

Class Name:	Thomson Reuter	ID:		Type:	Journals
Description:	A specific type of journal managed within the system	1		Associated UC:	Journals search and data retrieval
Responsibilities	Provide journal data for search and retrieval			Collaborators	Journals, Journals Data
Attributes	Journal name, publisher				
Relationships	Part of Journals				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	Journals Data				

Class Name:	Scopus	ID:		Type:	Journals
Description:	A specific type of journal managed within the system	2		Associated UC:	Journals search and data retrieval
Responsibilities	Provide journal data for search and retrieval			Collaborators	Journals, Journals Data
Attributes	Journal name, publisher				
Relationships	Part of Journals				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	Journals Data				

Class Name:	Normal	ID:		Type:	Journals
Description:	Represents regular journals not categorized under Thomson Reuters or Scopus	3		Associated UC:	Journals search and data retrieval
Responsibilities	Provide standard journal data for search and retrieval			Collaborators	Journals, Journals Data
Attributes	Journal name, publisher				
Relationships	Part of Journals				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	Journals Data				

Class Name:	Journals	ID:		Type:	Research Publications
Description:	Represents the collection of all journals within the system	4		Associated UC:	Journals management and search
Responsibilities	Manage, provide data, and facilitate search for journals			Collaborators	Thomson Reuters, Scopus, Normal, Journals Data
Attributes	List of journals				
Relationships	Aggregates Thomson Reuters, Scopus, and Normal				
Generalization (is-a)					
Aggregation (has-a)	Journals Data				
Uses/Dependency					

Class Name:	Journals Data	ID:		Type:	Data
Description:	Contains detailed data related to journals	5		Associated UC:	Data retrieval and management
Responsibilities	Store and provide access to journal-specific data			Collaborators	Journals
Attributes	Journal metadata, articles, authors				
Relationships	Associated with Journals				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	Journals				

Class Name:	Conference	ID:		Type:	Research Publications
Description:	Represents the collection of all conferences within the system	6		Associated UC:	Conference management and search
Responsibilities	Manage, provide data, and facilitate search for conferences			Collaborators	
Attributes	List of conferences, dates, locations				
Relationships	Aggregates Conference Data				
Generalization (is-a)					

Aggregation (has-a)	Conference Data				
Uses/Dependency					

Class Name:	Conference Data	ID:		Type:	Data
Description:	Contains detailed data related to conferences	7		Associated UC:	Data retrieval and management
Responsibilities	Store and provide access to conference-specific data			Collaborators	Conference
Attributes	Conference metadata, papers, speakers				
Relationships	Associated with Conference				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	conference				

Class Name:	ResearchPublications	ID:		Type:	General
Description:	Represents all research publications, including journals and conferences	8		Associated UC:	Management of research publications
Responsibilities	Oversee the publication process and data			Collaborators	Journals, Conferences
Attributes	List of publications				
Relationships	Aggregates Journals and Conferences				
Generalization (is-a)					
Aggregation (has-a)	Journals, Conferences				
Uses/Dependency					

Class Name:	search	ID:		Type:	Functionality
Description:	Enables searching within the system for various publications	9		Associated UC:	Search functionality for publications
Responsibilities	Execute search queries and return results			Collaborators	Journals, Conference, ResearchPublications
Attributes	Search criteria, filters				
Relationships	Search criteria, filters				
Generalization (is-a)	Uses Journals, Conference, ResearchPublications				
Aggregation (has-a)					
Uses/Dependency	ResearchPublications, Journals, Conference				

Class Name:	staff	ID:		Type:	User
Description:	Represents the academic or administrative staff using the system	10		Associated UC:	Profile management, publication entry, search
Responsibilities	Enter and manage publication details, use system resources			Collaborators	ResearchPublications, search, updateexisting data
Attributes	Staff ID, name, department				
Relationships	Interacts with ResearchPublications, search				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	login				

Class Name:	student	ID:		Type:	User
Description:	Represents students using the system for research purposes	11		Associated UC:	Search publications, view details
Responsibilities	Use system to access research publications			Collaborators	ResearchPublications, search
Attributes	Student ID, name, course				
Relationships	Interacts with ResearchPublications, search				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	login				

Class Name:	login	ID:		Type:	Functionality
Description:	Authentication mechanism for users to access their profiles	12		Associated UC:	User authentication and session management
Responsibilities	Validate user credentials and manage sessions			Collaborators	staff, student, Admin
Attributes	Username, password, role				
Relationships	Initiates user sessions				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency					

Class Name:	updateexisting data	ID:		Type:	Functionality
Description:	Allows users, especially admins, to update existing records in the system	13		Associated UC:	Data update and management
Responsibilities	Update and maintain the accuracy of publication data			Collaborators	Admin, ResearchPublications, Journals Data, Conference Data
Attributes	Details of the data being updated				
Relationships	Modifies data in ResearchPublications, Journals Data, Conference Data				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	Admin Login				

Class Name:	Admin login	ID:		Type:	Functionality
Description:	Specialized login functionality for administrators	14		Associated UC:	Administrator authentication and session management
Responsibilities	Validate admin credentials and provide access to admin functionalities			Collaborators	Admin, updateexisting data
Attributes	Username, password				
Relationships	Initiates admin sessions				
Generalization (is-a)	Generalizes login				
Aggregation (has-a)					
Uses/Dependency	updateexisting data				

Class Name:	Admin	ID:		Type:	User
Description:	Represents administrators who manage the system	15		Associated UC:	System management, data update, user management
Responsibilities	Oversee the system, manage user accounts, update data			Collaborators	updateexisting data, Admin login, ResearchPublications
Attributes	Admin ID, name				
Relationships	Uses Admin login, updateexisting data				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	Admin Login				

Class Name:	ResearchPublications Details	ID:		Type:	Data
Description:	Contains the metadata and comprehensive details of research publications	16		Associated UC:	Detailed view and management of research publications
Responsibilities	Store and present detailed information about publications			Collaborators	ResearchPublications, Journals, Conferences
Attributes	Publication title, authors, abstract, publication date				
Relationships	Detailed view of ResearchPublications				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	ResearchPublications				

Class Name:	system	ID:		Type:	Core
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Description:	The main system that encapsulates all functionalities of the Research Publication Management System	17		Associated UC:	System-wide management and operation
Responsibilities	Facilitate all interactions and functionalities within the system			Collaborators	All other classes
Attributes	System settings, user data, publication data				
Relationships	Central entity that integrates all other classes				
Generalization (is-a)					
Aggregation (has-a)	All other classes				
Uses/Dependency					

Class Name:	webpage	ID:		Type:	Interface
Description:	Represents the user interface of the system where users interact	18		Associated UC:	User interaction and display of system data
Responsibilities	Display information and provide interaction interface to users			Collaborators	system, ResearchPublications, search
Attributes	UI components, layout, content				
Relationships	Displays system and publication data				
Generalization (is-a)					
Aggregation (has-a)					
Uses/Dependency	system				