

Localization and Implementation of the COAR Controlled Vocabulary for Repositories in Turkey

COAR Annual Conference 2025 May 12-14, 2025 The National Institute of Informatics in Tokyo, Japan

Gultekin GURDAL Izmir Institute of Technology





Analysis of Current Resource Type Usages



The types of sources used in open access repositories in Türkiye vary greatly. This makes data discovery difficult. Inconsistent labeling of sources is a major problem.



Purpose and Scope of the Studies



Aim

To ensure better management of open access content in Türkiye by adapting COAR's work into Turkish.



Goals

The open access environment in Türkiye is rapidly developing. However, there is a lack of standardization in source type labeling. To standardize Turkish resource type labeling and increase international compatibility.



Scope

Examining the source types used in institutional archives in Türkiye and matching them with the COAR vocabulary.



Translating COAR Controlled Vocabularies into Turkish



Turkish translation of the COAR Access Rights vocabulary (2015) Review and translation of COAR Access Rights terms

Turkish translation of the Version Types vocabulary (2021) Translation of COAR Version Types terms into Turkish.

Most recently, contribution to the translation of Resource Type 3.2 (2024) Translations of Resource Type 3.2 and verification by experts in the application.

Collaboration and coordination with COAR

Voluntarily taking part in all COAR activities and announcing and disseminating the work in the national community.

Community Engagement and Awareness Raising



Shared translations through professional mailing lists



Received feedback



Promoted use and awareness via presentations





Workflow for Adapting COAR Vocabulary to Turkish



Examination

Detailed review of COAR documents for translation.

Translation

Translation of terms into Turkish.

Verification

Translations are checked and verified by practitioners.

Broadcasting

Publication of Turkish vocabulary and announcement of professional lists

Integration into Our Institutional Repository



Implemented COAR Resource Type 3.2 in our repository system



Integrated controlled terms into the 'resource type' field

A Domain-specific language for the document-based modeldriven engineering of business applications

	Simple item page
dc.contributor.author	Tuğlular, Tuğkan
dc.contributor.orcid	0000-0001-6797-3913
dc.date.accessioned	2025-05-05T08:56:09Z
dc.date.available	2025-05-05T08:56:09Z
dc.date.issued	2022
dc.department	İzmir Institute of Technology. Computer Engineering
dc.description.abstract	To facilitate the development of business applications, a domain-specific language (DSL), called DARC, is introduced in this paper. Business documents including the descriptions of the responsibilities, authorizations, and collaborations, are used as the first-class entities during model-driven engineering (MDE) with DARC. Hence the implementation of the business applications can be automatically achieved from the corresponding document models. The evaluation of using DARC DSL for the development of commercial business software was performed in an international sales, logistics, and service solution provider company. The results showed that the code for all business documents and more than 50% of the responsibility descriptions composing the business applications could be generated automatically by modeling with DARC. Finally, according to the users' feedback, the assessment clearly revealed the adoption of DARC features in terms of the DSL quality characteristics, namely functional suitability, usability, reliability, maintainability, productivity, extensibility, compatibility, and expressiveness.
dc.description.provenance	Submitted by Aysen BINEN (aysenbinen@iyte.edu.tr) on 2025-05-05T08:56:09Z No. of bitstreams: 1 A_Domain-Specific_Language_for_the_Document-Based_Model- Driven_Engineering_of_Business_Applications.pdf: 1443233 bytes, checksum: bd0e4878878635fd7dafc190047bbb36 (MD5)
dc.description.provenance	Made available in DSpace on 2025-05-05T08:56:09Z (GMT). No. of bitstreams: 1 A_Domain- Specific_Language_for_the_Document-Based_Model- Driven_Engineering_of_Business_Applications.pdf: 1443233 bytes, checksum: bd0e4878878635fd7dafc190047bbb36 (MD5) Previous issue date: 2022
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dc.identifier.issn	2169-3536
dc.identifier.uri	https://doi.org/10.1109/ACCESS.2022.3210530
dc.identifier.uri	https://premium-demo.gcris.com/handle/123456789/122

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	dc.rights	open access	n access		
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	dc.subject	Business applica	tion		
	dc.subject	Domain-specific	language		
	dc.subject	Model-driven engineering			
	dc.subject	DARC			
	dc.title	A Domain-speci applications	fic language for the document-based mode		
	dc.type	journal article			
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		-	oar/resource_type/c_6501		
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Format:

Description:

Adobe Portable Document Format

Journal Article

Link to Access: https://premium-demo.gcris.com/entities/publication/df52572d-d6d8-4026-8568-b70028de8fa7/full

en

en

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Resource Type Hierarchy





Communities Home Browse GCRIS . Entities . Statistics Overview By Issue Date By Author By Title By Subject **IZTECH GC** tabase Ву Туре ogy (IZTECH) Research Ecosystem, is an By Language vering all research outputs in IZTECH. It also activities and allows sharing with the whole scientific world rvation. By Scopus Q By WoS Q Q Search By Project Funding By Access Right By Journal By Publication Category By COAR Access Rights Category Org Projects By COAR Resource Type Category 8 1 By Subject Category **Scholarly Output Distribution Citation Counts** (Citations Within Organization) Other Citation Counts







Communities Home Browse GCRIS • Entities • Overview

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	Journal Article Citation - Wo5: 6 Citation - Scopus: 7 Synthesis and characterization of novel high temperature structural ac
	hesives based on nadic end capped MDA-BTDA-ODA copolyimide
	(lop Publishing Ltd, 2018) Acar, Oktay; Varis, Serhat; Isik, Tugba; Tirkes, Seha; Der
	A series of novel copolyimide structural adhesives were synthesized using 4,4'-diar
	odiphenyl-methane (MDA), 3,4'-oxydianiline (ODA) and 3,3',4,4'-benzophenonete-
	tracarboxylic acid dianhy-dride (BTDA) as co-monomers, and nadic anhydride as
	✓ Show more

gineering of business applications

(IEEE, 2022) Tuğlular, Tuğkan; Tuğlular, Tuğkan; 0000-0001-6797-3913 To facilitate the development of business applications, a domain-specific language (DSL), called DARC, is introduced in this paper. Business documents including the descriptions of the responsibilities, authorizations, and collaborations, are used as Show more

onon more

Journal Article Citation - WoS: 12 Citation - Scopus: 17

Triboluminescent electrospun mats with blue-green emission under mechanical force

(American Chemical Society, 2017) Incel, Anil; Varlikli, Canan; McMillen, Colin D.; Fibrous mechanosensing elements can provide information about the direction of crack propagation and the mechanism of material failure when they are homogeneously dispersed into the bulk volume of materials. A fabrication strategy of fib. Show more

Journal Article Citation - WoS: 4 Citation - Scopus: 9

End-to-end security implementation for mobile devices using TLS proto-

Difficulties Encountered During the Studies and Solution Suggestions



Various difficulties were encountered during the translation work. Cultural differences and synonymy issues were tried to be resolved.

Standardizing terms can take time.



National Contributions to a Global Framework



Türkiye's contribution to COAR vocabularies



Aligning national repository systems with global standards



Enabling interoperability through shared terminology



İzmir Institute of Technology: As a contact point of COAR

Through this work, we aimed to bridge national systems with international standards. The use of COAR vocabularies in Turkish enhances interoperability and supports open science practices. We are proud to contribute to a global effort from our local context.

We have integrated the COAR Resource Type Vocabulary into our institutional system, IZTECH GCRIS. Link to Access: https://gcris.iyte.edu.tr/.

 $\sqrt{1}$ In the demo version, resource types are now classified according to COAR standards. Link to Access: <u>https://premium-demo.gcris.com/home</u>

 \checkmark This enables:

- > Clear and consistent content type definition
- \succ Improved interoperability with external systems.

V The production launch is planned for June 2025.



- We plan to organize a webinar for other institutions in Türkiye
- We will prepare a practical integration guide to support adoption.





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