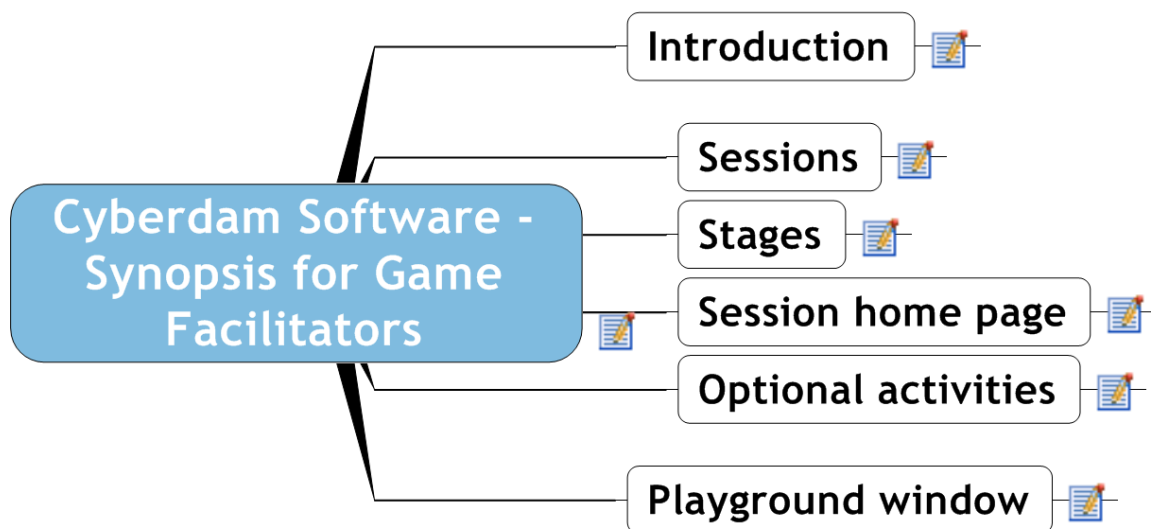




Stichting RechtenOnline

Project Leren in een Virtuele Wereld

Cyberdam Software - Synopsis for Game Facilitators



Pieter van der Hijden - 15 September 2009

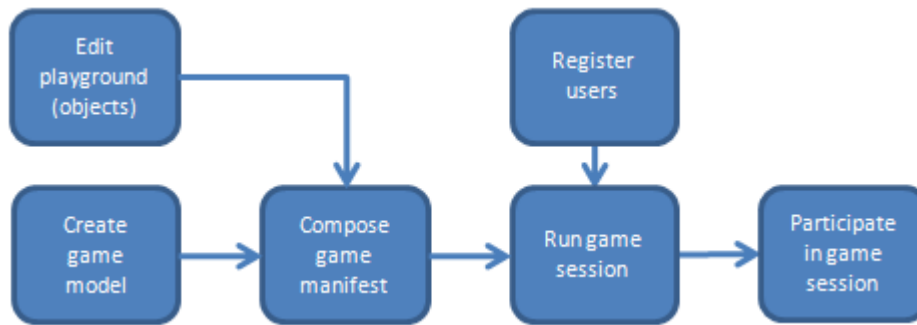
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1 Introduction



Cyberdam - system overview

The Cyberdam web application consists of:

- Playgrounds (an interactive city map with background information and a corresponding directory of objects with underlying information and eventually simple websites as well).
- Models (a specification of roles, stages, variables, optional activities by role and stage and so-called scripts).
- Manifests which relate model roles to playground objects. It is possible to relate roles of a certain model to objects coming from various playgrounds.

The Cyberdam web application offers the tools to authorized users to create, update, export and import these playgrounds, models and manifests. Based on this content users (tutors) can run game sessions and let other people (students, tutors) participate. The system further has functions for user administration and (not included in the figure) systems management (e.g. language packs management and system tuning).



Figure - a collection of games

The standard distribution of Cyberdam contains:

- the Cyberdam web-application (Java),
- about 20 models (most in Dutch, some in English),
- the Cyberdam-city playground (150 objects, Dutch and English edition available),
- a comparable Digidam playground (80 objects, Dutch only),
- some dedicated maps related to specific games (most of them in English),
- two language packs for human computer communication (English and Dutch).

At the server side Cyberdam requires the web application mentioned above. It uses Tomcat, Apache and MySQL. At the client (user) side, Cyberdam does not require any dedicated software, only a generic Internet browser is needed.

Note: A gaming/simulation as a product we call a (game) model; a gaming/simulation as a process, we call a (game) session.

2 Sessions



Participants involved in a Cyberdam game session

An authorised user (like a tutor) may create a Cyberdam session based on a certain manifest (that refers to playground(s) and model). While creating a session, the facilitator or "game master" will assign each role of the model to one or more participants, either students or tutors (or to themselves). The session then becomes ready-to-start. Once it is started the session is called "running". It keeps on running until it reaches its normal end ("finished") or until it is terminated by the user who created it ("aborted").

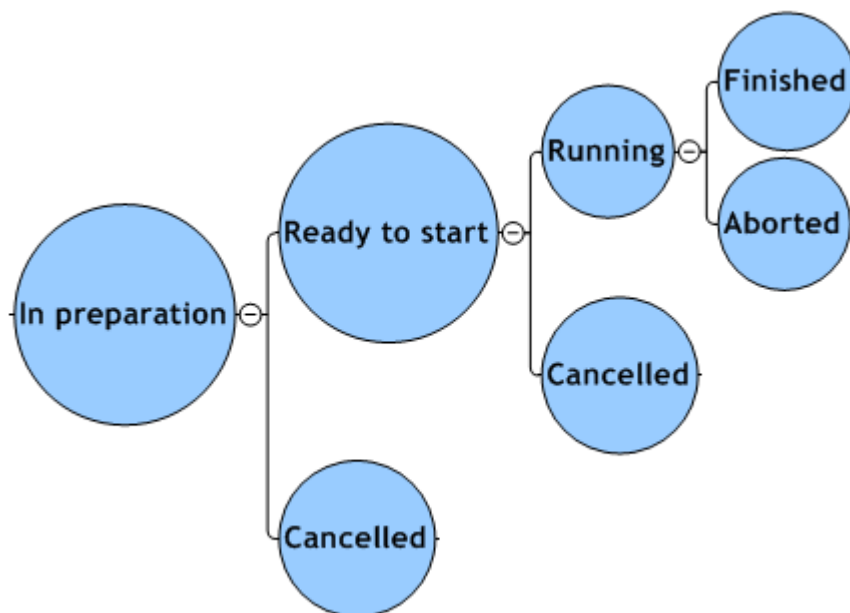


Figure - the status of a session

Once a session is running, each participant has access to session home page of their own role (see below). The facilitator can access the session home pages of all roles and eventually intervene. He/she also can inspect a historical log of the whole session. When a session has been ended, be it in a normal way ("finished") or in an abnormal way ("aborted"), the participant still has access to the session home page(s), be it read access only.

3 Stages

A session goes through one or more stages. Moving to another stage (either forward or backward) can be prescribed (a script inside the model) and/or left to one of the roles (usually a role that is played by a tutor).

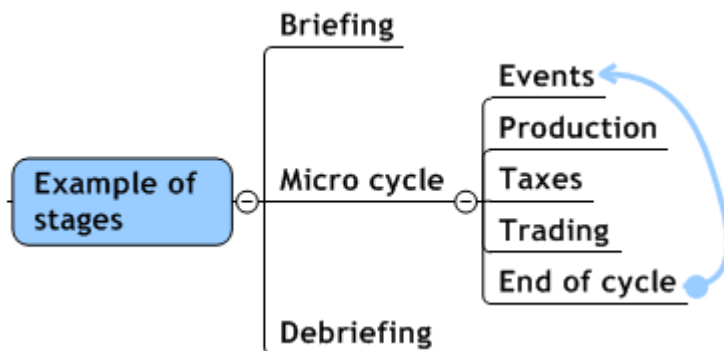


Figure: Example of stages

In the example a session has a macro cycle with three stages: debriefing, a couple of micro cycles, and a debriefing stage. Each micro cycle has 5 subsequent sub-stages: Events handling, producing, tax collecting, trading and the reviewing the cycle.

4 Session home page

Game session HEX Online Demo

Cyberdam 2.3 Test > Participant > Game session

Pieter van der HijdenLogout

Local leader AA

Cycle-1 - Step-3 Production

- Home page
- Messages
- Activities
- Files
- Playground
- Game Intro
- Colophon

Contacts

- National leader (Nation, HEX Online)
- Regional leader A (Region A, HEX Online)
- Local leader AA (Agriculture A, HEX Online)
- Facilitator

Return

Local leader AA



	Cycle-0	Cycle-1	Cycle-2	Cycle-3	Cycle-4
Food	0				
Housing	3				
Infrastructure	3				
Services	0				
Commodities	0				
Money	0				
People	4				

Received messages

New message

Sender	To	Subject	Step-of-play	Date + time	Attachments
No messages found					

Activities

Activity Type	Activity	Attachments	Completed?
Input	Specify your production targets for this cycle		No

Files

New file

File name	Step-of-play	Date + time
No files found		

Figure - Example of a session home page

The session home page offers to a role:

- A link ("Playground") to open an extra window with the playground(s) used for this session; there they can browse the playground(s) and change the description of their own character.
- Direct links (under "Contacts") to the playground object pages of each of the roles involved in this session.
- A status container (top left: "Local leader AA", etc.) which by default lists the name of the role and the current stage. This rich text field can be specified differently during model building.
- A so-called heads-up display (top right, picture plus table), i.e. a container that is empty by default. This rich text field can be specified differently during model building.
- A summary of incoming messages, optional activities and uploaded files and hyperlinks to dedicated pages with messages, files and optional activities.
 - Messages are like email; they go from one role to one or more other roles. The message page displays an incoming message box and a sent messages box. Messages may be moved to a recycle bin (and back again).
 - In principle, files uploaded are only visible for the role that uploaded them (and for the facilitator). Roles may use these files as attachments to their messages. They also can add these files as hyperlinks to the descriptive page of their "own" playground object.
 - For optional activities, see below.

5 Optional activities

Depending on role, stage and other conditions specified in the model (and evaluated dynamically), the role will find zero, one or more optional activities on their session home page or their dedicated activities page.

It depends on the actual label and description of these activities whether they may be considered as a command, a recommendation, an advice, a suggestion or a choice. The description of an activity may contain variable information like the outcomes of a calculation. It may also come with additional resources (files into the model).

Cyberdam comes with five types of activities:

- Input - The input activity asks the role to fill in a form. By finishing this activity, they provide this information as input to the prescribed calculations (scripts) in the model.
- Output - The output activity displays certain information to the role.
- Upload - The upload activity asks the role to upload a file.
- Message - The message activity asks the role to send a message to one or more other roles.
- Move - The move activity invites the role to move the session to another stage.

Upon completion of an activity (not, when cancelling the activity), a script is run. It may change internal variables and as such change the conditions that determine the visibility or not of certain activities.

A role always can inspect a list of executed activities and keep access to all accompanying resources.

6 Playground window



Figure - Example of a playground map: Cyberdam-city with popup window for selected object

The participant can navigate the map, click object hotspots and jump to the descriptive page of a selected object. They may also browse the directory of objects and drill down to the descriptive page and eventual websites.

Cyberdam, Bakery Bas


Name	Bakery Bas
Category	Enterprise
Caption	The bakery has been situated in the old centre of the city since the Middle Ages. Bread is still baked in the bakery every night.
Address	Bakkersteeg 14, Cyberdam - Centrum [E6]
Picture	
Description	About 16 years ago Baker Bas started with a small bakery and a bakery shop in Cyberdam. Right from the first moment on it was already clear that quality and customer's service had to play the main role. It seemed to be the correct vision, regarding the fast growing number of selling points.

Figure - Example of a directory entry.

One of the objects will be related to the participant's own role. He/she may change the default text of this object at any moment. Changes will be visible for participants of that session only. Participants can also add certain documents "their" descriptive pages.

HEX Online directory

HEX Online

- Map
- Directory
- Info

Refresh table

Name	Category	Caption	Address
<u>Nation</u>	Miscellaneous	The national level	N
<u>Agriculture A</u>	Miscellaneous	Region A - Agriculture settlement	AA
<u>Agriculture B</u>	Miscellaneous	Region B - Agriculture settlement	BA
<u>Agriculture C</u>	Miscellaneous	Region C - Agriculture settlement	CA
<u>Fishing A</u>	Miscellaneous	Region A - Fishing settlement	AF
<u>Fishing B</u>	Miscellaneous	Region B - Fishing Settlement	BF
<u>Fishing C</u>	Miscellaneous	Region C - Fishing settlement	CF
<u>Forest B</u>	Miscellaneous	Region B - Forest settlement	BG
<u>Mining A</u>	Miscellaneous	Region A - Mining settlement	AM
<u>Region A</u>	Miscellaneous	Region A	A
<u>Region B</u>	Miscellaneous	Region B	B
<u>Region C</u>	Miscellaneous	Region C	C
<u>Savanna C</u>	Miscellaneous	Region C - Savanna settlement	CS
<u>Urban A</u>	Miscellaneous	Region A - Urban settlement	AU
<u>Urban B</u>	Miscellaneous	Region B - Urban settlement	BU
<u>Urban C</u>	Miscellaneous	Region C - Urban settlement	CU

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Figure - Example of a playground window with open playground directory