Interactive / short / 1

query	Interactive / short / 1
title	Profile of a person
pattern	
desc.	Given a start Person, retrieve their first name, last name, birthday, IP address, browser, and city of residence.

params				
1	`Person.id`	ID		`personId`

result				
1	`Person.firstName`	String	R	`firstName`
2	`Person.lastName`	String	R	`lastName`
3	`Person.birthday`	Date	R	`birthday`
4	`Person.locationIP`	String	R	`locationIP`
5	`Person.browserUsed`	String	R	`browserUsed`
6	`Person–isLocatedIn–>City.id`	32-bit Integer	R	`cityId`
7	`Person.gender`	String	R	`gender`
8	`Person.creationDate`	DateTime	R	`creationDate`

Interactive / short / 2

query	Interactive / short / 2
title	Recent messages of a person
pattern	
desc.	Given a start Person, retrieve the last 10 Messages created by that user. For each Message, return that Message, the original Post in its conversation, and the author of that Post. If any of the Messages is a Post, then the original Post will be the same Message, i.e. that Message will appear twice in that result.

params

1	Person.id	ID	personId

result

1	Message.id	64-bit Integer	R	messageId
2	Message.content or Post.imageFile	String	R	messageContent
3	Message.creationDate	DateTime	R	messageCreationDate
4	Post.id or Comment-replyOf*->Post.id	ID	R	originalPostId
5	Post-hasCreator->Person.id or Comment-replyOf*->Post-hasCreator->Person.id	ID	R	originalPostAuthorId
6	Post-hasCreator->Person.firstName or Comment-replyOf*->Post-hasCreator->Person.firstName	String	R	originalPostAuthorFirst·Name
7	Post-hasCreator->Person.lastName or Comment-replyOf*->Post-hasCreator->Person.lastName	String	R	originalPostAuthorLast·Name

sort

1	Message.creationDate	↓
2	Message.id	↓

Interactive / short / 3

query	Interactive / short / 3
title	Friends of a person
pattern	
desc.	Given a start Person, retrieve all of their friends, and the date at which they became friends.

params				
	1	`Person.id`	ID	`personId`

result					
	1	`Person.id`	ID	R	`personId`
	2	`Person.firstName`	String	R	`firstName`
	3	`Person.lastName`	String	R	`lastName`
	4	`Knows.creationDate`	DateTime	R	`friendshipCreationDate`

sort			
	1	`Knows.creationDate`	↓
	2	`Person.id`	↑

Interactive / short / 4

query	Interactive / short / 4
title	Content of a message
pattern	
desc.	Given a Message, retrieve its content and creation date.

params				
	1	`Message.id`	ID	`messageId`

result					
	1	`Message.creationDate`	ID	R	`messageCreationDate`
	2	`Message.content or Post.imageFile`	String	R	`messageContent`

Interactive / short / 5

<table>
<tr><td>IS 1</td><td>query</td><td colspan="2">Interactive / short / 5</td></tr>
</table>

IS 1	query	Interactive / short / 5
IS 2	title	Creator of a message
IS 3		
IS 4	pattern	
IS 5		
IS 6		
IS 7		
	desc.	Given a Message, retrieve its author.
	params	**1** `Message.id` ID `messageId`

1	`Message-hasCreator->Person.id`	ID	R	`personId`
2	`Message-hasCreator->Person.firstName`	String	R	`firstName`
3	`Message-hasCreator->Person.lastName`	String	R	`lastName`

Interactive / short / 6
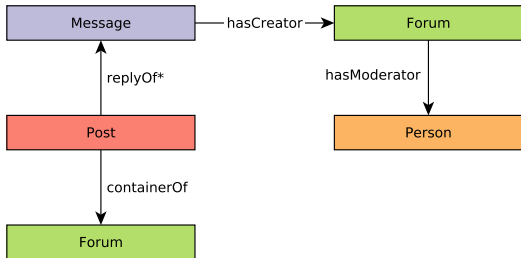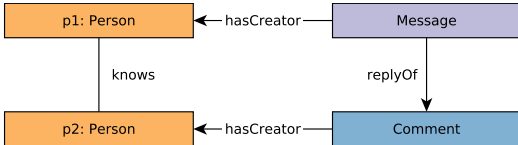
IS 1	query	Interactive / short / 6
IS 2	title	Forum of a message
IS 3		
IS 4	pattern	
IS 5		
IS 6		
IS 7		
	desc.	Given a Message, retrieve the Forum that contains it and the Person that moderates that Forum. Since Comments are not directly contained in Forums, for Comments, return the Forum containing the original Post in the thread which the Comment is replying to.
	params	**1** `Message.id` ID `messageId`

1	`Message<-containerOf-Forum.id`	ID	R	`forumId`
2	`Message<-containerOf-Forum.title`	String	R	`forumTitle`
3	`Message<-containerOf-Forum-hasModerator->Person.id`	ID	R	`moderatorId`
4	`Message<-containerOf-Forum-hasModerator->Person.firstName`	String	R	`moderatorFirstName`
5	`Message<-containerOf-Forum-hasModerator->Person.lastName`	String	R	`moderatorLastName`

Interactive / short / 7

query	Interactive / short / 7
title	Replies of a message

pattern	

desc.	Given a Message, retrieve the (1-hop) Comments that reply to it. In addition, return a boolean flag `knows` indicating if the author of the reply knows the author of the original message. If author is same as original author, return false for `knows` flag.

params				
	1	`Message.id`	ID	`messageId`

result					
	1	`Message<-replyOf-Comment.id`	ID	R	`commentId`
	2	`Message<-replyOf-Comment.content`	String	R	`commentContent`
	3	`Message<-replyOf-Comment.creationDate`	DateTime	R	`commentCreationDate`
	4	`Comment-hasCreator->Person.id`	ID	R	`replyAuthorId`
	5	`Comment-hasCreator->Person.firstName`	String	R	`replyAuthorFirstName`
	6	`Comment-hasCreator->Person.lastName`	String	R	`replyAuthorLastName`
	7	`knows`	Boolean	C	`replyAuthorKnowsOriginal·MessageAuthor`

sort			
	1	`Message<-replyOf-Comment.creationDate`	↓
	2	`Comment-hasCreator->Person.id`	↑