alle Dateien
- Aktuelle
- Favoriten
- Mit Ihnen geteil
- Von Ihnen geteilt
- Geteilt über einen Link
- Tags

☐ My_Documents		7.6 MB	vor 6 Monaten
☐ TEAM1_BESANCON	Geteilt	210.5 MB	vor 3 Monaten
☐ TEAM 1_OLD	Geteilt	39.8 MB	vor 6 Monaten
☐ TEAM 2_OLD	Geteilt	66 MB	vor 6 Monaten
☐ TEAM 3_OLD	Geteilt	64.5 MB	vor 6 Monaten
☐ TEAM SPAIN_OLD	Geteilt	78.6 MB	vor 15 Tagen
☐ Nextcloud.mp4		452 KB	vor 8 Monaten
☐ Nextcloud Manual.pdf		4.3 MB	vor 8 Monaten
7 Ordner und 2 Dateien		472 MB	

BIM GAME
// nextcloud (e-learning Plattform)



☐ 180830_E_Duplo-Modell-Handling_zl.pdf

☐ 180830_E_Introduction_DUPLO_Team1_pü.pdf

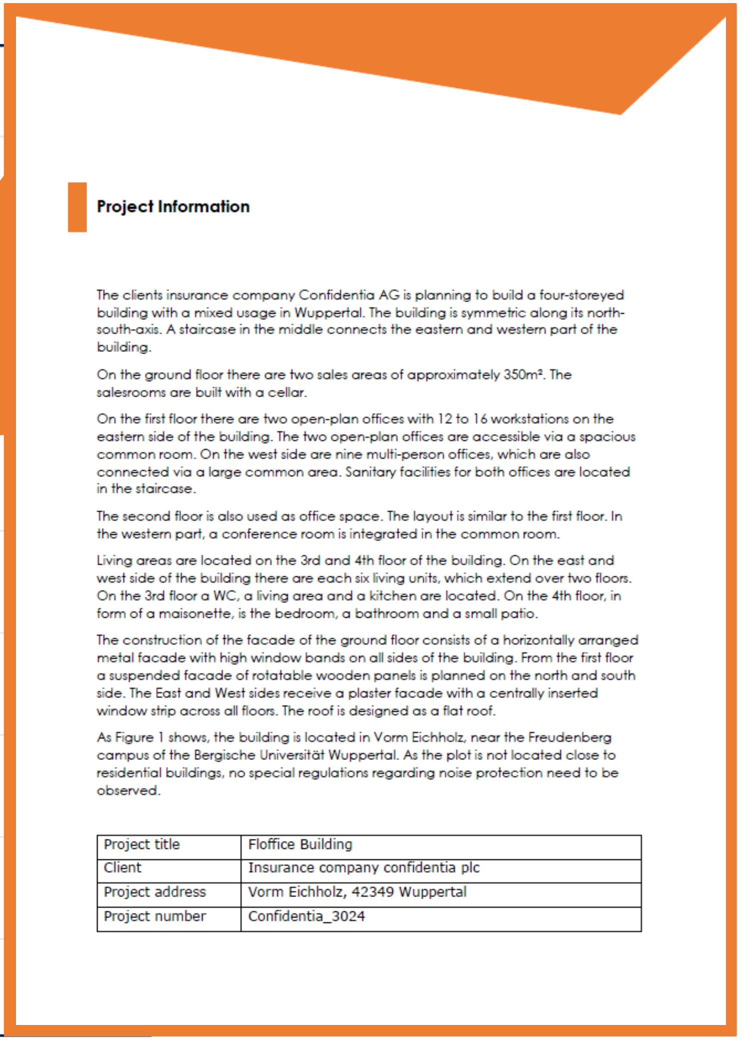
☐ Duplohaus.ifc

☐ Duplohaus.rvt

☐ Duplohaus_02.ifc

☐ Konzept.docx

6 Dateien



Project Information

The clients insurance company Confidentia AG is planning to build a four-storeyed building with a mixed usage in Wuppertal. The building is symmetric along its north-south-axis. A staircase in the middle connects the eastern and western part of the building.

On the ground floor there are two sales areas of approximately 350m². The salesrooms are built with a cellar.

On the first floor there are two open-plan offices with 12 to 16 workstations on the eastern side of the building. The two open-plan offices are accessible via a spacious common room. On the west side are nine multi-person offices, which are also connected via a large common area. Sanitary facilities for both offices are located in the staircase.

The second floor is also used as office space. The layout is similar to the first floor. In the western part, a conference room is integrated in the common room.

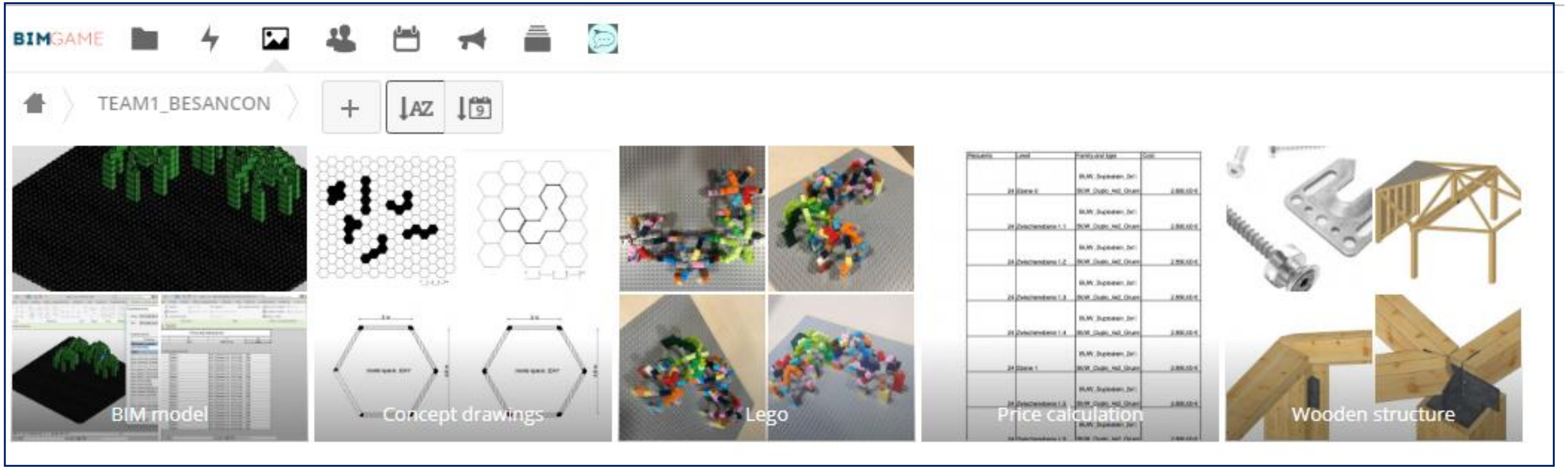
Living areas are located on the 3rd and 4th floor of the building. On the east and west side of the building there are each six living units, which extend over two floors. On the 3rd floor a WC, a living area and a kitchen are located. On the 4th floor, in form of a maisonette, is the bedroom, a bathroom and a small patio.

The construction of the facade of the ground floor consists of a horizontally arranged metal facade with high window bands on all sides of the building. From the first floor a suspended facade of rotatable wooden panels is planned on the north and south side. The East and West sides receive a plaster facade with a centrally inserted window strip across all floors. The roof is designed as a flat roof.

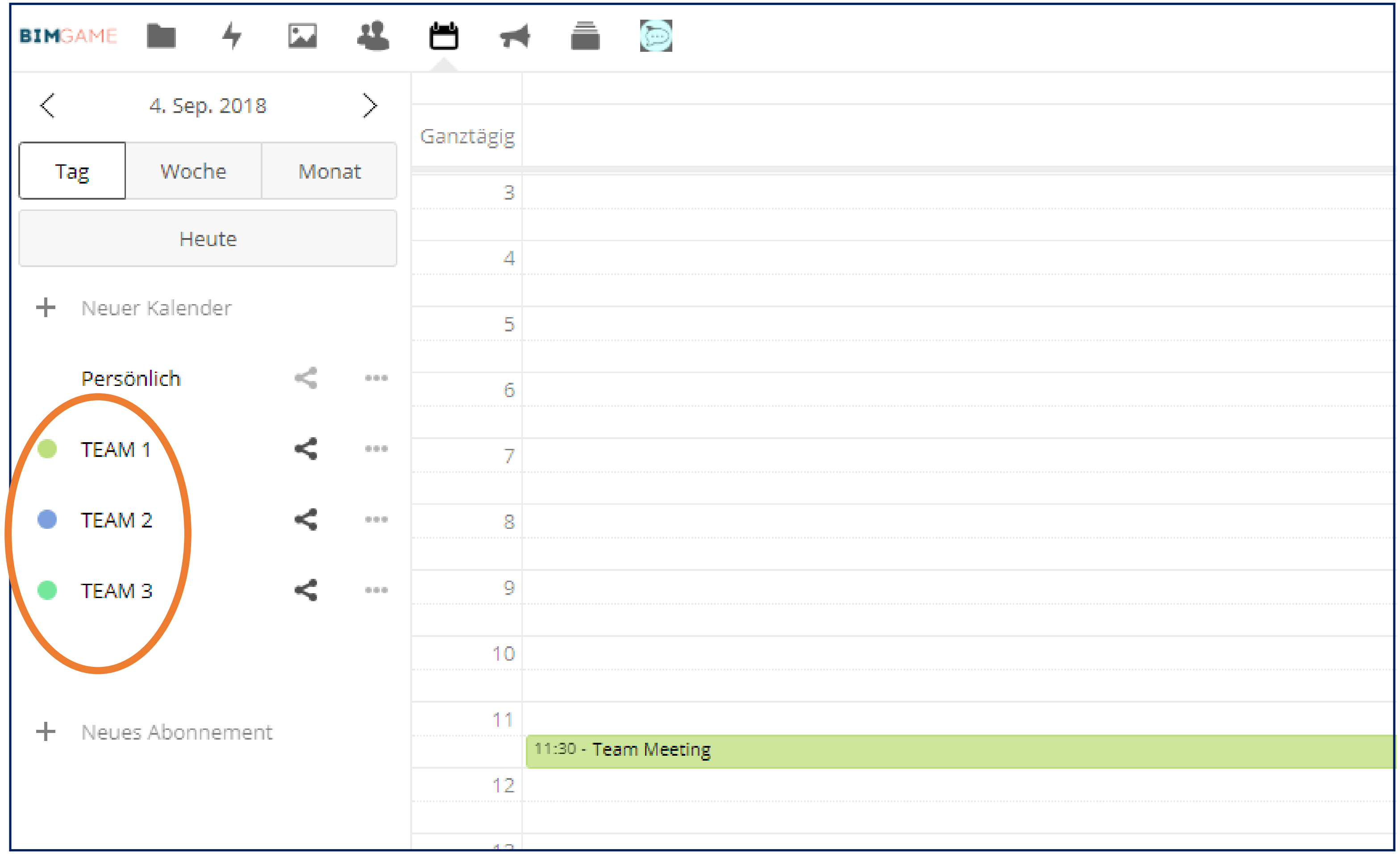
As Figure 1 shows, the building is located in Vorm Eichholz, near the Freudenberg campus of the Bergische Universität Wuppertal. As the plot is not located close to residential buildings, no special regulations regarding noise protection need to be observed.

Project title	Floffice Building
Client	Insurance company confidentia plc
Project address	Vorm Eichholz, 42349 Wuppertal
Project number	Confidentia_3024

BIM GAME
// nextcloud (e-learning Plattform)

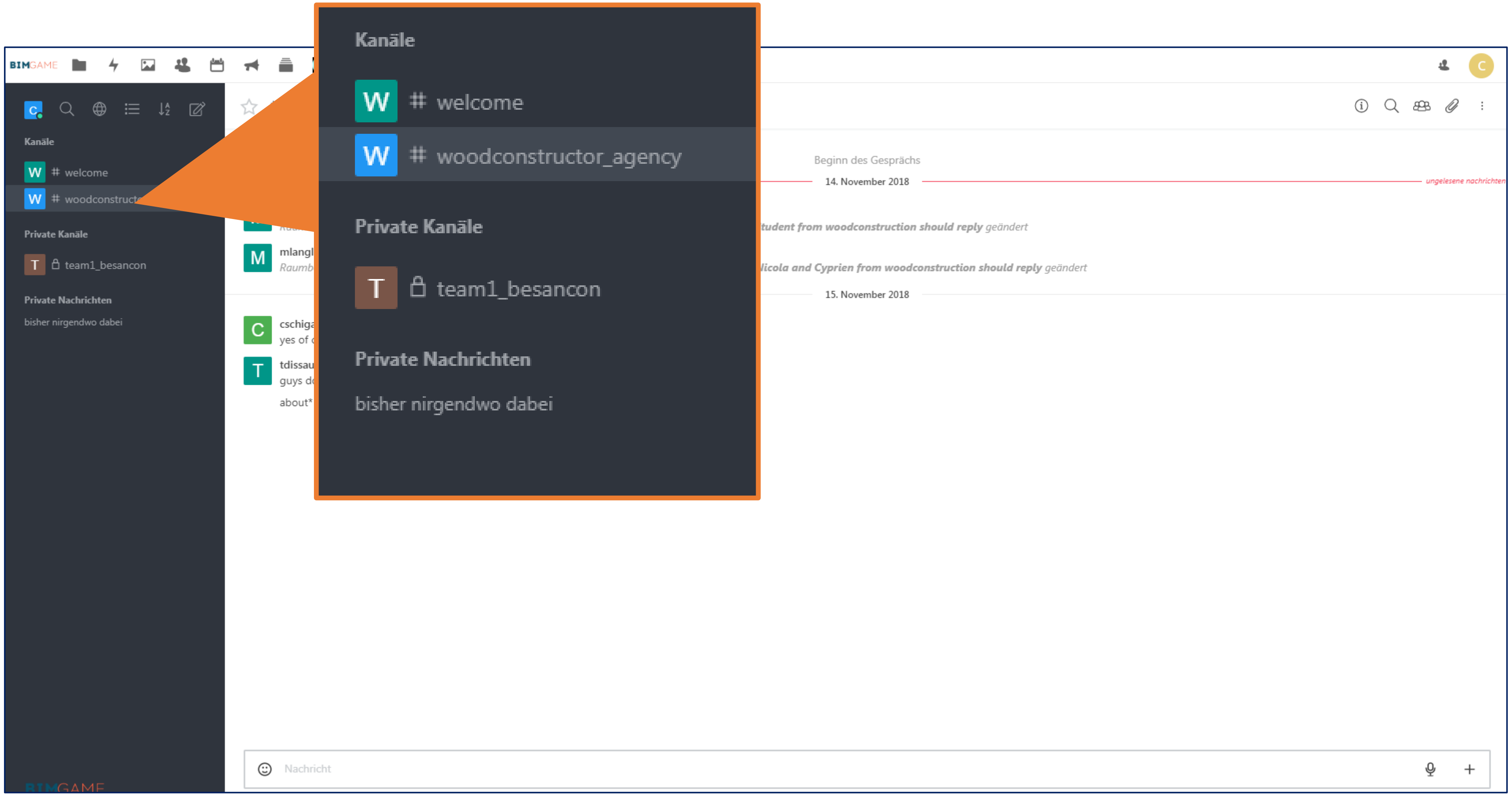

BIMGAME
TEAM1_BESANCON
+
AZ
BIM model
Concept drawings
Lego
Price calculation
Wooden structure

BIM GAME
// nextcloud (e-learning Plattform)

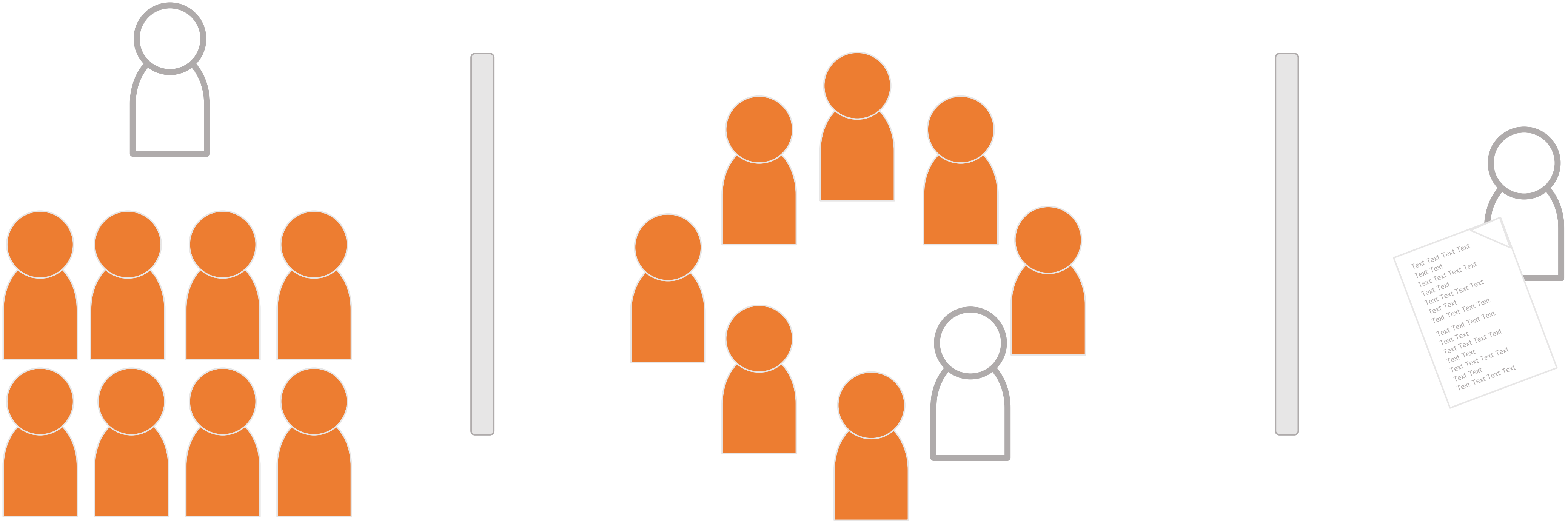

BIMGAME
4. Sep. 2018
Tag
Woche
Monat
Heute
Neuer Kalender
Persönlich
TEAM 1
TEAM 2
TEAM 3
Neues Abonnement
Ganztägig
3
4
5
6
7
8
9
10
11
12

11:30 - Team Meeting

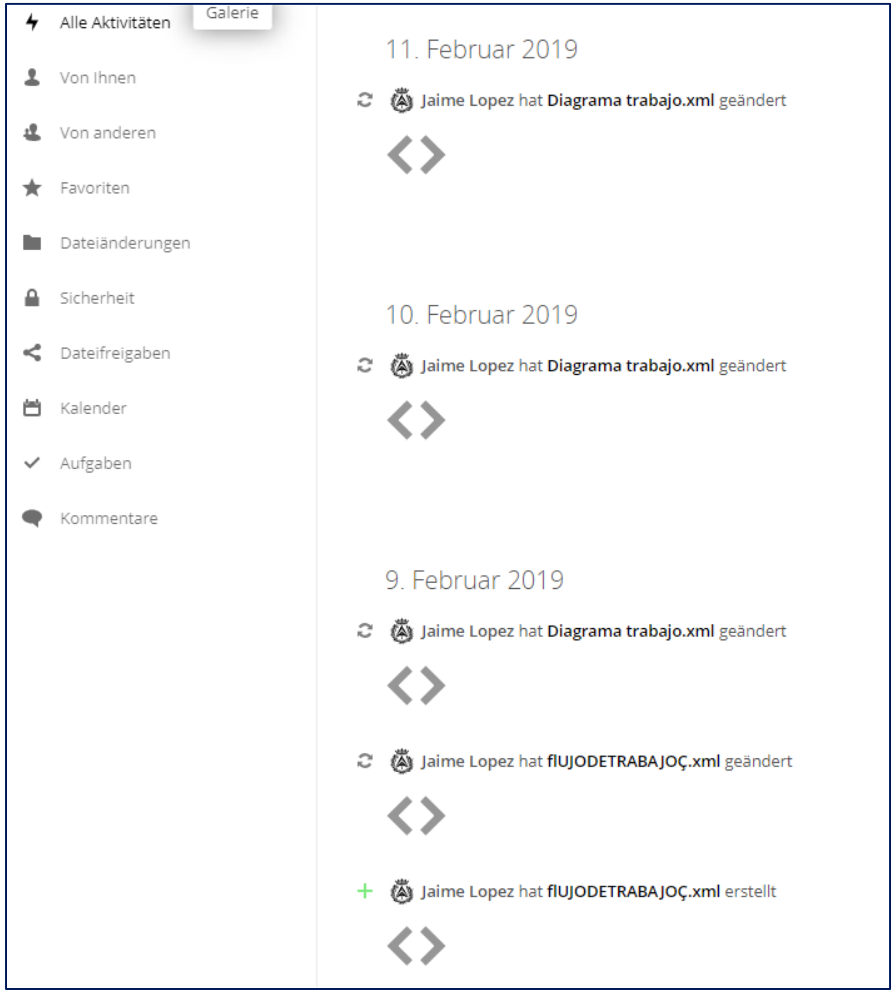
BIM GAME
// nextcloud (e-learning Plattform)


Kanäle
W # welcome
W # woodconstructor_agency
Private Kanäle
T team1_besancon
Private Nachrichten
bisher nirgendwo dabei
Beginn des Gesprächs
14. November 2018
ungelesene nachrichten
tudent from woodconstruction should reply geändert
licola and Cyprien from woodconstruction should reply geändert
15. November 2018
Nachricht
BIMGAME

BIM GAME
// Rolle des Lehrers



BIM GAME
// Rolle des Lehrers


Alle Aktivitäten
Galerie
Von Ihnen
Von anderen
Favoriten
Dateiänderungen
Sicherheit
Dateifreigaben
Kalender
Aufgaben
Kommentare

11. Februar 2019

Jaime Lopez hat **Diagrama trabajo.xml** geändert

10. Februar 2019

Jaime Lopez hat **Diagrama trabajo.xml** geändert

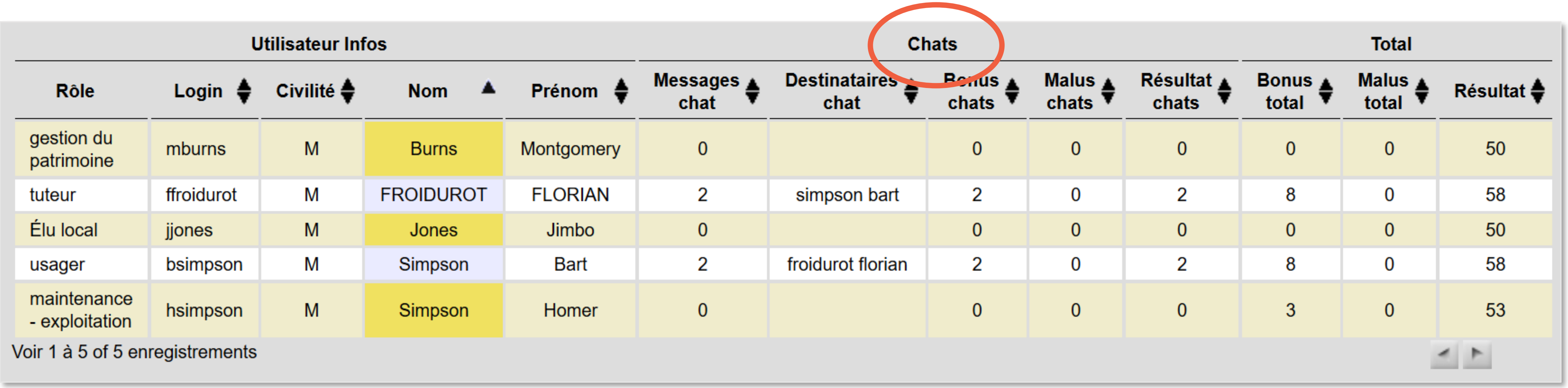
9. Februar 2019

Jaime Lopez hat **Diagrama trabajo.xml** geändert

Jaime Lopez hat **flUJODETRABAJOÇ.xml** geändert

Jaime Lopez hat **flUJODETRABAJOÇ.xml** erstellt

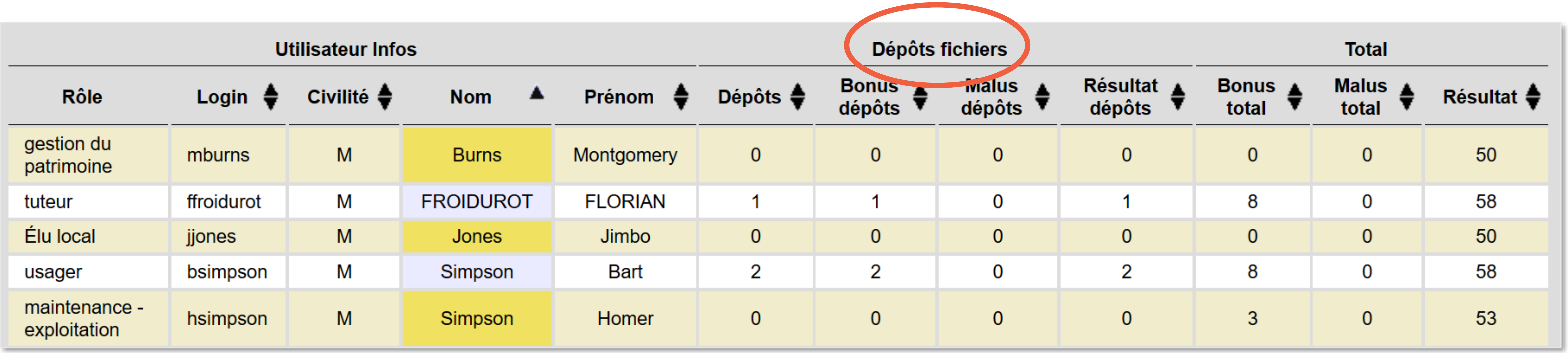
BIM GAME
// Rolle des Lehrers



Utilisateur Infos					Chats					Total		
Rôle	Login	Civilité	Nom	Prénom	Messages chat	Destinataires chat	Bonus chats	Malus chats	Résultat chats	Bonus total	Malus total	Résultat
gestion du patrimoine	mburns	M	Burns	Montgomery	0		0	0	0	0	0	50
tuteur	ffroidurot	M	FROIDUROT	FLORIAN	2	simpson bart	2	0	2	8	0	58
Élu local	jjones	M	Jones	Jimbo	0		0	0	0	0	0	50
usager	bsimpson	M	Simpson	Bart	2	froidurot florian	2	0	2	8	0	58
maintenance - exploitation	hsimpson	M	Simpson	Homer	0		0	0	0	3	0	53

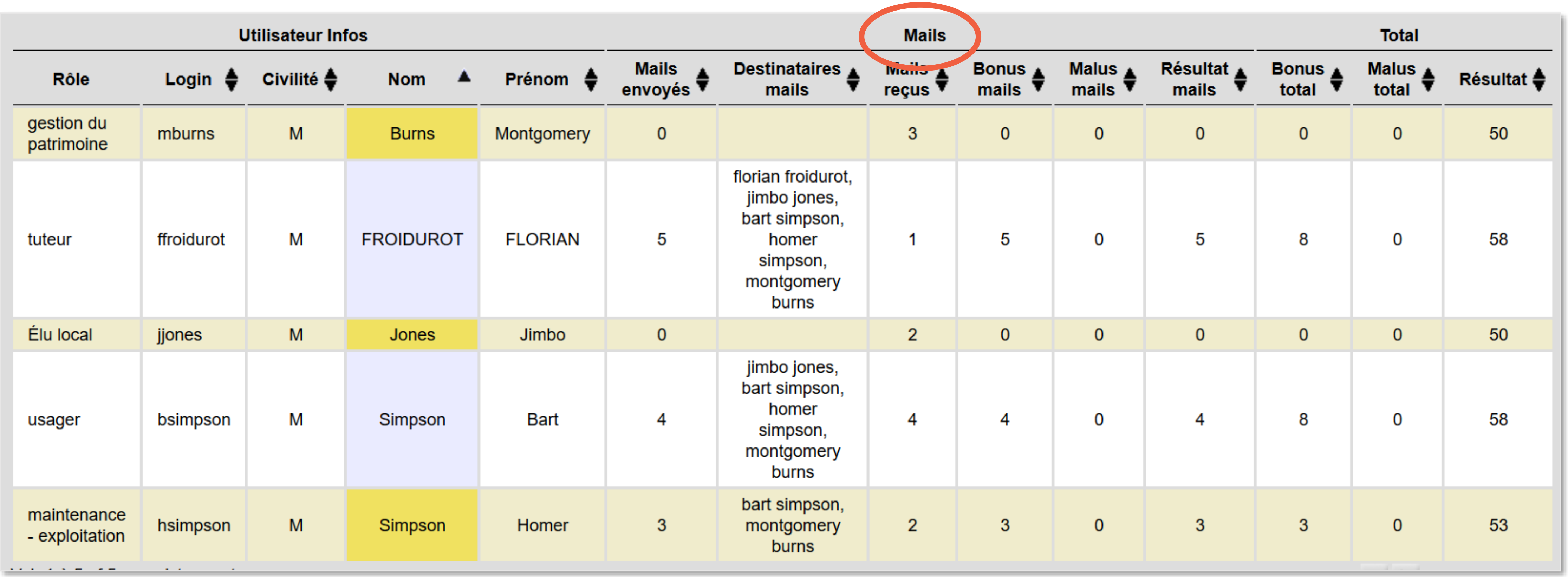
Voir 1 à 5 of 5 enregistrements

BIM GAME
// Rolle des Lehrers



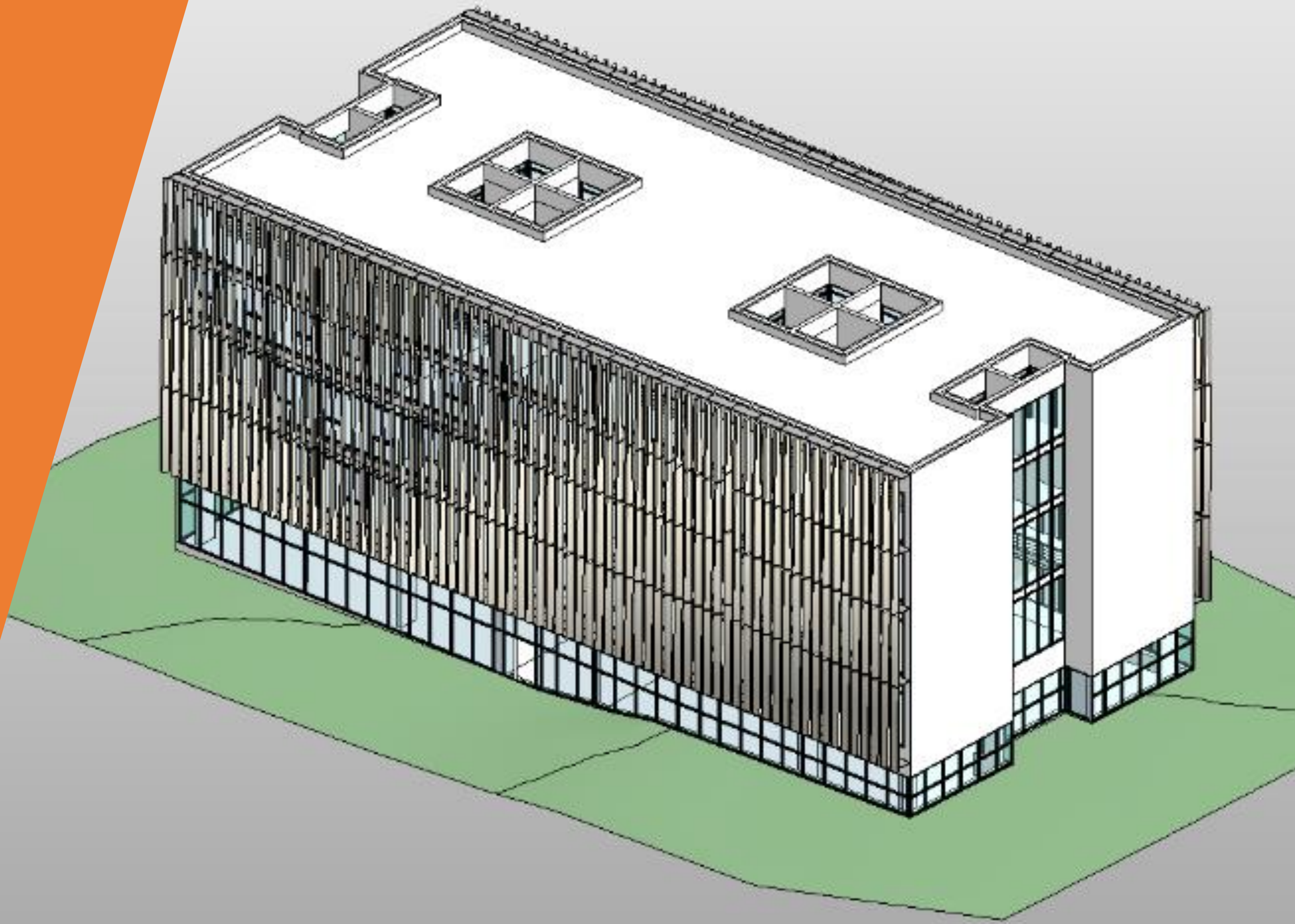
Utilisateur Infos					Dépôts fichiers				Total		
Rôle	Login	Civilité	Nom	Prénom	Dépôts	Bonus dépôts	Malus dépôts	Résultat dépôts	Bonus total	Malus total	Résultat
gestion du patrimoine	mburns	M	Burns	Montgomery	0	0	0	0	0	0	50
tuteur	ffroidurot	M	FROIDUROT	FLORIAN	1	1	0	1	8	0	58
Élu local	jjones	M	Jones	Jimbo	0	0	0	0	0	0	50
usager	bsimpson	M	Simpson	Bart	2	2	0	2	8	0	58
maintenance - exploitation	hsimpson	M	Simpson	Homer	0	0	0	0	3	0	53

BIM GAME
// Rolle des Lehrers

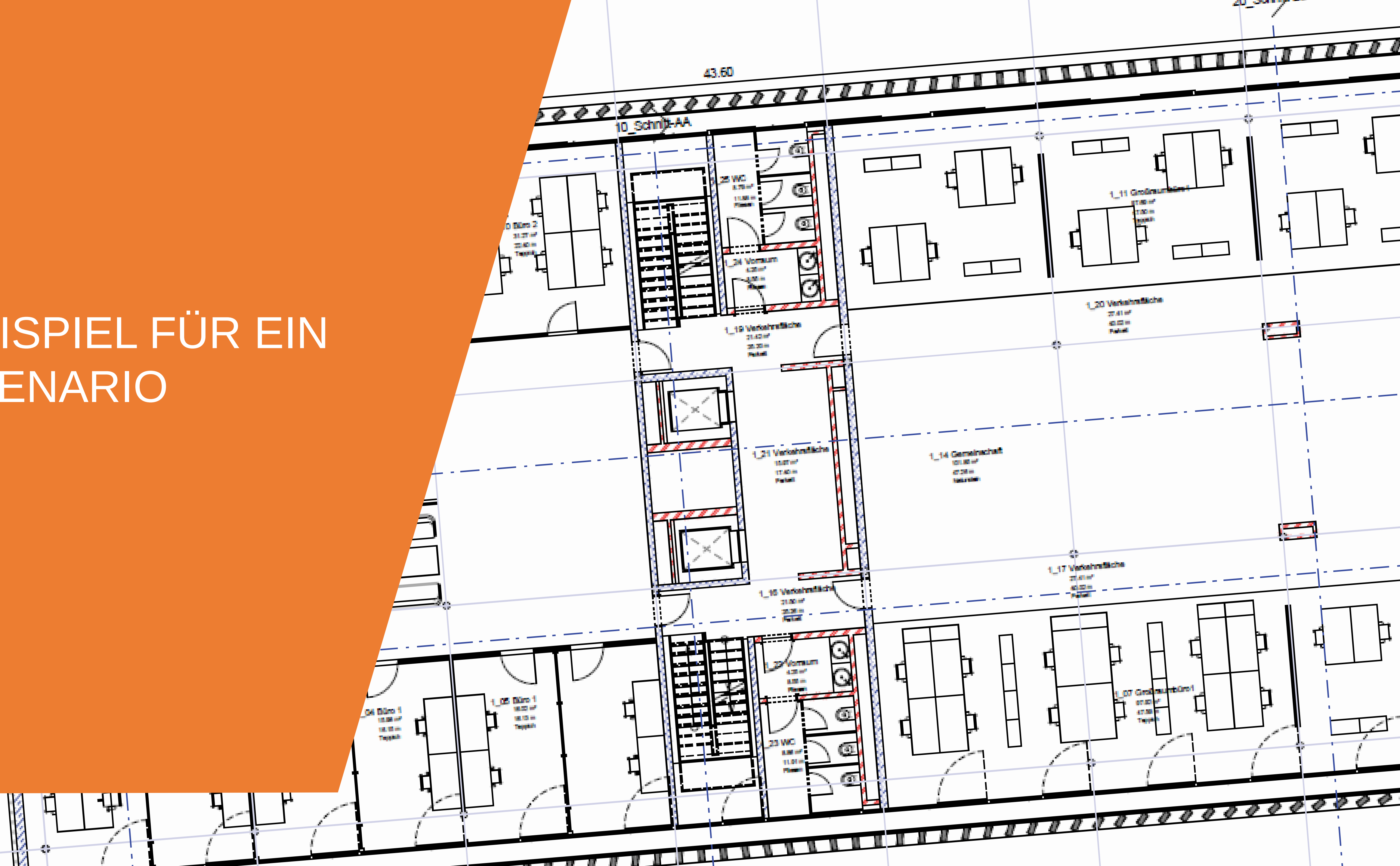


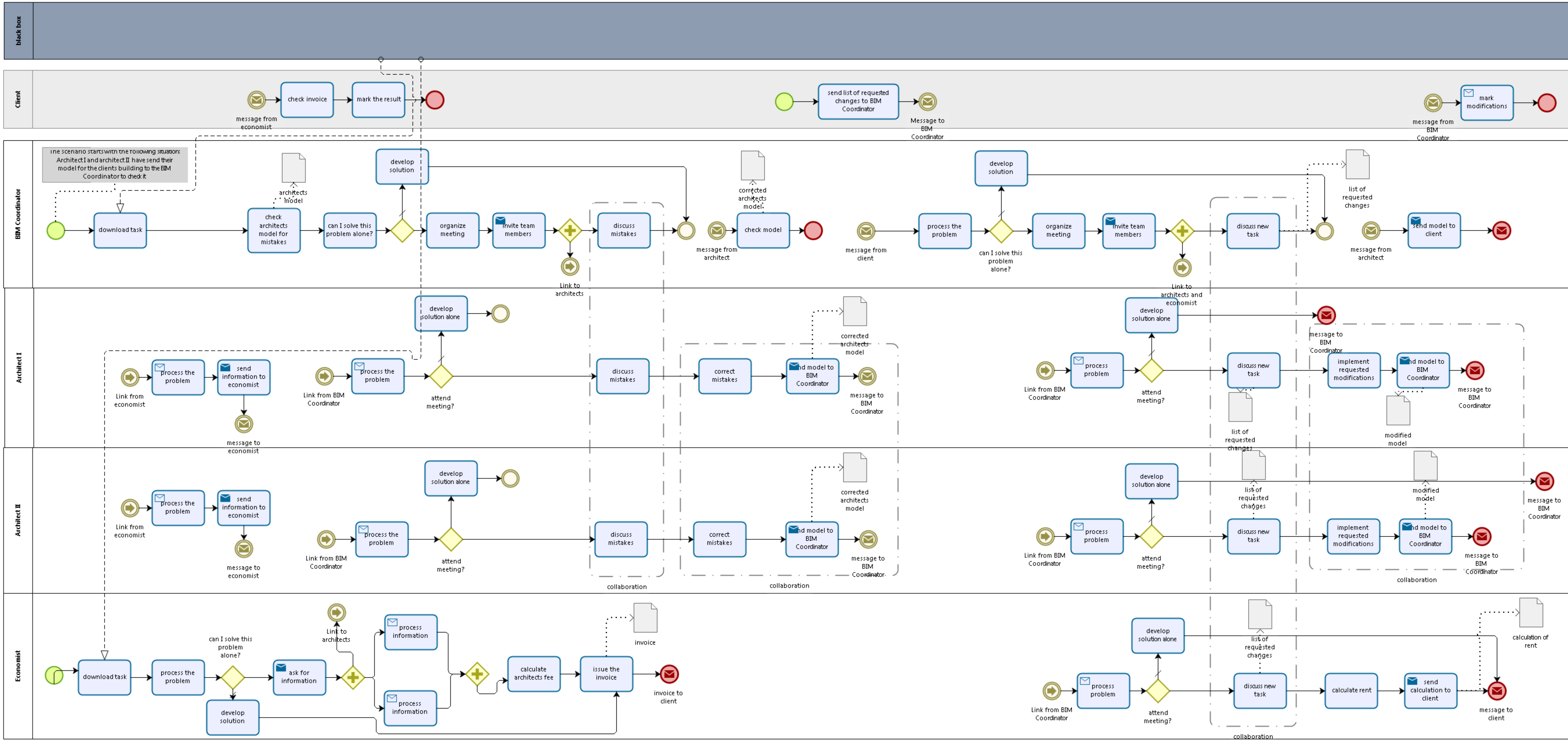
Utilisateur Infos					Mails						Total		
Rôle	Login	Civilité	Nom	Prénom	Mails envoyés	Destinataires mails	Mails reçus	Bonus mails	Malus mails	Résultat mails	Bonus total	Malus total	Résultat
gestion du patrimoine	mburns	M	Burns	Montgomery	0		3	0	0	0	0	0	50
tuteur	ffroidurot	M	FROIDUROT	FLORIAN	5	florian froidurot, jimbo jones, bart simpson, homer simpson, montgomery burns	1	5	0	5	8	0	58
Élu local	jjones	M	Jones	Jimbo	0		2	0	0	0	0	0	50
usager	bsimpson	M	Simpson	Bart	4	jimbo jones, bart simpson, homer simpson, montgomery burns	4	4	0	4	8	0	58
maintenance - exploitation	hsimpson	M	Simpson	Homer	3	bart simpson, montgomery burns	2	3	0	3	3	0	53

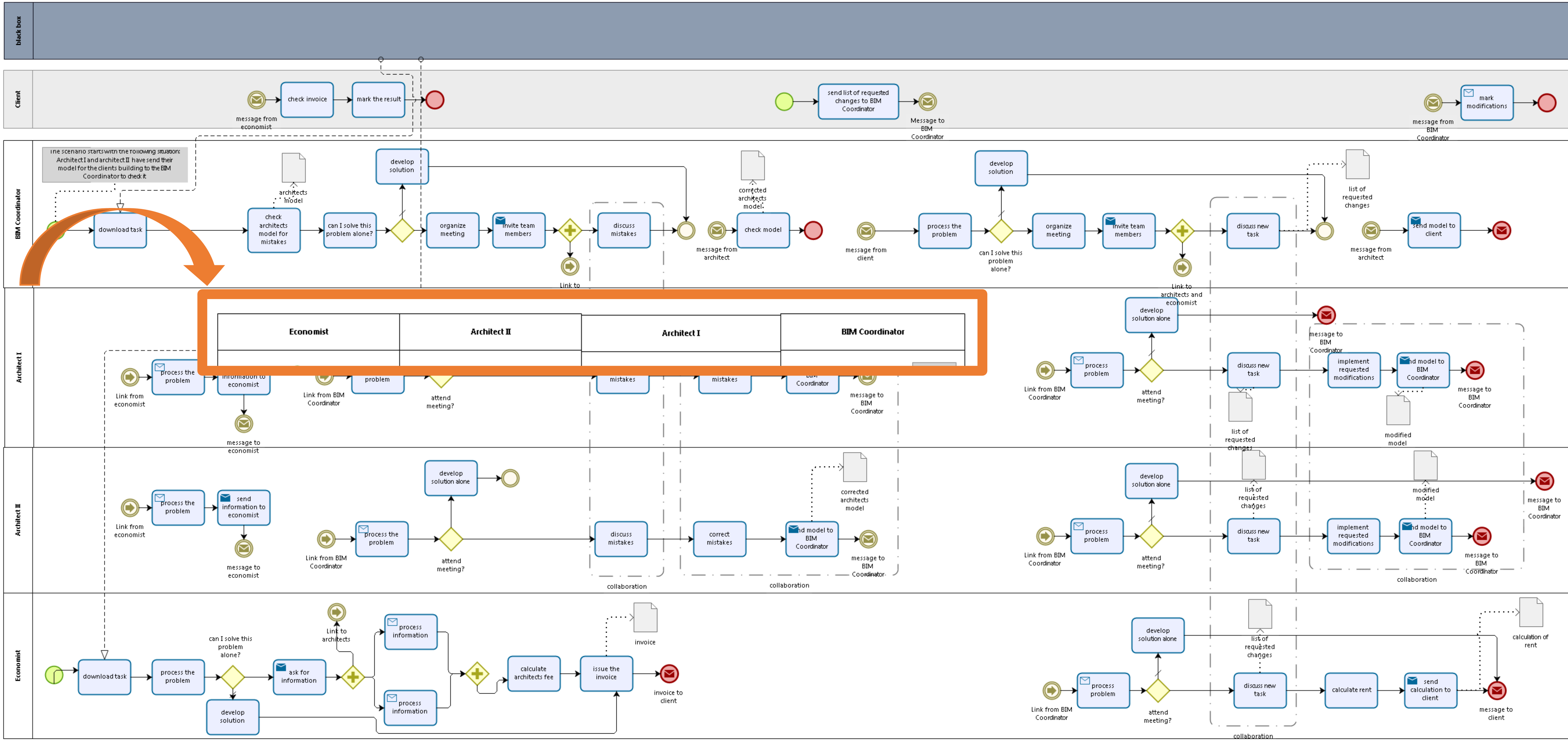
BEISPIEL FÜR EIN SZENARIO



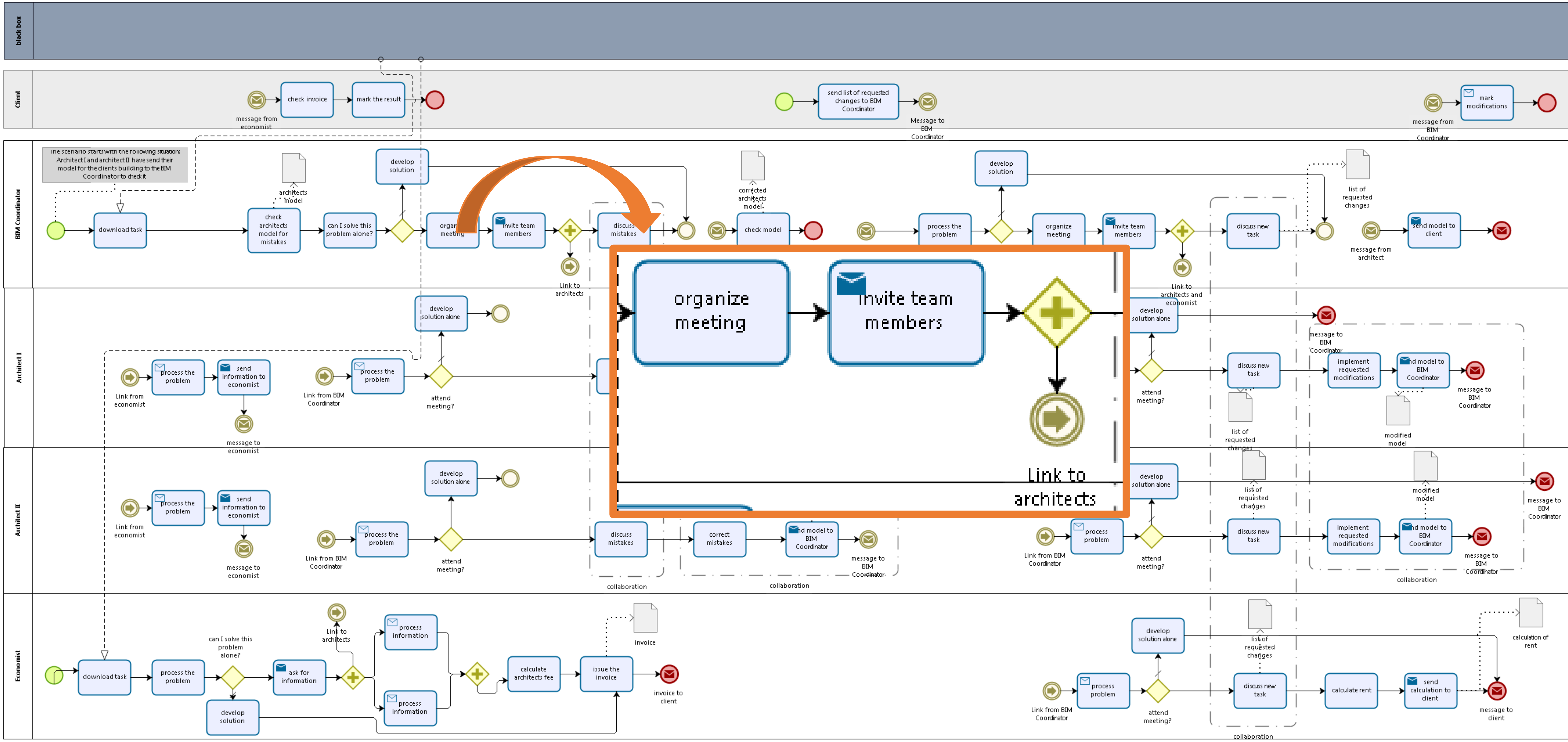
BEISPIEL FÜR EIN SZENARIO

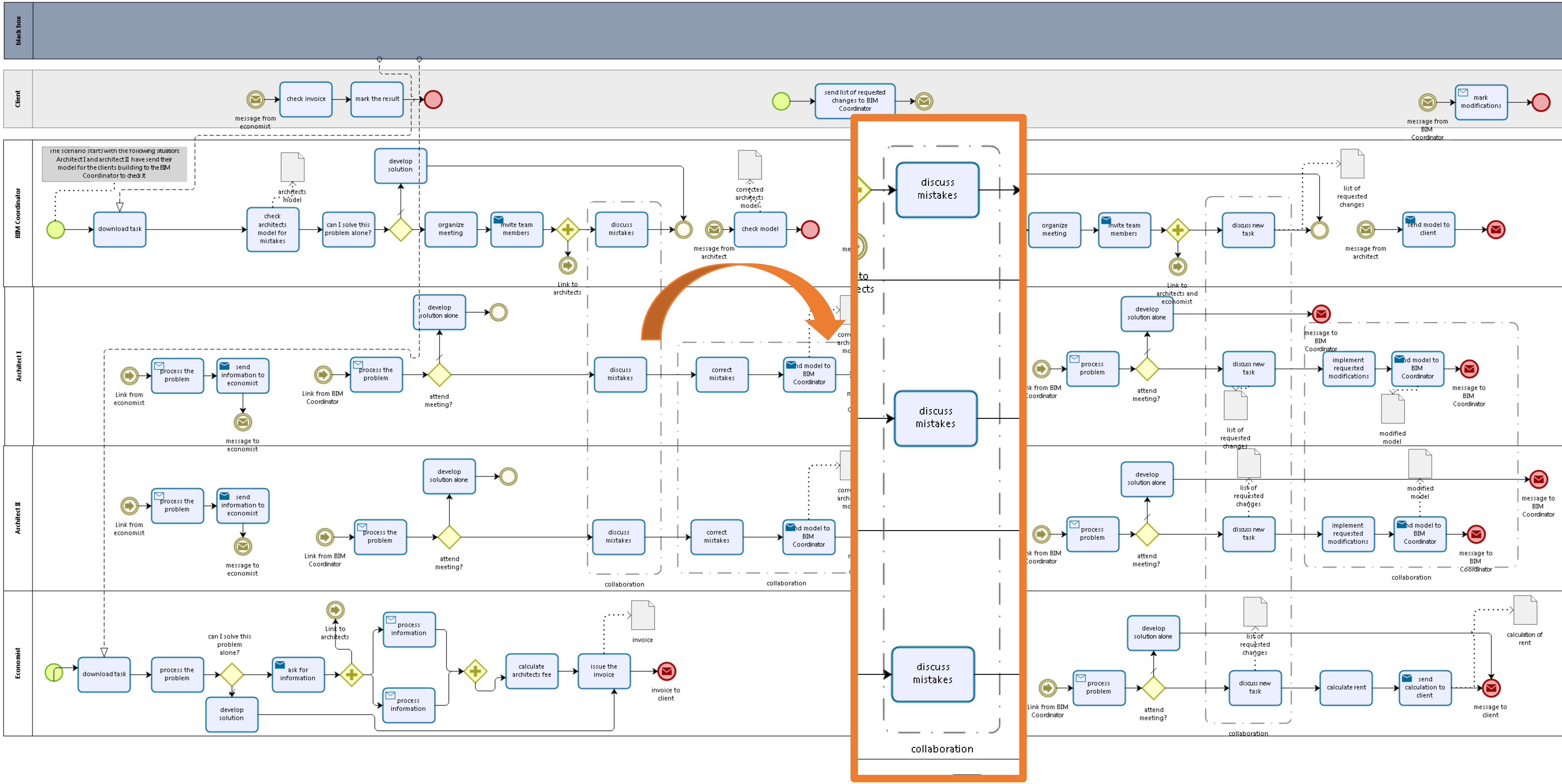

43.60
10_Schnitt-AA
Büro 2
1_25 WC
1_24 Vorraum
1_19 Verkehrsfläche
1_11 Großraumbüro 1
1_20 Verkehrsfläche
1_21 Verkehrsfläche
1_14 Gemeinschaft
1_17 Verkehrsfläche
1_16 Verkehrsfläche
1_22 Vorraum
1_23 WC
1_04 Büro 1
1_05 Büro 1
1_07 Großraumbüro 1

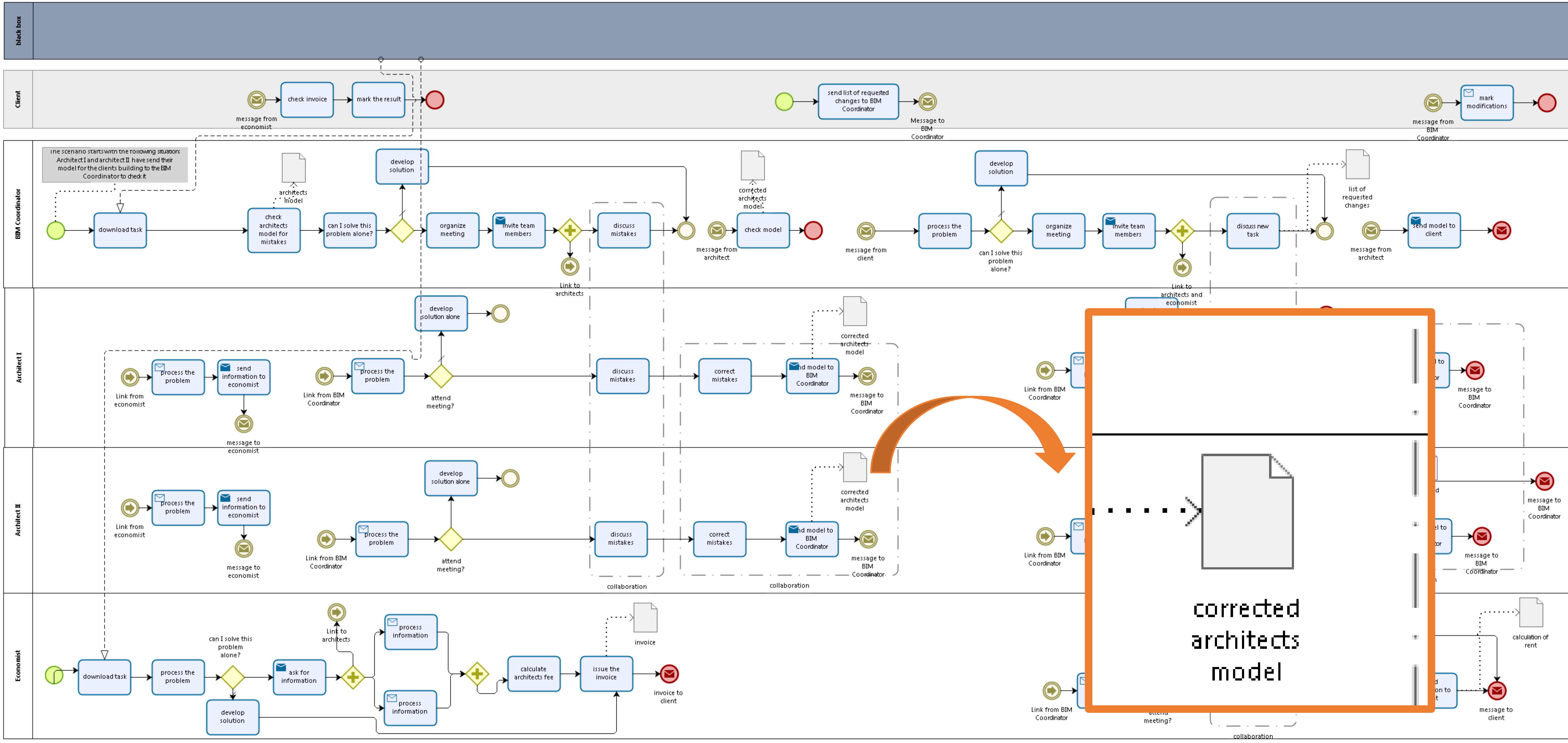

black box
Client
message from economist
check invoice
mark the result
send list of requested changes to BIM Coordinator
Message to BIM Coordinator
message from BIM Coordinator
mark modifications
BIM Coordinator
The scenario starts with the following situation: Architect I and architect II have send their model for the clients building to the BIM Coordinator to check it
download task
architects model
check architects model for mistakes
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to architects
discuss mistakes
message from architect
corrected architects model
check model
message from client
process the problem
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to architects and economist
discuss new task
list of requested changes
message from architect
send model to client
Architect I
develop solution alone
Link from economist
process the problem
send information to economist
message to economist
Link from BIM Coordinator
process the problem
attend meeting?
discuss mistakes
correct mistakes
send model to BIM Coordinator
corrected architects model
message to BIM Coordinator
Link from BIM Coordinator
process problem
develop solution alone
attend meeting?
message to BIM Coordinator
discuss new task
list of requested changes
implement requested modifications
send model to BIM Coordinator
modified model
message to BIM Coordinator
Architect II
develop solution alone
Link from economist
process the problem
send information to economist
message to economist
Link from BIM Coordinator
process the problem
attend meeting?
discuss mistakes
correct mistakes
send model to BIM Coordinator
corrected architects model
message to BIM Coordinator
collaboration
collaboration
Link from BIM Coordinator
process problem
develop solution alone
attend meeting?
list of requested changes
discuss new task
implement requested modifications
send model to BIM Coordinator
modified model
message to BIM Coordinator
message to BIM Coordinator
collaboration
Economist
download task
process the problem
can I solve this problem alone?
develop solution
ask for information
Link to architects
process information
process information
calculate architects fee
issue the invoice
invoice
invoice to client
Link from BIM Coordinator
process problem
develop solution alone
attend meeting?
list of requested changes
discuss new task
calculate rent
send calculation to client
calculation of rent
message to client
collaboration


black box
Client
message from economist
check invoice
mark the result
send list of requested changes to BIM Coordinator
Message to BIM Coordinator
message from BIM Coordinator
mark modifications
BIM Coordinator
The scenario starts with the following situation: Architect I and architect II have send their model for the clients building to the BIM Coordinator to check it
download task
architects model
check architects model for mistakes
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to
discuss mistakes
message from architect
corrected architects model
check model
message from client
process the problem
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to architects and economist
discuss new task
list of requested changes
message from architect
send model to client
Architect I
Link from economist
process the problem
information to economist
message to economist
Link from BIM Coordinator
problem
attend meeting?
mistakes
mistakes
BIM Coordinator
message to BIM Coordinator
develop solution alone
message to BIM Coordinator
Link from BIM Coordinator
process problem
attend meeting?
discuss new task
list of requested changes
implement requested modifications
nd model to BIM Coordinator
modified model
message to BIM Coordinator
Architect II
Link from economist
process the problem
send information to economist
message to economist
develop solution alone
Link from BIM Coordinator
process the problem
attend meeting?
discuss mistakes
correct mistakes
corrected architects model
nd model to BIM Coordinator
message to BIM Coordinator
collaboration
collaboration
develop solution alone
list of requested changes
modified model
message to BIM Coordinator
Link from BIM Coordinator
process problem
attend meeting?
discuss new task
implement requested modifications
nd model to BIM Coordinator
message to BIM Coordinator
collaboration
Economist
download task
process the problem
can I solve this problem alone?
develop solution
ask for information
Link to architects
process information
process information
calculate architects fee
issue the invoice
invoice
invoice to client
develop solution alone
list of requested changes
Link from BIM Coordinator
process problem
attend meeting?
discuss new task
calculate rent
send calculation to client
calculation of rent
message to client
collaboration

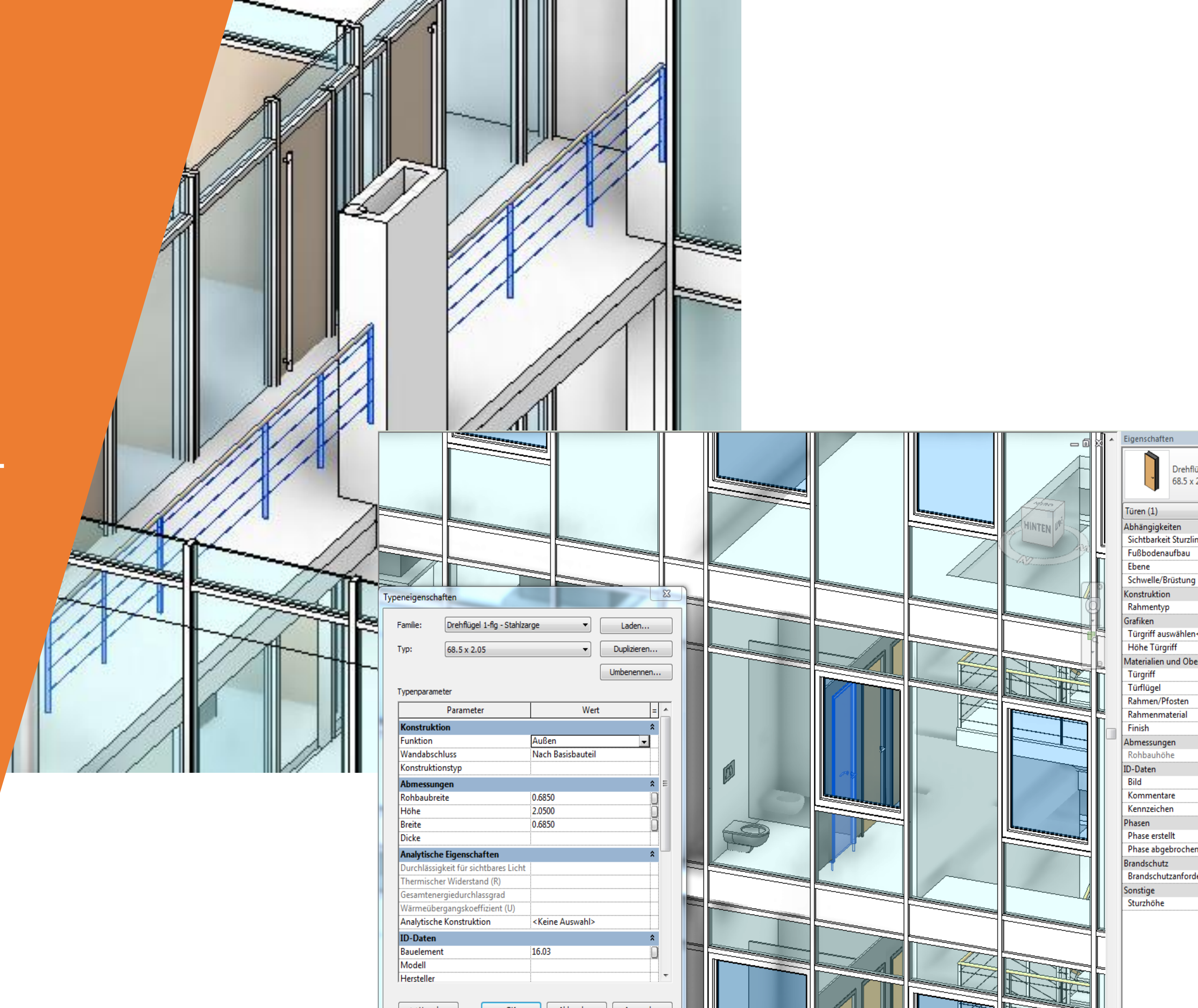
Economist	Architect II	Architect I	BIM Coordinator


black box
Client
message from economist
check invoice
mark the result
send list of requested changes to BIM Coordinator
Message to BIM Coordinator
message from BIM Coordinator
mark modifications
BIM Coordinator
The scenario starts with the following situation: Architect I and architect II have send their model for the clients building to the BIM Coordinator to check it
download task
architects model
check architects model for mistakes
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to architects
discuss mistakes
corrected architects model
check model
process the problem
develop solution
organize meeting
invite team members
Link to architects and economist
discuss new task
list of requested changes
message from architect
send model to client
organize meeting
invite team members
Link to architects
Architect I
develop solution alone
Link from economist
process the problem
send information to economist
message to economist
Link from BIM Coordinator
process the problem
attend meeting?
develop solution alone
message to BIM Coordinator
attend meeting?
discuss new task
list of requested changes
implement requested modifications
send model to BIM Coordinator
modified model
message to BIM Coordinator
Architect II
develop solution alone
Link from economist
process the problem
send information to economist
message to economist
Link from BIM Coordinator
process the problem
attend meeting?
discuss mistakes
correct mistakes
send model to BIM Coordinator
message to BIM Coordinator
collaboration
collaboration
develop solution alone
list of requested changes
modified model
message to BIM Coordinator
Link from BIM Coordinator
process the problem
attend meeting?
discuss new task
implement requested modifications
send model to BIM Coordinator
message to BIM Coordinator
collaboration
Economist
download task
process the problem
can I solve this problem alone?
develop solution
ask for information
Link to architects
process information
process information
calculate architects fee
issue the invoice
invoice
invoice to client
develop solution alone
list of requested changes
Link from BIM Coordinator
process problem
attend meeting?
discuss new task
calculate rent
send calculation to client
calculation of rent
message to client
collaboration


black box
Client
BIM Coordinator
Architect I
Architect II
Economist
message from economist
check invoice
mark the result
send list of requested changes to BIM Coordinator
message from BIM Coordinator
mark modifications
The scenario starts with the following situation: Architect I and architect II have send their model for the clients building to the BIM Coordinator to check it
download task
architects model
check architects model for mistakes
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to architects
discuss mistakes
corrected architects model
message from architect
check model
list of requested changes
Link to architects and economist
discuss new task
send model to client
develop solution alone
Link from economist
process the problem
send information to economist
message to economist
Link from BIM Coordinator
attend meeting?
correct mistakes
send model to BIM Coordinator
collaboration
implement requested modifications
modified model
message to BIM Coordinator
can I solve this problem alone?
ask for information
Link to architects
process information
calculate architects fee
issue the invoice
invoice
invoice to client
calculate rent
send calculation to client
calculation of rent
message to client
discuss mistakes
discuss mistakes
discuss mistakes
collaboration


black box
Client
message from economist
check invoice
mark the result
send list of requested changes to BIM Coordinator
Message to BIM Coordinator
message from BIM Coordinator
mark modifications
BIM Coordinator
The scenario starts with the following situation: Architect I and architect II have send their model for the clients building to the BIM Coordinator to check it
download task
architects model
check architects model for mistakes
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to architects
discuss mistakes
message from architect
corrected architects model
check model
message from client
process the problem
can I solve this problem alone?
develop solution
organize meeting
invite team members
Link to architects and economist
discuss new task
list of requested changes
message from architect
send model to client
Architect I
develop solution alone
Link from economist
process the problem
send information to economist
message to economist
Link from BIM Coordinator
process the problem
attend meeting?
discuss mistakes
correct mistakes
send model to BIM Coordinator
corrected architects model
message to BIM Coordinator
Link from BIM Coordinator
message to BIM Coordinator
Architect II
develop solution alone
Link from economist
process the problem
send information to economist
message to economist
Link from BIM Coordinator
process the problem
attend meeting?
discuss mistakes
correct mistakes
send model to BIM Coordinator
corrected architects model
message to BIM Coordinator
collaboration
collaboration
Link from BIM Coordinator
message to BIM Coordinator
message to BIM Coordinator
Economist
download task
process the problem
can I solve this problem alone?
develop solution
ask for information
Link to architects
process information
process information
calculate architects fee
issue the invoice
invoice
invoice to client
Link from BIM Coordinator
attend meeting?
collaboration
calculation of rent
message to client
corrected architects model

EINGEBAUTE FEHLER IM MODELL



Typeneigenschaften

Familie: Drehflügel 1-flg - Stahlzarge

Typ: 68.5 x 2.05

Typenparameter

Parameter	Wert
Konstruktion	
Funktion	Außen
Wandabschluss	Nach Basisbauteil
Konstruktionstyp	
Abmessungen	
Rohbaubreite	0.6850
Höhe	2.0500
Breite	0.6850
Dicke	
Analytische Eigenschaften	
Durchlässigkeit für sichtbares Licht	
Thermischer Widerstand (R)	
Gesamtenergiedurchlassgrad	
Wärmeübergangskoeffizient (U)	
Analytische Konstruktion	<Keine Auswahl>
ID-Daten	
Bauelement	16.03
Modell	
Hersteller	

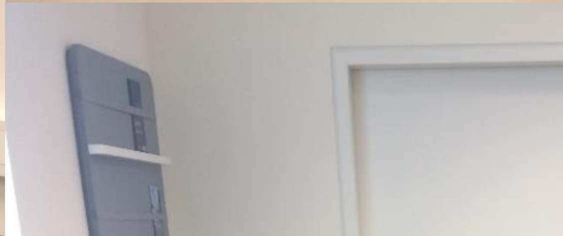
Laden...
Duplizieren...
Umbenennen...
HINTEN
Eigenschaften
Drehflü
68.5 x 2
Türen (1)
Abhängigkeiten
Sichtbarkeit Sturzlin
Fußbodenaufbau
Ebene
Schwelle/Brüstung
Konstruktion
Rahmentyp
Grafiken
Türgriff auswählen
Höhe Türgriff
Materialien und Obe
Türgriff
Türflügel
Rahmen/Pfosten
Rahmenmaterial
Finish
Abmessungen
Rohbauhöhe
ID-Daten
Bild
Kommentare
Kennzeichen
Phasen
Phase erstellt
Phase abgebrochen
Brandschutz
Brandschutzanforde
Sonstige
Sturzhöhe

UMSETZUNGS-BEISPIEL

UMSETZUNGS-
BEISPIEL

iiyama
TAR•X
Autodesk
Autodesk® Revit® Architecture 2011
Getting Started – Video Tutorials

UMSETZUNGS-BEISPIEL



BIM GAME
// Warum sollte ich es anwenden?

Aktiv statt passiv

Perspektivwechsel

Üben in sicherer Umgebung

Spielerisches Lernen

https://shop.lego.com/de-DE/LEGO-Minifiguren-The-LEGO-Movie-Serie-71004

Kollaborativ

SPASS AM LERNEN

VERBESSERUNG ONLINEPLATTFORM

TESTUMSETZUNGEN

ABSCHLUSS-KONGRESS

VIELEN DANK FÜR DIE AUFMERKSAMKEIT!