PS Software Engineering 1 (WS2001/02)
Group 2 - Infowarrior

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Abstract

Abstract (TODO)

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1 Introduction

blah (TODO)

2 CRC Session

2.1 Info Collection

InfoCollector	
Superclasses:	
Subclasses: all form classes	
Responsibility: Collection of information	
Responsibilities	*Collaborators*
Receive Information(type, infoobject)	External(various)
	Database
	InfoDelivery
	Authentification
	WebServer

2.2 Maintainance

Maintainance	
Superclasses:	
Subclasses:	
Responsibility: Provides tool for administrators	
Responsibilities	*Collaborators*
Set Options	InfoDelivery
Get Options	Authentification
Set Scheduler	InfoRepresentation
Set Output Format	WebServer
Set Output Template	
Delete User	
Add User	
Change Userinfo	

2.3 XML

Not relevant, because we intend to use freely available class collections (e.g.: JDOM).

XML	
Superclasses:	
Subclasses:	
Responsibility: XML tool collection	
Responsibilities	*Collaborators*

2.4 Database

Database	
Superclasses:	
Subclasses:	
Responsibility: Stores news items	
Responsibilities	*Collaborators*
Not relevant, because we intend to use	InfoCollector
freely available software (e.g.: mySql).	InfoDelivery
	WebServer

Of interest however are the dataobjects to be stored in the database (in respect to database design).
Of interest is the format of the "special form" in which news are stored (c.f.: Prot.1 page 11

2.5 Information Representation

InfoRepresentation	
Superclasses:	
Subclasses:	
Responsibility: Formats information for viewers	
Responsibilities	*Collaborators*
Format(type, InfoObject)	InfoDelivery
SetFormat(type, template)	Maintainance
SetStandardFormatMail(template)	WebServer
SetStandardFormatHTTP(template)	
SetStandardFormatDBT(template)	

2.6 Information Delivery (Push)

Only timed transfer or request handling?
timeframe is from 0-25 (0 realtime, rest is in hourframe of digest).

InfoDelivery	
Superclasses:	
Subclasses:	
Responsibility: Forwards information and handles requests	
Responsibilities	*Collaborators*
SendDigest(time)	Authentification
SetRecp(adr, type, time, what)	Maintainance
SendRT(InfoObject)	InfoCollector
ChangeRecpFrame(adr, time)	Database
ChangeRecpType(adr, type)	InfoRepresentation
ChangeRecpWhat(adr, what)	External(various)
ShowRecentHTTP(time)	

2.7 Authentification

Authentification	
Superclasses:	
Subclasses:	
Responsibility: Forwards information and handles requests	
Responsibilities	*Collaborators*
Login(user, pwd)	Maintainance
Logout(user)	InfoCollector
GetPermissions(user)	WebSever
SetPermission(user, permission)	InfoDelivery
GetDecryptionKey(adr)	
SetDecryptionKey(adr, key)	
GetEncryptionKey(adr)	
SetEncryptionKey(adr, key)	

2.8 Web Server (Pop)

WebServer	
Superclasses:	
Subclasses:	
Responsibility: HTTP GUI	
Responsibilities	*Collaborators*
	Datebase
	Maintainance
	InfoCollection
	Authentification
	InfoRepresentation
	External(User)

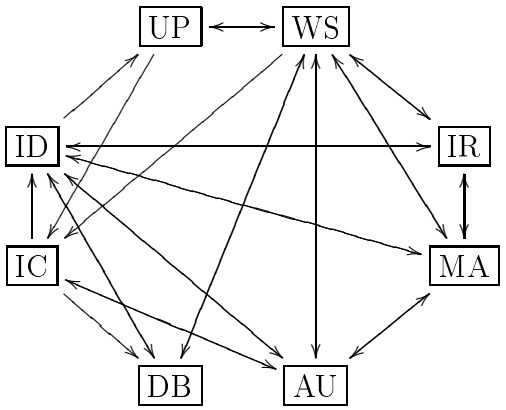
2.9 Information

Info	
Superclasses:	
Subclasses:	
Responsibility: Repesentation of the abstract concept of information	
Responsibilities	*Collaborators*

2.10 Person

Person	
Superclasses:	
Subclasses:	
Responsibility: artificial or real person	
Responsibilities	*Collaborators*
	InfoDelivery
	WebServer
	InfoCollection

3 User Role Map



Explanation:

AU. . . Authentification

DB...Database
IC...Information Collection
ID...Information Delivery
IR...Information Represenation
MA...Maintainance
UP...User/Person
WS...Web Server

4 Use Cases

The use cases in this section are simple textual representation of happenings in the system brought into cronological order. The start of use cases in this section is not necessarily an action outside of the system (e.g.: a user action), but an action specified by the customer requirement specification.

4.1 client (called e-news) sends information

1. client sends information to InfoCollector in realtime mode
2. autentification of informationmaterial and sender
3. information will be transfered originally to database
4. information will be transfered originally to InfoDelivery(pop)
5. information will be transfered to InfoRepresentation
6. information will be transformated into the specified format
7. information will be retransfered from InfoRep to InfoDelivery(pop)

4.2 user requests public information

1. user requests information contacting user interface (GUI)
2. user may select between various forms of information representation
3. information will be fetched from database
4. information will be transfered to InfoRepresentation
5. information will be transformated into the specified format

6. information will be retransfered to WebServer
7. html presentation

4.3 User Requests Restricted Information

1. User request login (as per 4.4.2)
2. User request information (similar to 4.2
3. User logs out

4.4 system administration

Various use cases apear in the field of user and system management. We tried to extract and discuss the most important and freqqently used.

4.4.1 Add new user

1. User request account (through webserver)
2. Webserver creates secure connection (https)
3. User enters data (loginname, password, emailaddress) [1]
4. Webserver request User creation through Maintainance
5. Maintainance requests information data from Authentification
6. Maintainance returns success or failure statement
7. If successfull the user is forwarded to 4.4.4 else the user is returned to point 3.

4.4.2 User requests login

1. User requests login (through webserver)
2. Webserver creates secure connection (https)
3. User enter data (loginname, password)
4. Webserver requests User authentification (through Authentification)

[1] Are there more than one authentification level? If yes is it necessary to bill the user, and if yes how does the validation of billing information take place?

5. Authenficication either grants (continue) or denies access (return to 4.4.2).

4.4.3 Delete user (User request)

1. User requests login (as per 4.4.2)
2. User confirms deletion
3. If confirmation positive, maintainance is contacted with user deletion request.
4. Maintainance deletes all userinfo from Information Delivery
5. Maintainance deletes all userinfo from Authentification
6. User is forwarded to 4.4.2

4.4.4 Set user values

1. User requests login (as per 4.4.2)
2. Webserver request user settings from Maintainance
3. Maintainance requests userinfo from InfoDelivery
4. Maintainance requests userinfo from Authetification
5. Maintainance returns user changable settings [2]
6. Webserver presents settings and awaits user changes
7. User enters changes
8. Webserver request setting change from Maintainance
9. Maintainance validates settitings
10. If successfull changes are forwarded to InfoDelivery and Authentification
11. Report of changes is sent to Webserver (including new settings if changes where made)
12. user continues with repeated setting change or logout.

[2] this exludes for example system settings, login name, ...

A Protocols

A.1 Protocol of 2001.10.31

A.1.1 Participants

Dabrowski, Roman

Fettahoglu, Mustafa

- Hofbauer, Heinz

Schneider, Michael

Schwaiger, Roland

Stütz, Thomas

The bullet (•) designates this weeks leader.

A.1.2 Topics

- **CRC cards**
  Discussion of the use of CRC cards. Some examples were given, and discussed.
  Some new CRC cards were found during the example and added to the collection, but since we decided to redo the CRC session during the next meeting, we will not give any details.

- **Customer - Developer interaction**
  Clarification of Customer whishes through questions and general discussion of the scope of the project (e.g.: what media to take into account, i.e.: text, picture, movies, etc.).
  Important facts extracted from the customer during this phase:

  Incoming News:

  - Incoming news are realtime.
  - Outside sources deliver news.
  - News are delivered in a standard form [3].

[3] This "standard form" is an established standard in the news community, but till now we know nothing of the actual form.

Outgoing News:

- Realtime or digest
- Active or passive (push - pop technology)
- Customizable look (through maintainance tools).
- Possible media: sms, xml, email, html, wap.

Database:

- Remaintime in fast DB is four weeks.
- After four weeks the news are moved to a slower repository.

Authentification:

- Incoming news must be authentified.
- Outgoing news may be encrypted.
- Passive access requires authentifiction for news which are not for the general public.

Monetarian Considerations:

- No budget restrictions!

A.2 Protocol of 2001.11.07

A.2.1 Participants

Hofbauer, Heinz

• Schneider, Michael

Schwaiger, Roland

◦ Stütz, Thomas

The bullet (•) designates this weeks leader.
The circle (◦) designates the writer of he protocol.

A.2.2 Topics

- **Organisation of the Project**
  We informed Mr. Schwaiger, that one member of the group (Mustafa Fettahoglu) had deciced to leave the group and quit the course.

- **CRC card Presentation**
  New CRC cards and User Role Map were presented.

- **Use Cases**
  Special frequently used and important use cases were discussed and visualized through the CRC card modell.
  New requirements and spezifications were extracted:

  - Different levels of access from public available (0) to very restricted (5).
  - A trusted center is responsible for validating financial info.
  - Two interfaces are necessary for InfoCollection , one for human users and one for other news systems from other companies. Therefor we need the new use case **register other system**

- **Next Week**

  1. Describe use cases (e.g. concerning the web interface)
  2. Essential User Interface
  3. Overhead Projector Presentation