

SWS Assignment 10: Dating Service: Interim Reports on Component Specifications

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Introduction

This is a first report for the specification of the Matching Logic (ML). This is by no means ment to be complete and precise, but rather a result of brainstorm sessions.

The different tables specify actions possible on the ML. For every table holds that the time is increasing from top to bottom. This means that we are not specific about how much time some action takes, but only specify the order of the actions.

Types

type interestLevel :: Neutral | sInterest | Interest | BlackList | Nothing

type user :: The user with his properties (also referenced with *this*)

Assumptions

The user context in which requests are done is global and passed along with every message between the GUI and the ML and between the ML and the DB.

Retrieving suggested users for a match

		<i>ui messages</i>	ML	<i>db messages</i>		DB
	→	suggestions				
			Prefs :: [(<i>field</i> , <i>value</i>)] Prefs := this.getPreferences	getUsers Prefs	→	
			PrefList :: [<i>user</i>]		←	
			BlackList :: [<i>user</i>]	blacklistedUsers	→	
				silentlyInterestedIn	→	
			SilentlyInterestedList :: [<i>user</i>]		←	
	←	(PrefList ∪ SilentlyInterestedList) - BlackList				

Setting the interest level

UI	<i>ui messages</i>	ML	<i>db messages</i>	DB
→	interestFrom <i>level user</i>		setInterestFrom <i>level user</i>	→
		if(<i>level</i> == sInterest ∨ <i>level</i> == Interest) InterestTo :: <i>interestLevel</i>	getInterestTo <i>user</i>	→
				←
		if(InterestTo == sInterest ∨ InterestTo == Interest) if(<i>level</i> == BlackList ∨ <i>level</i> == Neutral) MatchWith :: <i>boolean</i>	setMatchWith <i>user</i>	→
			getMatchWith <i>user</i>	→
				←
		if(MatchWith)	removeMatchWith <i>user</i>	→

Searching for users

UI	<i>ui messages</i>	ML	<i>db messages</i>	DB
→	search [(<i>field, value</i>)]		getUsers [(<i>field, value</i>)]	→
		UserList :: [<i>user</i>]		←
		BlackList :: [<i>user</i>]	blacklistedUsers	→
				←
←	UserList - BlackList			

Unregistering a user

UI	<i>ui messages</i>	ML	<i>db messages</i>	DB
→	unregister		unregister	→