PROJECT FINAL REPORT

Grant Agreement number: 231507

Project acronym: PuppyIR

Project title: An Open Source Environment to construct Information Services for Children

Funding Scheme: STREP**:**

Period covered: **from** April 2009 **to** March 2012

Name of the scientific representative of the project's co-ordinator[1], Title and Organisation:

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Project website[2] address: http://www.puppyir.eu/

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[1] Usually the contact person of the coordinator as specified in Art. 8.1. of the grant agreement

[2] The home page of the website should contain the generic European flag and the FP7 logo which are available in electronic format at the Europa website (logo of the European flag: http://europa.eu/abc/symbols/emblem/index_en.htm ; logo of the 7th FP: http://ec.europa.eu/research/fp7/index_en.cfm?pg=logos). The area of activity of the project should also be mentioned.

4.1   Final publishable summary report

`http:/www.puppyir.eu/`

PuppyIR – An Open Source Environment to construct Information Services for Children

PuppyIR (IST FP7 231507) has developed technology that will enable children to search the Internet safely and successfully. The PuppyIR open-source framework aids in the construction of child-friendly information services, which will be able to summarise content and moderate information for children, help children safely build social networks, and intelligently aggregate the information for presentation to children. PuppyIR aims to facilitate the creation of child-centred information access, based on the understanding of the behaviour and needs of children. PuppyIR offers a package for software designers to construct IR systems for children in combination with various of prototypes and resources for user-centered evaluation. Also courseware for training developers in the use of the Framework is provided.

Children should be helped to maximize their full potential. Developing a child's abilities to find and understand information is key to their development as young adults. The internet offers children exciting new ways to meet people, learn about different cultures and develop their creative potential. However, children's ability to use the internet has long been severely hampered by the lack of appropriate search tools.

Most Information Retrieval (IR) systems are designed for use by adults: they return information that is unsuitable for children, present information in lists that children find difficult to manage and make it difficult for children to ask for information. Worse, many internet search engines confront children with inappropriate material. PuppyIR helps children search the Internet safely and successfully by the design of an open source framework of child-friendly information services.

PuppyIR provides a suite of components that can be used by system designers to tailor IR systems for children's specific needs. PuppyIR has developed new interaction paradigms that allow children to express their information needs simply and have results presented in an intuitive way. It offers Information Services that can summarise content for children, moderate information and intelligently aggregate it for presentation to children. PuppyIR offers a multi-layered architecture: system designers can choose from several interaction paradigms and information services to construct their own system. For a multitude of services, prototypes have been delivered that demonstrate the potential of the Framework, and PuppyIR also has designed and applied child-centred evaluation methods. All services and methods developed have been extensively documented in over 60 peer-reviewed publications.

For all the project outcomes the project website provides a well documented entry point. As the PuppyIR framework is open-source, it will be extensible for new information sources, new information services and new languages.
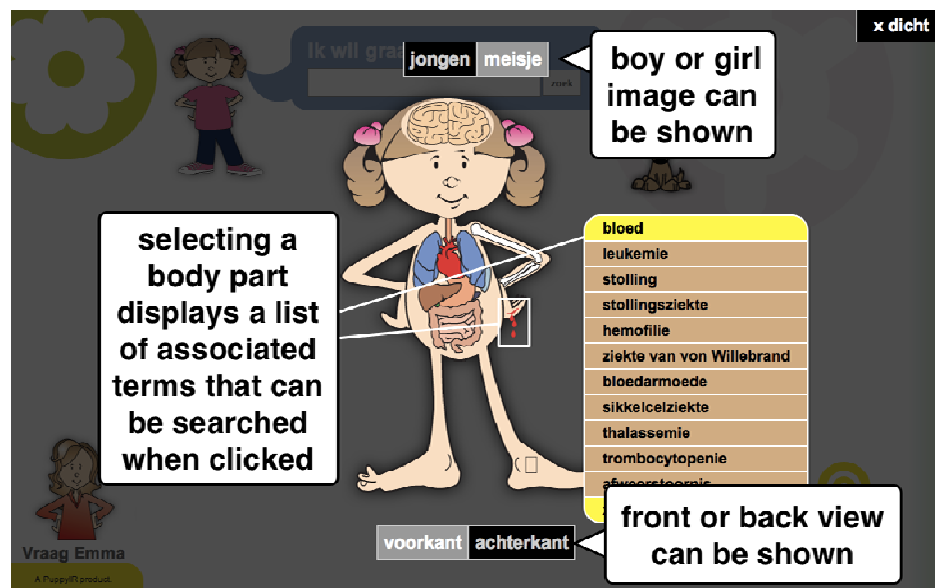
Images
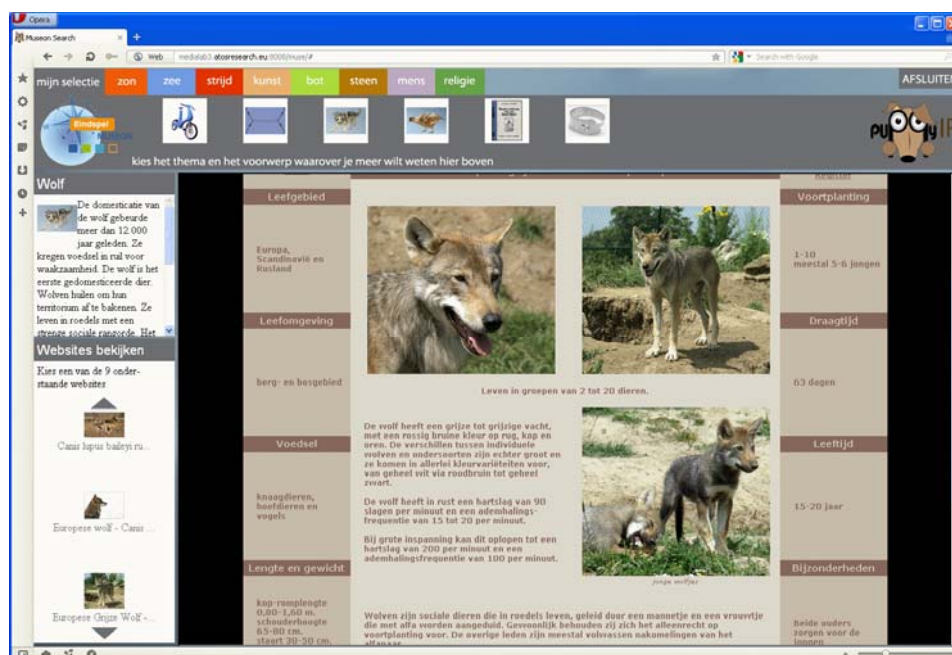

Figure A: Exploring body parts with the Body Browser.

Figure B: PuppyIR selects a suitable web page about the wolf.

Figure C: touch table for the selection of subjects during/after museum visit

Consortium

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4.2 Use and dissemination of foreground

Section A (public)

For PuppyIR, the project website is seen as the central dissemination instument. It contains pages with all major project results: a link to the SourceForge pages (the repository that contains the software developed in open source), a page with documentation, including training materials, an overview of prototypes developed and a toolkit with measures developed and used for child-centered evaluations.

In addition, the website contains a list of (currently over 60) scientific (peer reviewed) publications relating to the foreground of the project, which are also included in the table below, starting with the most important ones. Several conference papers have been submitted for acceptance, and the coordinating partner will continue to publish them on the project website and also will maintain a list of upcoming events/presentations related to the work conducted in PuppyIR.

A1: LIST OF THE TOP RANKED SCIENTIFIC (PEER REVIEWED) PUBLICATIONS										
NO.	Author(s)	Title	Title of the periodical or the series	Relevant pages	Publisher	Place of publication	Year of publication	Peer reviewed (y/n/na)	Permanent identifiers[3] (if available)	Is/Will open access[4] provided to this publication?
1	Azzopardi L., Glassey R., Gyllstrom K., van der Sluis F., Eickhoff C., Duarte Torres S., Dowie D., F. de Jong, D. Hiemstra et al	EmSe: Supporting Children's Information Needs within a Hospital Environment	34th European Conference on Information Retrieval (ECIR)	pp.578-580	Springer		2012	y	[DOI] [pdf]	y
2	Lingnau A., van Dijk B., Ruthven I.,	Enriching children's experiences during and after	IEEE 12th International Conference on Advanced Learning		IEEE		2012	y	to appear	

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[3] A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).

[4] Open Access is defined as free of charge access for anyone via the internet. Please answer "yes" if the open access to the publication is already established and also if the embargo period for open access is not yet over but you intend to establish open access afterwards.

	Kuckelkorn H., and Schmuch J.	a museum visit	Technologies							
3	Polajnar T., Glassey R. and Azzopardi L.	Detection of News Feeds Items Appropriate for Children	34th European Conference on Information Retrieval (ECIR)	pp. 63-72	Springer	Berlin	2012	y	[DOI] [pdf]	y
4	E.J. Bergervoet, F. van der Sluis, E.M.A.G. van Dijk, A. Nijholt.	Bombs, fish, and coral reefs: The role of in-game explanations and explorative game behavior on comprehension	The Visual Computer, International Journal of Computer Graphics. N. Magnenat-Thalmann (Ed.)	na	Springer	Berlin	2012	y	to appear	y
5	Duarte Torres, S.R., Weber, I.	What and how children search on the web.	Proceedings of the 20th ACM international conference on Information and knowledge management (CIKM 2011), Glasgow, Scotland.	pp. 393-402	ACM		2011	y	[DOI] [pdf]	y
6	Karl Gyllstrom, Marie-Francine Moens	Examining the Leftness Property of Wikipedia Categories	Proceedings of the 20th ACM international conference on Information and knowledge management (CIKM 2011), Glasgow, Scotland.	pp.2309-2313	ACM		2011	Y	[DOI]	
7	Bergervoet, E., Van der Sluis, F., Van Dijk, E., and Nijholt, A.	Let the game do the talking: The influence of explicitness and game behavior on comprehension in an educational computer game	International Conference on Cyberworlds, IEEE Computer Society, *Best paper award*	pp. 120-127	IEEE		2011	y	[pdf]	y
8	Eickhoff C., de Vries A.P.	How Crowdsourcable is Your Task?	Proceedings of the Workshop on Crowdsourcing for Search and Data Mining (CSDM)		Univ of Texas		2011	y	[pdf]	y
9	Eickhoff C., Serdyukov P., de Vries A. P.	A Combined Topical/Non-topical Approach to Identifying Web Sites for Children	Proceedings of the 4th ACM International Conference on Web Search and Data Mining (WSDM)	pp.505-514	ACM		2011	y	[DOI] [pdf]	y
10	Eickhoff C., de Vries A.P.	Increasing Cheat Robustness of Crowdsourcing Tasks	Information Retrieval	na	Springer		2012	y	[DOI] [pdf]	y

NO.	Author(s)	Title	Title of the periodical or the series	Relevant pages	Publisher	Place of publication	Year of publication	Peer reviewed (y/n/na)	Permanent identifiers[5] (if available)	Is/Will open access[6] provided to this publication?
11	Duarte S., Hiemstra D., Serdyukov P.	An Analysis of Queries Intended to Search Information for Children	In IIiX '10: Proceeding of the third symposium on Information interaction in context, New York, NY, USA		ACM		2010	y	[pdf]	y

A2: LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, 2012										
NO.	Author(s)	Title	Title of the periodical or the series	Relevant pages	Publisher	Place of publication	Year of publication	Peer reviewed (y/n/na)	Permanent identifiers[5] (if available)	Is/Will open access[6] provided to this publication?
1	Eickhoff C., Harris C.G., de Vries A.P., Srinivasan P.	Quality through Flow and Immersion: Gamifying Crowdsourced Relevance Assessments	Proceedings of the 35th Annual International ACM Conference on Research and Development in Information Retrieval (SIGIR)		ACM		2012	y	to appear	
2	Eickhoff C.	Relevance as a Subjective and Situational Multidimensional Concept	Proceedings of the 35th Annual International ACM Conference on Research and Development in Information Retrieval (SIGIR)		ACM		2012	y	to appear	
3	De Belder, J. and Moens, M.-F.	A dataset for the evaluation of lexical simplification	Proceedings of the CICLing Conference on Intelligent Text Processing and Computational Linguistics (Lecture Notes in Computer Science 7182). Berlin: Springer. pp. 426-437.	pp. 426-437	Springer	Berlin	2012	y	[pdf]	y
4	I. Ruthven, M. Landoni, and A.	Children and digital libraries	User Studies for Digital Library Development. (M. Dobreva, A.			UK	2012	y	[link]	

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NO.	Author(s)	Title	Title of the periodical or the series	Relevant pages	Publisher	Place of	Year of publication	Peer reviewed	Permanent identifiers	Is/Will open access
	Lingnau		O'Dwyer, and P. Feliciati, Eds.)							
5	Gomez, J.C. and Moens, M.-F.	Hierarchical classification of Web documents by stratified discriminant analysis	Proceedings of the 5th Information Retrieval Facility Conference 2012 (Lecture Notes in Computer Science).		Springer	Berlin	2012	y	[pdf]	y
6	Gomez J.-C., Moens, M.-F.	Multilayered Class Discrimination in Large-Scale Taxonomies	Proceedings of the 16th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (Lecture Notes in Computer Science)		Springer	Berlin	2012	y	[pdf]	y
7	Kolomiyets, O., Bethard, S. & Moens, M.-F.	Extracting Narrative Timelines as Temporal Dependency Structures	Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics		ACL		2012	y	to appear	y
8	Jans, B., Vulić, I., Bethard, S. & Moens, M.-F.	Skip N-grams and Ranking Functions for Predicting Script Events	Chapter of the Association for Computational Linguistics (EACL 2012)	pp. 336-344	ACL		2012	y	to appear	y
9	Van Dijk, B., van der Sluis, F., and Nijholt, A.	Designing a Museum Multi-Touch Table for Children	Proceedings of the 4th International ICST Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN 2011)	pp. 139-148	Springer	Berlin	2012	y	to appear	y
10	Dadvar, M., Ordelman R., Trieschnigg D.,de Jong F.	Improved Cyberbullying Detection Using Gender Information	Proceedings of the 12th -Dutch-Belgian Information Retrieval Workshop	pp. 23-26	UGent	Gent, Belgium	2012	y	[pdf]	y
11	Dadvar, M., de Jong, F.	Cyberbullying Detection; A Step Toward a Safer Internet Yard	Proceedings of the Twenty First World Wide Web Conference, WWW 2012 - PhD-Symposium	pp. 121-125	ACM		2012	y	[pdf]	y

A3: LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, 2011										
NO.	Author(s)	Title	Title of the periodical or the series	Relevant pages	Publisher	Place of	Year of publicati	Peer reviewe	Permanent identifiers[7]	Is/Will open access[8]

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[7] A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).

					publica tion	on	d (y/n/na)	(if available)	provided to this publication?
1	Eickhoff, C., Harris, C., Srinivasan, P., de Vries, A.	GeAnn at TREC 2011	TREC 2011 Notebook		NIST	Marylan d, USA	2011	n	[pdf]	y
3	Eickhoff, C., Harris, C., Srinivasan, P., de Vries, A.	GeAnn - Games for Engaging Annotations	SIGIR Workshop on Crowdsourcing for Information Retrieval (CIR)				2011	y	[pdf]	y
4	Akkersdijk, S.M, Brandon, M., Jochmann-Mannak, H., Hiemstra D., Huibers T.	ImagePile: an Alternative for Vertical Results Lists of IR-Systems	CTIT Technical Report, University of Twente				2011	n	[pdf	y
5	T. Polajnar, R. Glassey, K. Gyllstrom and L. Azzopardi	Enabling Picture-based Querying and Learning with the JuSe Interface	Child Computer Interaction - 2nd Workshop on UI Technologies and Educational Pedagogy (at CHI)				2011	y	pdf	y
6	R. Glassey, T. Polajnar and L. Azzopardi	PuppyIR Unleashed: A Framework for Building Child-Oriented Information Services	In Proceedings of the 11th Dutch-Belgian Information Retrieval Workshop (DIR)		UvA	Amsterd am, NL	2011	y	[proceedings-pdf]	y
7	Carsten Eickhoff, Tamara Polajnar, Karl Gyllstrom, Sergio Duarte, Richard Glassey	Web Search Query Assistance Functionality for Young Audiences	Proceedings of the European Conference on Information Retrieval (ECIR)				2011	Y	[DOI] [pdf]	y
8	Karl Gyllstrom, Marie-Francine Moens	Clash of the Typings: Finding controversies and children's topics within	Proceedings of the European Conference on Information Retrieval (ECIR)				2011	Y	[DOI] [pdf]	y

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		queries								
9	Duarte S.	Information retrieval for children based on the aggregated search paradigm	Technical Report, Centre for Telematics and Information Technology, University of Twente (Presented at the Doctoral Consortium of the third symposium on Information interaction in context (IIiX) in New Brunswick, USA)		CTIT	Ensche de, NL	2011	y	[pdf]	y
10	Van der Sluis, F., Duarte Torres, S., Hiemstra, D., and Van Dijk, E.M.A.G., Kruisinga, F.	Visual exploration of health information for children.	Proceedings of the 33rd European Conference on Information Retrieval (ECIR), Dublin, Ireland				2011	y	[pdf]	y
11	Lingnau A., Harrer A.	An analytic process schema for collaborative multi touch applications	Proceedings of the 11th IEEE International Conference on Advanced Learning Technologies (ICALT),), Athens, Georgia.	pp. 115-117	IEEE		2011	y	[DOI] [pdf]	y
12	McCrindle, C., Hornecker, E., Lingnau, A. and Rick, J.	The design of t-vote: A tangible tabletop application supporting children s decision making	Proceedings of the 10th International Conference on Interaction Design and Children - IDC2011				2011	y	[DOI] [pdf]	y
13	A. Lingnau, I. Ruthven, and M. Landoni	Show and Tell: supporting childrens search by interactively creating stories	Proceedings of the SIGIR 2011 Workshop on "entertain me": Supporting Complex Search Tasks				2011	y	[DOI] [pdf]	y
14	Glassey R. and Azzopardi L.	Finding Interest in the Stream	Proceedings of ASIST 2011				2011	y	[pdf]	y
15	Mohd Yusoff Y., Ruthven I., and Landoni M.	The Fun Semantic Differential Scales	Proceedings of the 10th International Conference on Interaction Design and Children	pp. 221-224			2011	y	[DOI] [pdf]	y

NO.	Author(s)	Title	Title of the periodical or the series	Relevant pages	Publisher	Place of publication	Year of publication	Peer reviewed (y/n/na)	Permanent identifiers[9] (if available)	Is/Will open access[10] provided to this publication?
	A4: LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, STARTING WITH THE MOST IMPORTANT ONES, 2010									
1	Hauff C. and Trieschnigg D.	Enhancing Access To Classic Children's Literature	Proceedings of the ACM CIKM BooksOnline'10 Workshop		ACM		2010	y	[pdf]	y
2	Eickhoff C., Serdyukov P., de Vries A.P.	Web Page Classification on Child Suitability	Proceedings of the 19th ACM International Conference on Information and Knowledge Management (CIKM)		ACM		2010	y	[DOI] [pdf]	y
3	Carsten Eickhoff, Arjen P. de Vries	Identifying Suitable YouTube Videos for Children	Proceedings of the 3rd Networked & Electronic Media Summit (NEM)		NEM		2010	y	[pdf]	y
4	Karl Gyllstrom, Marie-Francine Moens	Wisdom of the Ages: Toward Delivering the Children's Web with the Link-based AgeRank Algorithm	Proceedings of the International Conference in Information and Knowledge Management (CIKM)		ACM		2010	y	[DOI]	
5	Kalsbeek, M.G. and de Wit, J.J. and Trieschnigg, R.B. and van der Vet, P.E. and Huibers, T.W.C. and Hiemstra, D.	Automatic Reformulation of Children's Search Queries	Technical Report TR-CTIT-10-23, Centre for Telematics and Information Technology University of Twente, ISSN 1381-3625		CTIT	Enschede, NL	2010	n	[pdf]	y
6	Richard Glassey, Leif Azzopardi, Desmond Elliott and Tamara Polajnar	Interaction-based Information Filtering for Children	In Proceedings of the 3rd Information Interaction in Context Symposium (IIiX '10) New Brunswick, NJ, USA		ACM		2010	y	[pdf]	y

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[9] A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).

[10] Open Access is defined as free of charge access for anyone via the internet. Please answer "yes" if the open access to the publication is already established and also if the embargo period for open access is not yet over but you intend to establish open access afterwards.

7	Desmond Elliot, Leif Azzopardi, Richard Glassey and Tamara Polajnar	Filtering and Finding for Children	Proceedings of the ACM SIGIR Conference on Research and Development in Information Retrieval, Geneva, Switzerland		ACM		2010	y	[pdf]	y
8	Karl Gyllstrom, Marie-Francine Moens	A Picture is Worth a Thousand Search Results: Finding Child-Oriented Multimedia Results with collAge	Proceedings of the ACM SIGIR Conference on Research and Development in Information Retrieval, Geneva, Switzerland		ACM		2010	y	[pdf}	y
9	Sergio Duarte, Djoerd Hiemstra, Pavel Serdyukov	Query log analysis in the context of retrieval of information for children	Proceedings of the ACM SIGIR Conference on Research and Development in Information Retrieval, Geneva, Switzerland		ACM		2010	y	[pdf]	y
10	Jochmann-Mannak, H., Huibers, T., Lentz, L., Sanders, T.	Children searching information on the Internet: Performance on children's interfaces compared to Google	Proceedings of the Workshop on Accessible Search Systems, ACM SIGIR '10, Geneva, Switzerland		ACM		2010	y	[pdf]	y
11	Michel Jansen, Wim Bos, Paul van der Vet, Theo Huibers and Djoerd Hiemstra	TeddIR: Tangible Information Retrieval for Children	Proceedings of the 9th International Conference on Interaction Design and Children, Barcelona, Spain				2010	y	[pdf]	y
12	De Belder, J. and Moens, Marie-Francine	Sentence Compression for Dutch Using Integer Linear Programming	Proceedings of the 10th Dutch-Belgian Information Retrieval Workshop (DIR 2010). Nijmegen, The Netherlands,		RU	Nijmegen, NL	2010	y		
13	F. Van der Sluis, E.M.A.G. Van Dijk, and E.L. Van den Broek	Aiming for user experience in information retrieval: Towards user-centered relevance (ucr)	Proceeding of the 33rd International ACM SIGIR Conference on Research and Development in Information Retrieval, New York, USA	pp. 924-924	ACM		2010	y	[DOI]	
14	Y. Yusoff Mohd, M. Landoni and I. Ruthven	Assessing fun: young children as evaluators of interactive systems	In Proceedings of the Workshop on Accessible Search Systems held at the 33st Annual International ACM SIGIR Conference on Research and Development in Information Retrieval, New York, USA		ACM		2010	y	[pdf]	y
15	F. Van der Sluis and E. M. A. G. Van Dijk	A closer look at children's information retrieval usage:	In Proceedings of the Workshop on Accessible Search Systems held at	pp. 3-10			2010	y	[pdf]	y

		Towards child-centered relevance.	the 33st Annual International ACM SIGIR Conference on Research and Development in Information Retrieval, New York, USA							
16	F. Van der Sluis and E. L. Van den Broek	Using complexity measures in information retrieval.	In IIiX '10: Proceeding of the third symposium on Information interaction in context, New York, NY, USA	pp. 383-388	ACM		2010	y	[DOI]	
17	F. Van der Sluis and E. L. Van den Broek	Modeling user knowledge from queries: Introducing a metric for knowledge.	In Active Media Technology, volume 6335 of Lecture Notes in Computer Science, Springer Berlin / Heidelberg	pp. 395-402	Springer	Berlin	2010	y	[DOI]	y
18	F. Van der Sluis, E. L. Van den Broek, and E. M. A. G. Van Dijk	Information Retrieval eXperience (IRX): Towards a human-centered personalized model of relevance.	In Third International Workshop on Web Information Retrieval Support Systems, Toronto, Canada				2010	y	[pdf]	y
19	A. Lingnau, I. Ruthven, M. Landoni, F. Van der Sluis	Interactive search interfaces for young children - The PuppyIR approach	Proceedings of 10th IEEE International Conference on Advanced Learning Technologies		IEEE		2010	y	[DOI]	
21	De Belder, J., Deschacht, K., and Moens, Marie-Francine	Lexical simplification	1st International Conference on Interdisciplinary Research on Technology, Education and Communication (2010). Kortrijk, Belgium				2010	y	[pdf]	y
22	De Belder, J. and Moens, Marie-Francine	Text simplification for Children	Proceedings of the Workshop on Accessible Search Systems, SIGIR '10, Geneva, Switzerland		ACM		2010	y	[pdf]	y
23	De Belder, J. and Moens, Marie-Francine	Integer Linear Programming for Dutch Sentence Compression	CICLing 2010 (Lecture Notes in Computer Science 6008)	pp. 711-723	Springer	Berlin	2010	y	[DOI] [pdf]	y
24	Y. Modh Yusoff, M. Landoni, and I. Ruthven	Assessing fun: young children as evaluators of interactive systems	Workshop on Accessible Search Systems				2010	y	[pdf]	y

NO.	Author(s)	Title	Title of the periodical or the series	Relevant pages	Publisher	Place of publication	Year of publication	Peer reviewed (y/n/na)	Permanent identifiers[11] (if available)	Is/Will open access[12] provided to this publication?
			A5: LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, STARTING WITH THE MOST IMPORTANT ONES, 2009							
1	Azzopardi, L., Glassey, R., Mounia, L., Polajnar, T., Ruthven, I.	PuppyIR: Designing an Open Source Framework for Interactive Information Services for Children	Proceedings of 3rd Annual Workshop on Human-Computer Interaction and Information Retrieval (HCIR 2009)				2009		[pdf]	y
2	Azzopardi, L	Usage Based Effectiveness Measures: Monitoring Application Performance in Information Retrieval	Proceedings of the International Conference in Information and Knowledge Management (CIKM 2009).		ACM		2009	y	[pdf]	
3	S. Sushmita, H. Joho and M. Lalmas	A Task-Based Evaluation of an Aggregated Search Interface	Proceedings of 16th String Processing and Information Retrieval Symposium (SPIRE), Saariselkä, Finland				2009	y	[pdf]	y
4	Serdyukov, P. and Vries, A. P.	Ranking Wikipedia Entities	Proceedings of the 18th Text Retrieval Conference (TREC),		NIST		2009	n		
5	Serdyukov, P., Murdock V., van Zwol R.	Placing Flickr photos on a Map	Proceedings of ACM SIGIR 2009		ACM		2009	y	[pdf]	
6	Van der Sluis, F., Jochmann-Mannak, H.E.	Children's Information Retrieval Interaction: Multimodal in Essence?	Poster presented at the COST2102 International School				2009	n	[pdf]	y

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[11] A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).

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FINAL REPORT PuppyIR – May 2012

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Section B (confidential)

B1: LIST OF APPLICATIONS FOR PATENTS, TRADEMARKS, REGISTERED DESIGNS, ETC. : NOT APPLICABLE

B2: OVERVIEW TABLE WITH EXPLOITABLE FOREGROUND

Exploitable Foreground (description)	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable, commercial use	Patents or other IPR exploitation (licences)	Owner & Other Beneficiary(s) involved
PuppyIR open source search Framework for children	*Open source development framework*	*Publishing, Children's websites, museums, ISP's, Hospitals*	2012-13	Open source	*Univ. Glasgow Atos Univ. Twente Univ. Delft Univ. Leuven*
Search interfaces for children that allow them to search white-list internet resources via using game and electronic book metaphors	*Beat-the-witch information literacy game and Show-and-Tell electronic book-based search system*	*Education*	*2012-13*	*Open source*	*UoS*
Software for a quest for school classes. At a multitouch table groups are formed and the contents of the quest determined. Questions and corresponding feedback are provided via exhibition terminals. Back at the table based the contents for a personalized website are determined, based on the interaction within the exhibition.	*Interactive group quest for school groups with personalized post-visit website*	*Museums* *Exhibition spaces*	2012-13	*Open source for the multitouchtable software and website*	*Museon, Atos, Univ. Strathclyde, Univ. Twente*
Software for a quest for small groups of individual museum visitors. At a multitouch table groups are formed and the contents of the quest	*Interactive group quest*	*Museums* *Exhibition spaces*	*2012*	*Open source for the multitouch table software*	*Museon, Univ. Twente*

determined. Questions and corresponding feedback are provided via exhibition terminals. During the quest information is collected for an endgame back at the multitouch table.				

4.3   Report on societal implications

A   General Information *(completed automatically when **Grant Agreement number** is entered.*

Grant Agreement Number:	231507
Title of Project:	PuppyIR
Name and Title of Coordinator:	Prof. Dr. F.M.G. de Jong (UT)

B   Ethics

	x	Yes
1. Did you have ethicists or others with specific experience of ethical issues involved in the project?	○	No

2. Please indicate whether your project involved any of the following issues (tick box) :	*YES*
INFORMED CONSENT	
• Did the project involve children?	X
• Did the project involve patients or persons not able to give consent?	
• Did the project involve adult healthy volunteers?	
• Did the project involve Human Genetic Material?	
• Did the project involve Human biological samples?	
• Did the project involve Human data collection?	
RESEARCH ON HUMAN EMBRYO/FOETUS	
• Did the project involve Human Embryos?	
• Did the project involve Human Foetal Tissue / Cells?	
• Did the project involve Human Embryonic Stem Cells?	
PRIVACY	
• Did the project involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)	
• Did the project involve tracking the location or observation of people?	
RESEARCH ON ANIMALS	
• Did the project involve research on animals?	
• Were those animals transgenic small laboratory animals?	
• Were those animals transgenic farm animals?	
• Were those animals cloning farm animals?	
• Were those animals non-human primates?	
RESEARCH INVOLVING DEVELOPING COUNTRIES	
• Use of local resources (genetic, animal, plant etc)	
• Benefit to local community (capacity building ie access to healthcare, education etc)	
DUAL USE	
• Research having potential military / terrorist application	

C   Workforce Statistics

3   Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).

Type of Position	Number of Women	Number of Men
Scientific Coordinator	1	
Work package leader	1	5
Experienced researcher (i.e. PhD holders)	3	9

PhD Students	2	4
Other	3	2

4 How many additional researchers (in companies and universities) were recruited specifically for this project?	19
Of which, indicate the number of men:	6
Of which, indicate the number of women:	3

D	**Gender Aspects**		

5	**Did you carry out specific Gender Equality Actions under the project** ?	O X	Yes No

6   Which of the following actions did you carry out and how effective were they?

		Not at all effective			Very effective
❏	Design and implement an equal opportunity policy	O O	x	O O	
❏	Set targets to achieve a gender balance in the workforce	O O	x	O O	
❏	Organise conferences and workshops on gender	O O	x	O O	
❏	Actions to improve work-life balance	O O	x	O O	
O	Other:				

7   Was there a gender dimension associated with the research content – i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?

   x   Yes- please specify: in user studies gender counts were incorporated

   O   No

E	**Synergies with Science Education**

8   Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?

   O   Yes- please specify

   x   No

9   Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?

   x   Yes- please specify: coding package and training as part of the materials released in open source

   O   No

F	**Interdisciplinarity**

10   Which disciplines (see list below) are involved in your project?

x	Main discipline[13]: 2.2		
x	Associated discipline13: 3.3	X	Associated discipline13: 5.3

G	**Engaging with Civil society and policy makers**

11a	**Did your project engage with societal actors beyond the research community?** *(if 'No', go to Question 14)*	X O	Yes No

11b If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?

   O   No
   O   Yes- in determining what research should be performed
   O   Yes - in implementing the research
   x   Yes, in communicating /disseminating / using the results of the project

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[13] Insert number from list below (Frascati Manual)

			x	Yes
11c	**In doing so, did your project involve actors whose role is mainly to organise the dialogue with citizens and organised civil society (e.g. professional mediator; communication company, science museums)?**		O	No

12	**Did you engage with government / public bodies or policy makers (including international organisations)**
	O No
	O Yes- in framing the research agenda
	O Yes - in implementing the research agenda
	x Yes, in communicating /disseminating / using the results of the project

13a   Will the project generate outputs (expertise or scientific advice) which could be used by policy makers?

      O   Yes – as a **primary** objective (please indicate areas below- multiple answers possible)

      x   Yes – as a **secondary** objective (please indicate areas below - multiple answer possible)

      O   No

13b   If Yes, in which fields?

Audiovisual and Media Culture Education, Training, Youth	Enterprise	Information Society Public Health Research and Innovation	

13c   If Yes, at which level?

      x   Local / regional levels

      x   National level

      O   European level

      O   International level

H   Use and dissemination

14	How many Articles were published/accepted for publication in peer-reviewed journals?	Over 60 papers in peer-reviewed publication channels

To how many of these is open access[14] provided?	40%
How many of these are published in open access journals?	5%
How many of these are published in open repositories?	90%
To how many of these is open access not provided?	10%
Please check all applicable reasons for not providing open access:	

x publisher's licensing agreement would not permit publishing in a repository
❏ no suitable repository available
❏ no suitable open access journal available
❏ no funds available to publish in an open access journal
❏ lack of time and resources
❏ lack of information on open access
❏ other: ……………

15	How many new patent applications ('priority filings') have been made? *("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).*		0
16	**Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).**	Trademark	0
		Registered design	0
		Other	0
17	**How many spin-off companies were created / are planned as a direct result of the project?**		1
	Indicate the approximate number of additional jobs in these companies:		2

18	**Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project:**

❏	Increase in employment, or	x	In small & medium-sized enterprises
❏	Safeguard employment, or	❏	In large companies
❏	Decrease in employment,	❏	None of the above / not relevant to the project
x	Difficult to estimate / not possible to quantify	x	In musea.hospitals

19	**For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (*FTE = one person working fulltime for a year*) jobs:**	*Indicate figure:*
		x
	Difficult to estimate / not possible to quantify	

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[14] Open Access is defined as free of charge access for anyone via the internet.

I   Media and Communication to the general public

20   **As part of the project, were any of the beneficiaries professionals in communication or media relations?**

    x   Yes   ◯   No

21   **As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public?**

    ◯   Yes   x   No

22   ==**Which of the following have been used to communicate information about your project to the general public, or have resulted from your project?**==

x	Press Release	❑	Coverage in specialist press
❑	Media briefing	x	Coverage in general (non-specialist) press
❑	TV coverage / report	❑	Coverage in national press
❑	Radio coverage / report	❑	Coverage in international press
❑	Brochures /posters / flyers	x	Website for the general public / internet
x	DVD /Film /Multimedia	❑	Event targeting general public (festival, conference, exhibition, science café)

23   **In which languages are the information products for the general public produced?**

x	Language of the coordinator	x	English
❑	Other language(s)		

Question F-10: Classification of Scientific Disciplines according to the Frascati Manual 2002 (Proposed Standard Practice for Surveys on Research and Experimental Development, OECD 2002):

FIELDS OF SCIENCE AND TECHNOLOGY

1.   NATURAL SCIENCES
1.1   Mathematics and computer sciences [mathematics and other allied fields: computer sciences and other allied subjects (software development only; hardware development should be classified in the engineering fields)]
1.2   Physical sciences (astronomy and space sciences, physics and other allied subjects)
1.3   Chemical sciences (chemistry, other allied subjects)
1.4   Earth and related environmental sciences (geology, geophysics, mineralogy, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, oceanography, vulcanology, palaeoecology, other allied sciences)
1.5   Biological sciences (biology, botany, bacteriology, microbiology, zoology, entomology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences)

2   ENGINEERING AND TECHNOLOGY
2.1   Civil engineering (architecture engineering, building science and engineering, construction engineering, municipal and structural engineering and other allied subjects)
2.2   Electrical engineering, electronics [electrical engineering, electronics, communication engineering and systems, computer engineering (hardware only) and other allied subjects]
2.3.   Other engineering sciences (such as chemical, aeronautical and space, mechanical, metallurgical and materials engineering, and their specialised subdivisions; forest products; applied sciences such as geodesy, industrial chemistry, etc.; the science and technology of food production; specialised technologies of interdisciplinary fields, e.g. systems analysis, metallurgy, mining, textile technology and other applied subjects)

3.   MEDICAL SCIENCES
3.1   Basic medicine (anatomy, cytology, physiology, genetics, pharmacy, pharmacology, toxicology, immunology and immunohaematology, clinical chemistry, clinical microbiology, pathology)
3.2   Clinical medicine (anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, dentistry, neurology, psychiatry, radiology, therapeutics, otorhinolaryngology, ophthalmology)
3.3   Health sciences (public health services, social medicine, hygiene, nursing, epidemiology)

4.   AGRICULTURAL SCIENCES
4.1   Agriculture, forestry, fisheries and allied sciences (agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)
4.2   Veterinary medicine

5.   SOCIAL SCIENCES
5.1   Psychology
5.2   Economics
5.3   Educational sciences (education and training and other allied subjects)
5.4   Other social sciences [anthropology (social and cultural) and ethnology, demography, geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organisation and methods, miscellaneous social sciences and interdisciplinary , methodological and historical S1T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences].

6.   HUMANITIES
6.1   History (history, prehistory and history, together with auxiliary historical disciplines such as archaeology, numismatics, palaeography, genealogy, etc.)
6.2   Languages and literature (ancient and modern)
6.3   Other humanities [philosophy (including the history of science and technology) arts, history of art, art criticism, painting, sculpture, musicology, dramatic art excluding artistic "research" of any kind, religion, theology, other fields and subjects pertaining to the humanities, methodological, historical and other S1T activities relating to the subjects in this group] .