# Escaper

Diagram Specification

Documentation

Date: junio 04, 2018

No Magic

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#### **Diagram Specification**

#### **Escaper**

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# ¡Error! Utilice la pestaña Inicio para aplicar Revision al texto que desea que aparezca aquí.

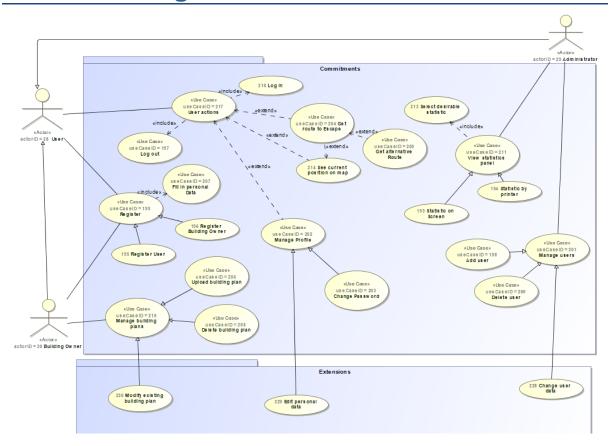
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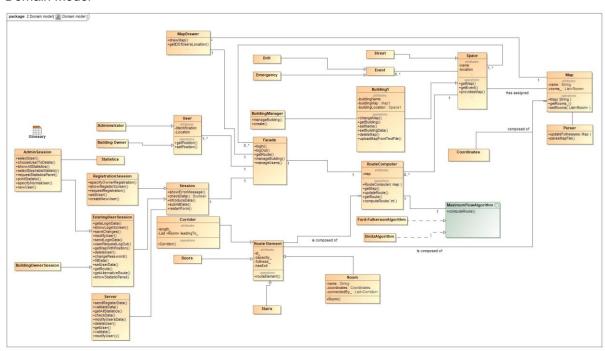
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# **Use Case Diagram**

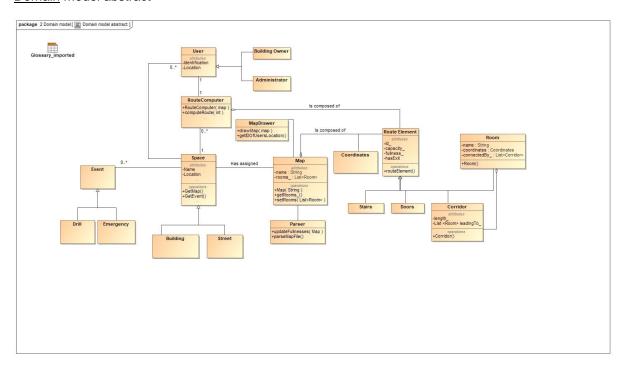


# **Class Diagrams**

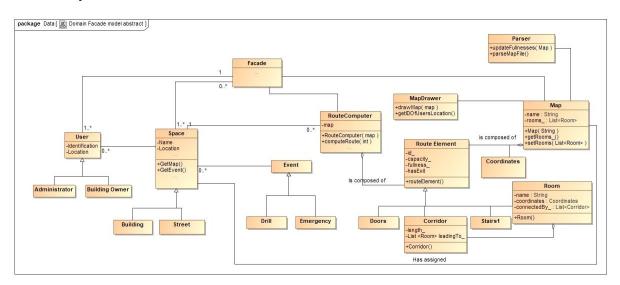
#### Domain Model



#### **Domain** model abstract



#### Domain Façade model abstract



# **Sequence Diagrams**

# Login

### **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
	<u>o</u>	Client	Server	

### **Messages**

Message Sort	synchCall
Parameters	
Sender	Client
Receiver	□ Server
Constraint	

### Lifeline

: User

Client

Server

# **Statistics On Screen**

### **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	RequestStatisticsPane I()		= : Facade	
2	showStatisticPanel()	= : Facade	= : Facade	
3	⇒ showAllStatistics()	₹ Administrator : Actor	= : Facade	
4	GetAllStatistics()	= : Facade	Server : Server	
5	All Statistics	Server : Server	= : Facade	
6	All Statistics	= : Facade	Representation : Actor	
7	selectDesirablestatisti c()	Administrator :	: Facade	
8	selectDesirablestatisti c()	= : Facade	= : Facade	
9	Desired Statistic	= : Facade	Region Administrator : Actor	

### Messages

#### **All Statistics**

Message Sort	reply
Parameters	
Sender	Server : Server
Receiver	= : Facade
Constraint	

#### **All Statistics**

Message Sort	reply
Parameters	
Sender	= : Facade

Receiver	nd Administrator : Actor
Constraint	

#### **Desired Statistic**

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	Administrator : Actor
Constraint	

### **GetAllStatistics()**

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	Server : Server
Constraint	

### RequestStatisticsPanel()

Message Sort	synchCall	
Parameters		
Sender	₹ Administrator : Actor	
Receiver	= : Facade	
Constraint		

### selectDesirablestatistic()

Message Sort	synchCall		
Parameters			
Sender	Administrator : Actor		
Receiver	= : Facade		
Constraint			

### selectDesirablestatistic()

Message Sort	synchCall
Parameters	

Sender	= : Facade
Receiver	= : Facade
Constraint	

### showAllStatistics()

Message Sort	synchCall	
Parameters		
Sender	₹ Administrator : Actor	
Receiver	= : Facade	
Constraint		

### showStatisticPanel()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### Lifeline

**Administrator: Actor** 

**Server: Server** 

# **Register Building Owner**

# **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	specifyOwnerRegistrat ion()	😤 : Building Owner	☐ : Facade	
2	showRegisterScreen()	: Facade	: Facade	
3	introduceData()	😤 : Building Owner	= : Facade	

4		😤 : Building Owner	= : Facade	
5	⇔ checkData()	= : Facade	= : Facade	
6	⇒ sendRegisterData()	= : Facade	: Server	
7	Create new user	: Server	: Building Owner	
8	⇒ setUserData()	: Server	Building Owner	
9	showErrorMessage()	= : Facade	= : Facade	
10	restartForm()	= : Facade	= : Facade	

# Messages

### checkData()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

#### Create new user

Message Sort	createMessage
Parameters	
Sender	■ : Server
Receiver	: Building Owner
Constraint	

### introduceData()

Message Sort	synchCall
Parameters	
Sender	😤 : Building Owner
Receiver	= : Facade
Constraint	

### restartForm()

Message Sort	synchCall
Parameters	

Sender	= : Facade
Receiver	= : Facade
Constraint	

### sendRegisterData()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: Server
Constraint	

### setUserData()

Message Sort	synchCall
Parameters	
Sender	■ : Server
Receiver	: Building Owner
Constraint	

### showErrorMessage()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### showRegisterScreen()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### specifyOwnerRegistration()

Message Sort synchCall	
------------------------	--

Parameters	
Sender	発 : Building Owner
Receiver	☐ : Facade
Constraint	

### submitData()

Message Sort	synchCall
Parameters	
Sender	😤 : Building Owner
Receiver	= : Facade
Constraint	

### Lifeline

: Facade

: Building Owner

: Server

: Building Owner

# **Change User**

# **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	⇒ selectUser()	nation : Administrator	= : Facade	
2	GetUser()	= : Facade	: User	
3	** UserSelected	: User	: Facade	
4	modifyUser()	name : Administrator	: Facade	
5	⇒ saveChanges()	😤 : Administrator	= : Facade	
6	FillData()	: Facade	: User	
7	→ DataFilled	: User	: Facade	

8	** userModified	= : Facade	🕺 : Administrator	
---	-----------------	------------	-------------------	--

### Messages

#### **DataFilled**

Message Sort	reply
Parameters	
Sender	: User
Receiver	= : Facade
Constraint	

### FillData()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	User : User
Constraint	

### GetUser()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: User
Constraint	

### modifyUser()

Message Sort	synchCall
Parameters	
Sender	😤 : Administrator
Receiver	= : Facade
Constraint	

### saveChanges()

Message Sort	synchCall
Parameters	

Sender	光 : Administrator
Receiver	= : Facade
Constraint	

### selectUser()

Message Sort	synchCall
Parameters	
Sender	子:Administrator
Receiver	= : Facade
Constraint	

#### userModified

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	😤 : Administrator
Constraint	

#### **UserSelected**

Message Sort	reply
Parameters	
Sender	: User
Receiver	= : Facade
Constraint	

### Lifeline

: Administrator

: User

# **Manage Building Plans**

# **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	manageBuilding()	: BuildingOwner	= : Facade	
2	manageBuilding()	= : Facade	BuildingManager	
3	getBuilding()	: BuildingManager	: Building1	
4	→ Building	: Building1	: Facade	
5	Building	= : Facade	: BuildingOwner	
6	⇒ setName()	: BuildingOwner	: Facade	
7	⇒ setName()	= : Facade	Building1	
8	→ changeMap	: BuildingOwner	= : Facade	
9	changeMap()	: Facade	: Building1	
10	→ Map changed	Building1	= : Facade	
11	→ Map changed	= : Facade	: BuildingOwner	

### Messages

### **Building**

Message Sort	asynchSignal
Parameters	
Sender	☐ : Building1
Receiver	= : Facade
Constraint	

### **Building**

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: BuildingOwner
Constraint	

### changeMap

Message Sort	synchCall

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Parameters	
Sender	☐ : BuildingOwner
Receiver	= : Facade
Constraint	

### changeMap()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	■ : Building1
Constraint	

### getBuilding()

Message Sort	synchCall
Parameters	
Sender	☐ : BuildingManager
Receiver	☐ : Building1
Constraint	

### manageBuilding()

Message Sort	synchCall
Parameters	
Sender	☐ : BuildingOwner
Receiver	= : Facade
Constraint	

### manageBuilding()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	☐ : BuildingManager
Constraint	

### Map changed

Message Sort	reply
Parameters	
Sender	■ : Building1
Receiver	= : Facade
Constraint	

### Map changed

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	BuildingOwner
Constraint	

### setName()

Message Sort	synchCall
Parameters	
Sender	☐ : BuildingOwner
Receiver	= : Facade
Constraint	

### setName()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	☐ : Building1
Constraint	

### Lifeline

: BuildingManager

: BuildingOwner

: Building1

: Facade

# **Register User**

# Register

# **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	requestRegistration()	关: User	: Facade	
2	showRegisterScreen()	= : Facade	= : Facade	
3	introduceData()	😤 : User	= : Facade	
4	⇒ submitData()	光: User	: Facade	
5	⇔ checkData()	= : Facade	= : Facade	
6	⇒ sendRegisterData()	= : Facade	: Server	
7	Create new user	: Server	: User	
8	⇒ setUserData()	: Server	: User	
9	showErrorMessage()	= : Facade	= : Facade	
10	restartForm()	= : Facade	= : Facade	

### **Messages**

### checkData()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

#### Create new user

Message Sort	createMessage
--------------	---------------

Parameters	
Sender	☐ : Server
Receiver	□ : User
Constraint	

### introduceData()

Message Sort	synchCall
Parameters	
Sender	😤 : User
Receiver	= : Facade
Constraint	

### requestRegistration()

Message Sort	synchCall
Parameters	
Sender	关: User
Receiver	= : Facade
Constraint	

### restartForm()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	☐ : Facade
Constraint	

### sendRegisterData()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: Server
Constraint	

### setUserData()

Message Sort	synchCall
Parameters	
Sender	: Server
Receiver	: User
Constraint	

### showErrorMessage()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### showRegisterScreen()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### submitData()

Message Sort	synchCall
Parameters	
Sender	光: User
Receiver	☐ : Facade
Constraint	

### Lifeline

: User

: Facade

: Server

: User

# **Delete User**

### **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	⇒ selectUser()	😤 : Administrator	= : Facade	
2	→ GetUser()	= : Facade	: User	
3	** UserSelected	: User	= : Facade	
4	chooseUserToDelete()	nation : Administrator	= : Facade	
5	DeleteUser()	= : Facade	: User	
6	** userDeleted	: User	= : Facade	
7	** userDeleted	= : Facade	😤 : Administrator	

### Messages

### chooseUserToDelete()

Message Sort	synchCall
Parameters	
Sender	关:Administrator
Receiver	= : Facade
Constraint	

### DeleteUser()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: User
Constraint	

### GetUser()

Message Sort	synchCall

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Parameters	
Sender	= : Facade
Receiver	: User
Constraint	

### selectUser()

Message Sort	synchCall
Parameters	
Sender	😤 : Administrator
Receiver	= : Facade
Constraint	

#### userDeleted

Message Sort	reply
Parameters	
Sender	: User
Receiver	☐ : Facade
Constraint	

#### userDeleted

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	😤 : Administrator
Constraint	

#### **UserSelected**

Message Sort	reply
Parameters	
Sender	: User
Receiver	= : Facade
Constraint	

### Lifeline

: Administrator

: User

# Login

# **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	○ logIn()	光: User	= : Facade	
2	⇒ showLoginScreen()	= : Facade	= : Facade	
3	⇒ sendLoginData()	光: User	= : Facade	
4	→ validateData()	= : Facade	: Server	
5	⇔ checkData()	: Server	: Server	
6	→ validate()	: Server	= : Facade	
7	→ dataCorrect	: Facade	😤 : User	
8	→ dataNotCorrect	: Server	= : Facade	
9	⇒ showErrorMessage	= : Facade	= : Facade	
10	→ restartForm	= : Facade	= : Facade	

# Messages

### checkData()

Message Sort	synchCall
Parameters	
Sender	: Server
Receiver	: Server
Constraint	

### dataCorrect

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	🕇 : User
Constraint	

#### dataNotCorrect

Message Sort	reply
Parameters	
Sender	☐ : Server
Receiver	= : Facade
Constraint	

### logIn()

Message Sort	synchCall
Parameters	
Sender	🔾 : User
Receiver	= : Facade
Constraint	

#### restartForm

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### sendLoginData()

Message Sort	synchCall
Parameters	
Sender	₹ : User
Receiver	= : Facade
Constraint	

### showErrorMessage

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: Facade
Constraint	

### showLoginScreen()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### validate()

Message Sort	asynchSignal
Parameters	
Sender	■ : Server
Receiver	= : Facade
Constraint	

### validateData()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: Server
Constraint	

### Lifeline

: User

: Facade

: Server

# **Upload Building Plan**

# **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	manageBuilding()	🔾 : Building Owner	= : Facade	
2	create()	= : Facade	BuildingManager	
3		: BuildingManager	Building1	
4	→ Building	Building1	= : Facade	
5	Building	= : Facade	😤 : Building Owner	
6	uploadMapFromTestFi le()	😤 : Building Owner	☐ : Facade	
7	uploadMapFromTestFi le()	= : Facade	Building1	
8	→ mapUploaded	Building1	= : Facade	
9	→ mapUploaded	= : Facade	😤 : Building Owner	

### Messages

### **Building**

Message Sort	synchCall
Parameters	
Sender	I Building1
Receiver	= : Facade
Constraint	

### **Building**

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	😤 : Building Owner
Constraint	

### create()

Message Sort	synchCall
Parameters	

Sender	☐ : Facade
Receiver	□ : BuildingManager
Constraint	

### getBuilding()

Message Sort	synchCall
Parameters	
Sender	□ : BuildingManager
Receiver	■ : Building1
Constraint	

### manageBuilding()

Message Sort	synchCall
Parameters	
Sender	子:Building Owner
Receiver	= : Facade
Constraint	

### mapUploaded

Message Sort	reply
Parameters	
Sender	☐ : Building1
Receiver	= : Facade
Constraint	

### mapUploaded

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	😤 : Building Owner
Constraint	

### uploadMapFromTestFile()

Manager Oant	I O - II
Message Sort	synchCall
	-,

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Parameters	
Sender	光:Building Owner
Receiver	☐ : Facade
Constraint	

### uploadMapFromTestFile()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	■ : Building1
Constraint	

### Lifeline

: BuildingManager

: Building Owner

: Building1

: Facade

# **Delete Building Plan**

# **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	manageBuilding()	: BuildingOwner	= : Facade	
2	manageBuilding()	= : Facade	BuildingManager	
3		BuildingManager	Building1	
4	→ Building	Building1	= : Facade	
5	→ Building	= : Facade	BuildingOwner	
6	deleteMap()	BuildingOwner	= : Facade	
7	deleteMap()	= : Facade	Building1	
8	Map Deleted	Building1	= : Facade	
9	Map Deleted	= : Facade	: BuildingOwner	

### **Messages**

### **Building**

Message Sort	asynchSignal
Parameters	
Sender	☐ : Building1
Receiver	☐ : Facade
Constraint	

### **Building**

Message Sort	asynchSignal
Parameters	
Sender	= : Facade
Receiver	☐ : BuildingOwner
Constraint	

### deleteMap()

Message Sort	synchCall
Parameters	
Sender	☐ : BuildingOwner
Receiver	= : Facade

int
-----

### deleteMap()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	□ : Building1
Constraint	

### getBuilding()

Message Sort	synchCall
Parameters	
Sender	☐ : BuildingManager
Receiver	□ : Building1
Constraint	

### manageBuilding()

Message Sort	synchCall
Parameters	
Sender	☐ : BuildingOwner
Receiver	= : Facade
Constraint	

### manageBuilding()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	BuildingManager
Constraint	

### **Map Deleted**

Message Sort	reply
Parameters	
Sender	I Building1

Receiver	= : Facade
Constraint	

#### **Map Deleted**

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	☐ : BuildingOwner
Constraint	

## Lifeline

: BuildingOwner

: BuildingManager

: Building1

: Facade

## **Message Summary**

No	o. Message Name	Sender	Receiver	Constraints
	<u> </u>	■ StartFinishSession	GetRouteToEscape	

## **Messages**

Message Sort	synchCall
Parameters	
Sender	□ StartFinishSession
Receiver	☐ GetRouteToEscape
Constraint	

## Lifeline

**GetAlternativeRoute** 

**GetRouteToEscape** 

**StartFinishSession** 

# **Statistic By Printer**

## **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	RequestStatisticsPane I()	₹ Administrator : Actor	☐ : Facade	
2	showStatisticPanel()	= : Facade	= : Facade	
3	ShowAllStatistics()		= : Facade	
4	getAllStatistics()	= : Facade	: Server	
5	All Statistics	: Server	: Facade	
6	All Statistics	= : Facade	₹ Administrator : Actor	
7	SelectDesirableStatisti	Administrator :	= : Facade	
8	SelectDesirableStatisti	= : Facade	= : Facade	
9	> Desired Statistic	= : Facade	Region Administrator : Actor	
10	→ PrintStatistic()		= : Facade	

### Messages

#### **All Statistics**

Message Sort	reply
Parameters	
Sender	☐ : Server
Receiver	= : Facade

Constraint
------------

#### **All Statistics**

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	Administrator : Actor
Constraint	

#### **Desired Statistic**

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	Administrator : Actor
Constraint	

### getAllStatistics()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: Server
Constraint	

### PrintStatistic()

Message Sort	asynchSignal
Parameters	
Sender	Administrator : Actor
Receiver	= : Facade
Constraint	

### RequestStatisticsPanel()

Message Sort	synchCall
Parameters	
Sender	ndministrator : Actor

¡Error! Utilice la pestaña Inicio para aplicar Revision al texto que desea que aparezca aquí.

Date: junio 04, 2018

Receiver	= : Facade
Constraint	

### SelectDesirableStatistic()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### SelectDesirableStatistic()

Message Sort	synchCall
Parameters	
Sender	₹ Administrator : Actor
Receiver	= : Facade
Constraint	

### **ShowAllStatistics()**

Message Sort	synchCall		
Parameters			
Sender	₹ Administrator : Actor		
Receiver	= : Facade		
Constraint			

### showStatisticPanel()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

## Lifeline

#### : Facade

#### : Server

# See current position on map

## **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	getMapWithPosition()	옷 : User	application : Facade	
2	getMapWithPosition()	application : Facade	= : MapDrawer	
3	getRooms_()	: MapDrawer	🗎 : Мар	
4	→ provideMap	🗎 : Мар	: MapDrawer	
5	getPosition()	: MapDrawer	application : Facade	
6		application : Facade	🕇 : User	
7	> providePosition	ች : User	application : Facade	
8	> providePosition	application : Facade	: MapDrawer	
9	> provideMapWithPosito n	: MapDrawer	予: User	

## **Messages**

### getMapWithPosition()

Message Sort	synchCall
Parameters	
Sender	戈:User
Receiver	application : Facade
Constraint	

#### getMapWithPosition()

Message Sort	synchCall
Parameters	
Sender	application : Facade

Receiver	: MapDrawer
Constraint	

### getPosition()

Message Sort	synchCall
Parameters	
Sender	■ : MapDrawer
Receiver	application : Facade
Constraint	

### getPosition()

Message Sort	synchCall
Parameters	
Sender	application : Facade
Receiver	🔾 : User
Constraint	

### getRooms\_()

Message Sort	synchCall
Parameters	
Sender	☐ : MapDrawer
Receiver	■ : Map
Constraint	

### provideMap

Message Sort	reply
Parameters	
Sender	
Receiver	: MapDrawer
Constraint	

### provideMapWithPositon

Message Sort	reply
Parameters	

Sender	☐ : MapDrawer
Receiver	🔾 : User
Constraint	

### providePosition

Message Sort	reply
Parameters	
Sender	关: User
Receiver	application : Facade
Constraint	

### providePosition

Message Sort	reply
Parameters	
Sender	application : Facade
Receiver	: MapDrawer
Constraint	

## Lifeline

: User

: Server

: MapDrawer

: Map

application: Facade

# **Change Password**

## **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	⇔ changePassword()	₹ : User	= : Facade	
2	modifyUser()	= : Facade	: Server	
3	→ dataChanged	: Server	= : Facade	
4	→ passwordChanged	= : Facade	₹ : User	
5	→ dataNotValidated	: Server	= : Facade	
6	showErrorMessage()	= : Facade	= : Facade	

## Messages

### changePassword()

Message Sort	synchCall
Parameters	
Sender	戈:User
Receiver	= : Facade
Constraint	

### dataChanged

Message Sort	reply
Parameters	
Sender	■ : Server
Receiver	= : Facade
Constraint	

#### dataNotValidated

Message Sort	reply
Parameters	
Sender	: Server
Receiver	= : Facade
Constraint	

### modifyUser()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	: Server
Constraint	

### passwordChanged

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	🕇 : User
Constraint	

### showErrorMessage()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

## Lifeline

: User

: Server

: Facade

## **Statistics On Screen**

## **Add User**

## **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	newUser()	nation : Administrator	= : Facade	
2	→ addUser()	= : Facade	: User	
3	→ FillUserData	: User	= : Facade	
4	→ FillData()	= : Facade	: User	
5	** UserAdded	: User	= : Facade	

## **Messages**

### addUser()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	User : User
Constraint	

### FillData()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	User : User
Constraint	

#### **FillUserData**

Message Sort	reply
Parameters	
Sender	: User
Receiver	: Facade
Constraint	

### newUser()

Message Sort	synchCall
Parameters	
Sender	😤 : Administrator
Receiver	= : Facade
Constraint	

#### **UserAdded**

Message Sort	reply
Parameters	
Sender	: User
Receiver	= : Facade
Constraint	

## Lifeline

: Administrator

: User

: Facade

## **View Statistics Panel**

## **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	RequestStatisticsPane I()	Region Administrator : Actor	☐ : Facade	
2	showStatisticPanel()	= : Facade	= : Facade	
3	→ SelectDesirableStatisti c()	Administrator : Actor	= : Facade	
4	→ GetAllStatistics()	= : Facade	: Server	
5	All Statistics	: Server	: Facade	

6	SelectDesirableStatisti	= : Facade	= : Facade	
7	Desired Statistic	= : Facade		

## Messages

### **All Statistics**

Message Sort	reply
Parameters	
Sender	: Server
Receiver	= : Facade
Constraint	

#### **Desired Statistic**

Message Sort	reply
Parameters	
Sender	= : Facade
Receiver	Administrator : Actor
Constraint	

### **GetAllStatistics()**

Message Sort	asynchSignal
Parameters	
Sender	= : Facade
Receiver	☐ : Server
Constraint	

### RequestStatisticsPanel()

Message Sort	synchCall
Parameters	
Sender	😤 Administrator : Actor
Receiver	= : Facade
Constraint	

#### **SelectDesirableStatistic**

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### SelectDesirableStatistic()

Message Sort	asynchSignal
Parameters	
Sender	₹ Administrator : Actor
Receiver	= : Facade
Constraint	

### showStatisticPanel()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

## Lifeline

: Facade

: Server

# Logout

## **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	→ Logout()	₹ : User	= : Facade	
2	→ userRequestLogOut()	= : Facade	: Server	
3	Chosen User	: Server	= : Facade	
4	→ logOut()	= : Facade	= : Facade	
5	User Logged Out	= : Facade	光: User	

## Messages

### **Chosen User**

Message Sort	reply
Parameters	
Sender	: Server
Receiver	= : Facade
Constraint	

### Logout()

Message Sort	synchCall
Parameters	
Sender	₹ : User
Receiver	= : Facade
Constraint	

### logOut()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	= : Facade
Constraint	

### **User Logged Out**

Message Sort	reply
--------------	-------

Parameters	
Sender	= : Facade
Receiver	₹ : User
Constraint	

### userRequestLogOut()

Message Sort	asynchSignal
Parameters	
Sender	☐ : Facade
Receiver	☐ : Server
Constraint	

## Lifeline

: User

: Facade

: Server

# **Get route to Escape**

## **Message Summary**

No.	Message Name	Sender	Receiver	Constraints
1	getRoute()	<sup>ຼ</sup> : User	= : Facade	
2	getMap()	= : Facade	☐ : Space	
3	getMap()	☐ : Space	🗏 : Мар	
4	servesMap()	🗎 : Мар	☐ : Space	
5	providesMap()	☐ : Space	RouteComputer	
6		RouteComputer	RouteComputer	
7	providesRoute()	RouteComputer	= : Facade	
8	providesRoute()	= : Facade	光: User	
9	getRoute()	🖁 : User	= : Facade	
10	⇒ updateRoute()	= : Facade	RouteComputer	
11		RouteComputer	RouteComputer	
12	providesRoute()	RouteComputer	= : Facade	
13	providesRoute()	: Facade	光: User	

## **Messages**

### createRoute()

Message Sort	synchCall
Parameters	
Sender	: RouteComputer
Receiver	: RouteComputer
Constraint	

### createRoute()

Message Sort	synchCall
Parameters	
Sender	☐ : RouteComputer
Receiver	☐ : RouteComputer
Constraint	

### getMap()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	□ : Space
Constraint	

### getMap()

Message Sort	synchCall
Parameters	
Sender	☐ : Space
Receiver	■ : Map
Constraint	

### getRoute()

Message Sort	synchCall
Parameters	
Sender	₹ : User
Receiver	= : Facade
Constraint	

### getRoute()

Message Sort	synchCall
Parameters	
Sender	光: User
Receiver	= : Facade
Constraint	

### providesMap()

Message Sort	synchCall
Parameters	
Sender	□ : Space
Receiver	RouteComputer :
Constraint	

### providesRoute()

Message Sort	synchCall
Parameters	
Sender	: RouteComputer
Receiver	= : Facade
Constraint	

### providesRoute()

Message Sort	synchCall
Parameters	
Sender	☐ : RouteComputer
Receiver	= : Facade
Constraint	

### providesRoute()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	光: User
Constraint	

## providesRoute()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	₹: User
Constraint	

### servesMap()

Message Sort	synchCall
Parameters	
Sender	■ : Map
Receiver	: Space
Constraint	

### updateRoute()

Message Sort	synchCall
Parameters	
Sender	= : Facade
Receiver	RouteComputer
Constraint	

## Lifeline

: User

: RouteComputer

: Space

: Map

: Facade

# **Appendix A: Diagrams**

## **Get route to Escape**

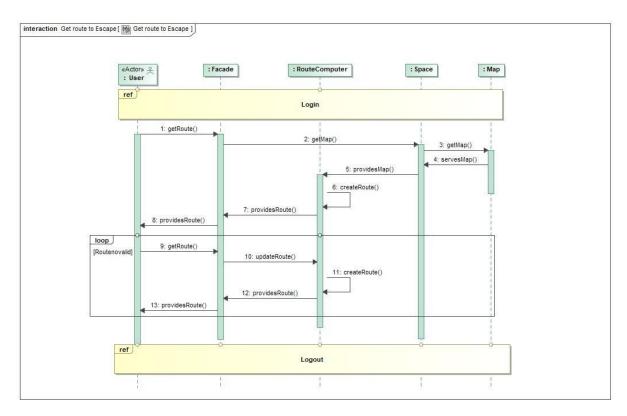


Figure 1. Get route to Escape

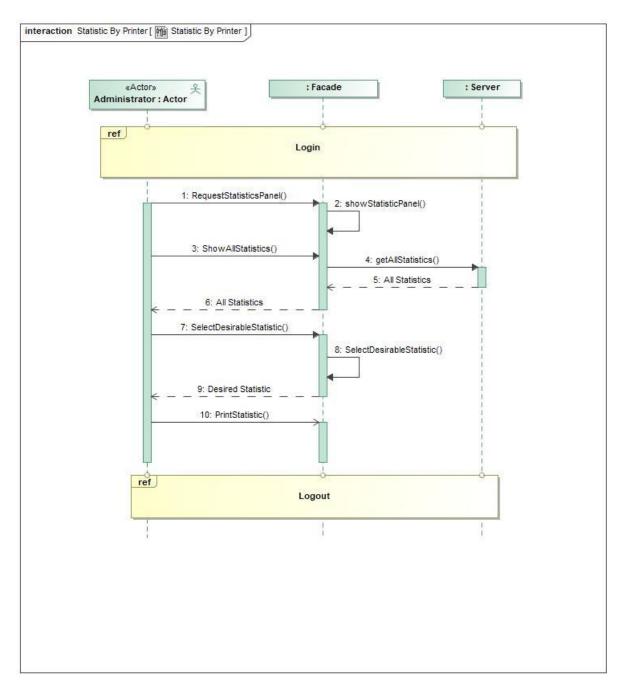


Figure 2. Statistic By Printer

## Logout

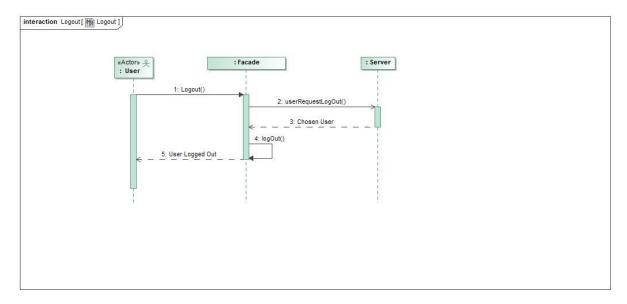


Figure 3. Logout

## **Change Password**

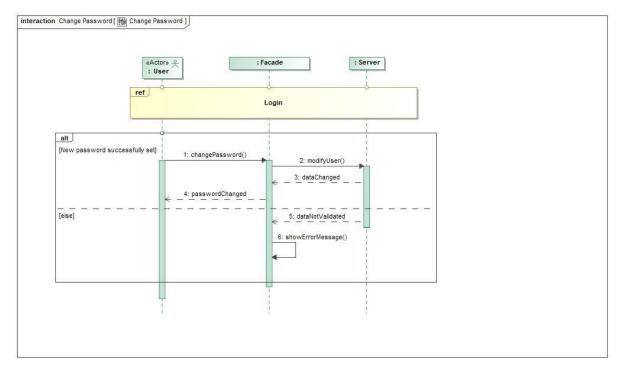


Figure 4. Change Password

### **View Statistics Panel**

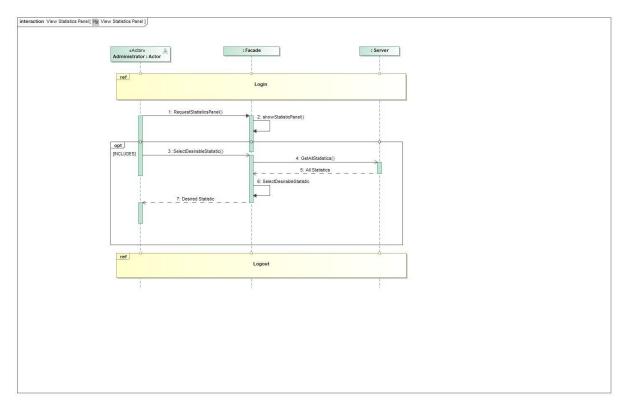


Figure 5. View Statistics Panel

## **Manage Building Plans**

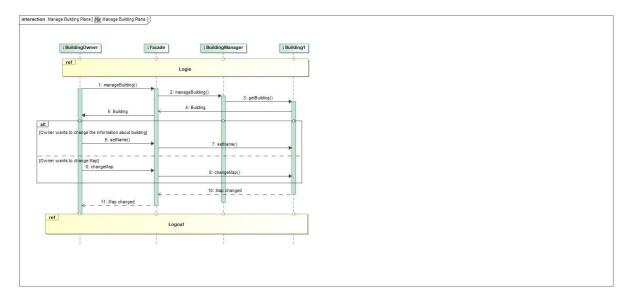


Figure 6. Manage Building Plans

### **Add User**

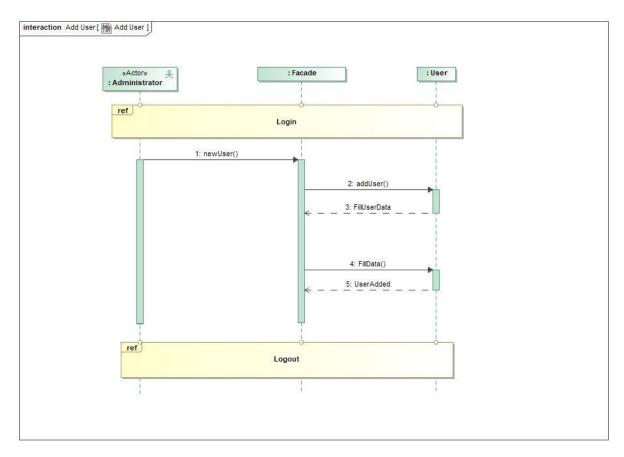


Figure 7. Add User

### **Delete User**

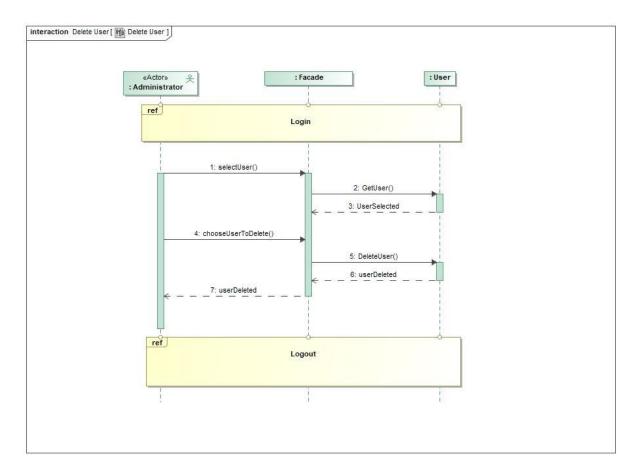


Figure 8. Delete User

## **Upload Building Plan**

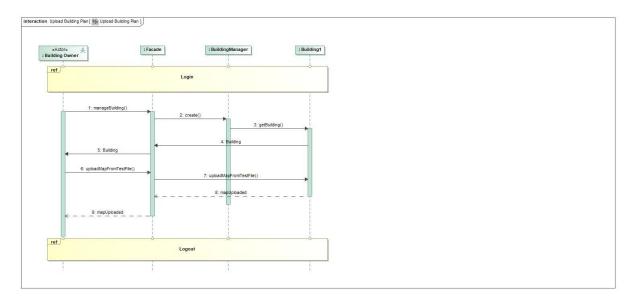


Figure 9. Upload Building Plan

## **Change User**

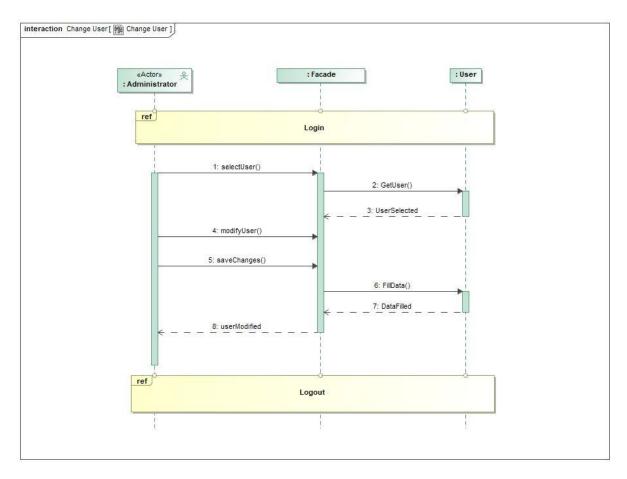


Figure 10. Change User

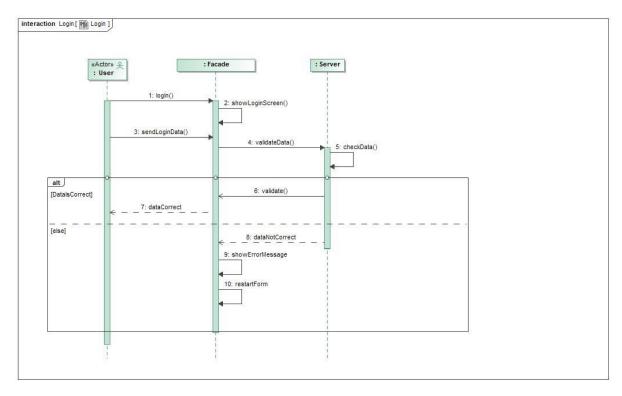


Figure 11. Login

## **Delete Building Plan**

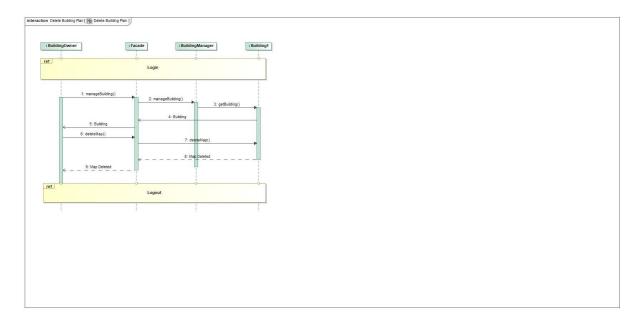


Figure 12. Delete Building Plan

## See current position on map

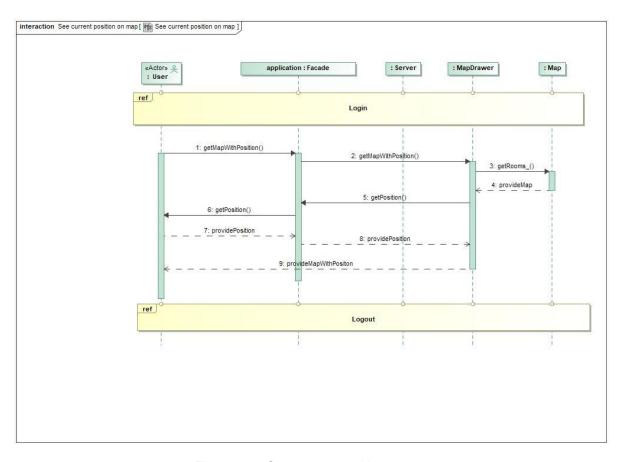


Figure 13. See current position on map

## Register

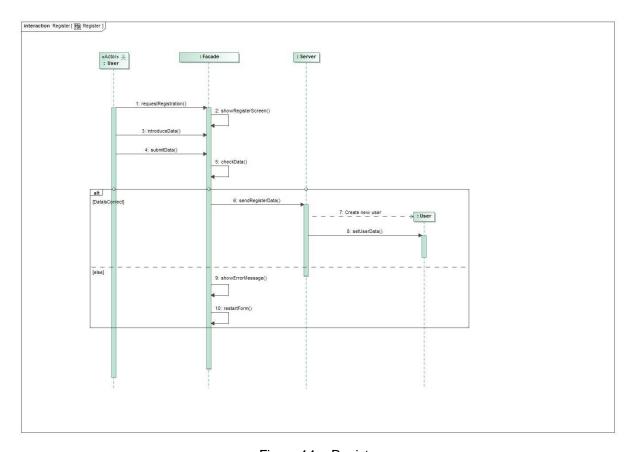


Figure 14. Register

### **Statistics On Screen**

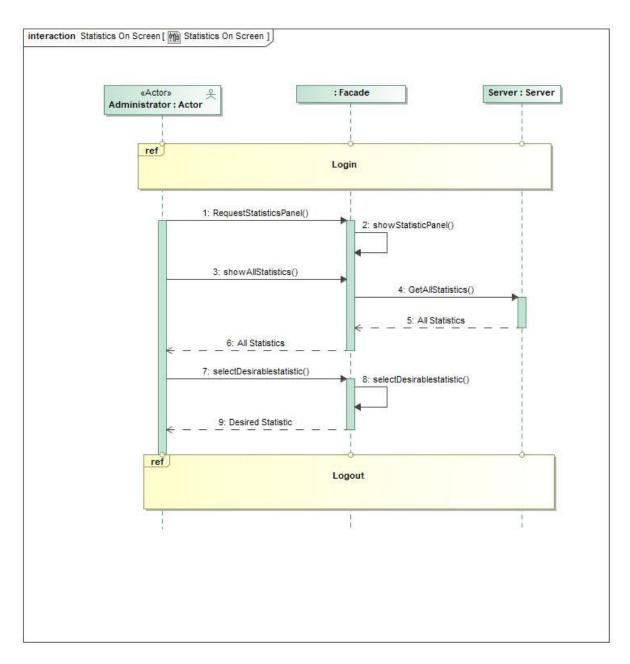


Figure 15. Statistics On Screen

## **Register Building Owner**

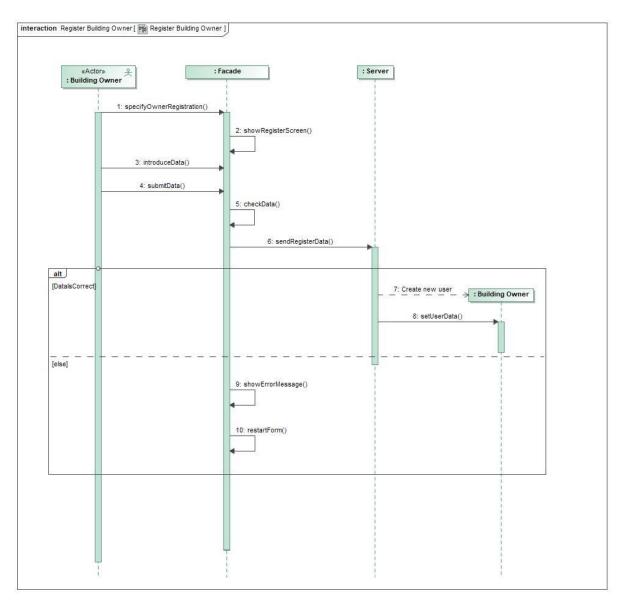


Figure 16. Register Building Owner