PS Software Engineering I
WS 2001/02
21.11.2001

InfoWarrior

Suggestions for Classes

Task 5

Member of team 4

Michael Brachtl (mbrachtl@cosy.sbg.ac.at)

Academic Supervisor: Dr. Schwaiger Roland

Correspondence to:

Universität Salzburg
Institut für Computerwissenschaften und Systemanalyse
Jakob–Haringer–Straße 2
A–5020 Salzburg
Austria

Chapter 1

Classes

1.1 Classes List

- Storage
- UserStorage
- Message Storage
- Primary Message Storage
- Secondary Message Storage
- User
- Customer
- Reporter
- Editor
- Administrator
- External System
- UserInterface
- Customer Interface
- ReporterInterface
- EditorInterface
- AdministratorInterface
- SystemInterface
- MediaObject
- Picture

- Video
- Audio
- Message
- Messageset
- Paylevel
- Category
- ACLSecuredObject
- SecuredObject
- ACL
- Permission
- Roles
- UserCore
- MessageCore
- Request
- Response
- XMLConverter

1.1.1 Storage

Abstract parent class for storing purposes.
Public Operations:
Connect () : Boolean
Close () : Boolean
GetReport () : REPORT
GetSize () : Integer

1.1.2 UserStorage

Class for Users.
Public Operations:
GetUser (id) : USER
AddUser (USER) : boolean
UpdateUser (USER) : boolean
DeleteUser (id) : boolean
GetRole () : ROLE
DeleteRole (ROLE) : boolean

UpdateRole (ROLE) : boolean
AddRole (ROLE) : boolean
AddPaylevel(PAYLEVEL): boolean
UpdatePaylevel (PAYLEVEL) : boolean
DeletePaylevel (id) : boolean

1.1.3 MessageStorage

Abstract class for storing messages.
Public Operations:
GetMessage (id) : MESSAGE
AddMessage (MESSAGE) : boolean
FindMessage (REQUEST) : RESPONSE

1.1.4 PrimaryMessageStorage

Class for storing current messages.
Public Operations:
UpdateMessage (MESSAGE) : boolean
DeleteMessage (id) : boolean AddCategory (CATEGORY) : boolean
UpadteCategory (CATEGORY) : boolean

1.1.5 SecondaryMessageStorage

Class for storing archived messages.

1.1.6 User

Abstract class for storing real person users of the system.
Public Attributes:
Name
Address
EMail
Phone
Mobile
CreditCard
Password
Subscriptions
LastLogin
Birthdate
Company
Operating System
Browser

Homepage
Login

1.1.7 Customer

Class for Customers of the System.
Public Attributes:

1.1.8 Reporter

Class for Roprters.
Public Attributes:
Department
Superior
Public Operations:
getArticles(): MESSAGES
getArticlesPending: MESSAGES

1.1.9 Editor

Class for editors of the system.

1.1.10 Editor

Class for editors of the system.

1.1.11 Administrator

Class for administrators of the system.

1.1.12 External System

Abstract class for external systems.

1.1.13 UserInterface

Abstract class for UserInterfaces.

1.1.14 CustomerInterface

Class for customers of the system.

1.1.15 ReporterInterface

Class for reporters.

1.1.16 EditorInterface

Class for editor.

1.1.17 AdministratorInterface

Class for administrators of the System.

1.1.18 SystemInterface

Class for access to systems by forgein systems.
Public Operations:
retrieveRequest(REQUEST): RESPONSE

1.1.19 Media Object

Abstract class for storing media objects.
Public Attributes:
MIME Type

1.1.20 Picture

Class for Pictures.
Public Attributes:
Heigth
Width
Depth
Date
dpi

1.1.21 Video

Class for Videos.
Public Attributes:
Heigth
Width
Depth
Length
Date

1.1.22 Audio

Class for Audio files.
Public Attributes:
Length
SampleRate

1.1.23 Video

Class for Pictures.
Public Attributes:

1.1.24 Message

Class for messages.
Public Attributes:
Author
Title
Abstract
Text
Date
Editor
Category
PayLevel
LastChanged
Released

1.1.25 MessageSet

Class for messages.
Public Operations:
GetMessages():MESSAGES

1.1.26 Paylevel

Class for paylevels.
Public Attributes:
Name
Cost

1.1.27 Category

Class for categorys.
Public Attributes:
Name
Abstract

1.1.28 ACLSecuredObject

Abstract class for accesscontrolledlist Objects .

1.1.29 Secured Object

Interface for ACLSecuredObject.
Public Operations:
isAllowed (USER, ACTION) : boolean
GetParent()

1.1.30 ACL

Class for AccessControlledLists.
Public Operations:
GetPermission()
GetRoles()
HasPermission()

1.1.31 Permission

Class for permissions.
Public Attributes:
Name

1.1.32 Roles

Class for roles.
Public Attributes:
Name
Public Operations:
GetMembers(): USER
AddMembers(USER): boolean
RemoveMembers(USER): boolean
isMember(USER): boolean

1.1.33 UserCore

Class for user operations.
Public Operations:
executeRequest(REQUEST):RESPONSE

1.1.34 MessageCore

Class for messages.
Public Operations:
executeRequest(REQUEST):RESPONSE

1.1.35 Request

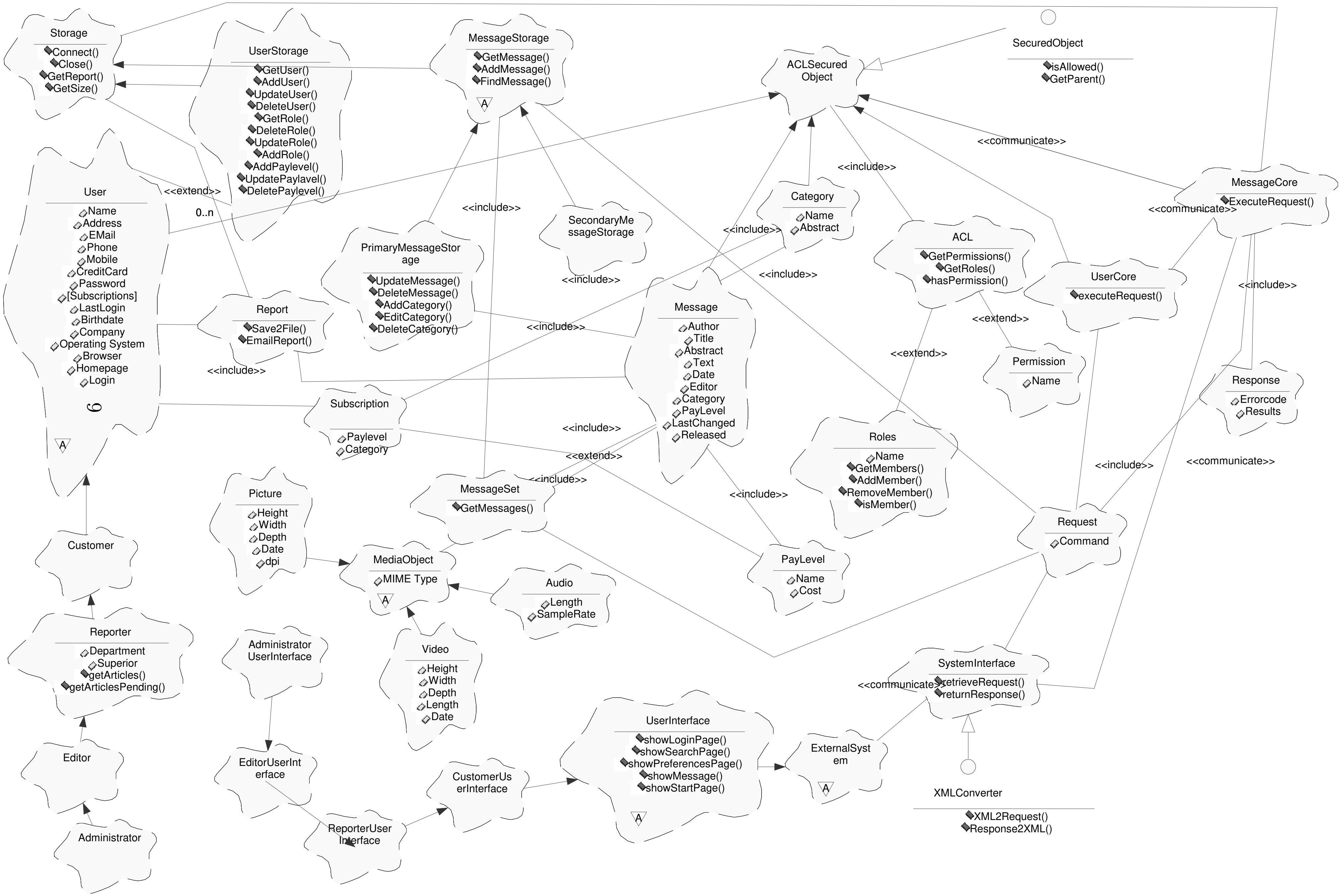
Class for requests.
Public Attributes:
Command

1.1.36 Response

Class for search results.
Public Attributes:
Errorcode
Results

1.1.37 XMLConverter

Interface for converting XML to Strings and vice versa.
Public Operations:
XML2Request() Response2XML()


Storage
Connect()
Close()
GetReport()
GetSize()
UserStorage
GetUser()
AddUser()
UpdateUser()
DeleteUser()
GetRole()
DeleteRole()
UpdateRole()
AddRole()
AddPaylevel()
UpdatePaylavel()
DeletePaylevel()
MessageStorage
GetMessage()
AddMessage()
FindMessage()
A
ACLSecured Object
SecuredObject
isAllowed()
GetParent()
User
Name
Address
EMail
Phone
Mobile
CreditCard
Password
[Subscriptions]
LastLogin
Birthdate
Company
Operating System
Browser
Homepage
Login
A
<<extend>>
0..n
<<include>>
SecondaryMe ssageStorage
PrimaryMessageStor age
UpdateMessage()
DeleteMessage()
AddCategory()
EditCategory()
DeleteCategory()
Category
Name
Abstract
ACL
GetPermissions()
GetRoles()
hasPermission()
MessageCore
ExecuteRequest()
<<communicate>>
UserCore
executeRequest()
Report
Save2File()
EmailReport()
Message
Author
Title
Abstract
Text
Date
Editor
Category
PayLevel
LastChanged
Released
Permission
Name
<<extend>>
Response
Errorcode
Results
Subscription
Paylevel
Category
Roles
Name
GetMembers()
AddMember()
RemoveMember()
isMember()
Picture
Height
Width
Depth
Date
dpi
MessageSet
GetMessages()
Request
Command
Customer
MediaObject
MIME Type
A
Audio
Length
SampleRate
PayLevel
Name
Cost
Reporter
Department
Superior
getArticles()
getArticlesPending()
Administrator UserInterface
Video
Height
Width
Depth
Length
Date
SystemInterface
retrieveRequest()
returnResponse()
Editor
EditorUserInt erface
CustomerUs erInterface
UserInterface
showLoginPage()
showSearchPage()
showPreferencesPage()
showMessage()
showStartPage()
A
ExternalSyst em
A
XMLConverter
XML2Request()
Response2XML()
Administrator
ReporterUser Interface