Adala

Final year project

Student: Hamad Almarri
SID: 200294236
Major: Software Systems Engineering
University of Regina

What is Adala

Adala is a software project that facilitate law enforcement processes (Police and Investigation) to let them manage and monitor different police cases. It will have also a database of people, cars, addresses, and properties, and It will support work-flow such as open/foreword cases to be a special cases for investigation purposes, which will include work-flow actions such as approve and deny processes.

Police cases can be incident/accident reports, or arrest reports.

Features

- Everything as an entry can be associated with anything else under a relation name (i.e. relate a person with suspicious car)

- Logging any changes on data

- Visualized analysis tool for the investigators to ease their work

- Monitoring and reporting for police cases

- Information locked by its author

- For new crime, giving suspect criminals

- More

Classify the Criminal/s

Data mining will be implemented so the software will be able to classify criminal/s based on the cases' inputs and by utilizing previous data the software will provide suggested criminal/s' attributes that are based on the results coming from Artificial Neural Network (ANN) model.

Crime Prevention

The software also should be able to apply crime prevention for youth at risk by collected and analyzing history data of a young person and the software will be able to classify that person if he/she has high probability of being a criminal in the future.

Development Info

- Scrum (incremental agile software development. on targateprocess.com)

- Git repository (on bitbucket.org)

- J2EE (JSF + Primefaces)

- Glassfish as webserver

- EclipseLink (JPA)

- Mysql (database)

- AWS -> EC2 -> CentOS (Host)

- My favourite IDE -> Eclipse :D

Milestones

+ −		ID ⇟	Name	Project	Start Date	End Date	Sprints	Effort	Progress	Tags
−	☐	433	Release #3	FIN	01-Jan-2015	14-Mar-2015	6	240 h	0%	

	Name	Velocity	Start Date	End Date	Effort	Progress
	Sprint#3.1	0 h	03-Jan-2015	16-Jan-2015	240 h	0%
	Sprint#3.2	0 h	17-Jan-2015	30-Jan-2015	0 h	0%
	Sprint#3.3	0 h	31-Jan-2015	13-Feb-2015	0 h	0%
	Sprint#3.4	0 h	14-Feb-2015	27-Feb-2015	0 h	0%
	Sprint#3.5	0 h	28-Feb-2015	13-Mar-2015	0 h	0%
	Sprint#3.6	0 h	14-Mar-2015	24-Mar-2015	0 h	0%

−	☐	415	Release #2 (current)	FIN	01-Oct-2014	31-Dec-2014	7	273 h	~16%	

	Name	Velocity	Start Date	End Date	Effort	Progress
	Sprint #2.1 (current)	0 h	04-Oct-2014	17-Oct-2014	80 h	~55%
	Sprint#2.2	0 h	18-Oct-2014	31-Oct-2014	0 h	0%
	Sprint#2.3	0 h	01-Nov-2014	14-Nov-2014	5 h	0%
	Sprint#2.4	0 h	15-Nov-2014	28-Nov-2014	60 h	0%
	Sprint#2.5	0 h	29-Nov-2014	12-Dec-2014	24 h	0%
	Sprint#2.6	0 h	13-Dec-2014	26-Dec-2014	89 h	0%
	Sprint#2.7	0 h	27-Dec-2014	31-Dec-2014	15 h	0%

−	☐	403	Release #1	FIN	12-Aug-2014	31-Aug-2014	2	41 h	100%	

	Name	Velocity	Start Date	End Date	Effort	Progress
	Sprint #1.1	0.8 h	12-Aug-2014	21-Aug-2014	29 h	100%
	Sprint #1.2	0 h	22-Aug-2014	31-Aug-2014	12 h	100%

Release 1

409	**Sprint #1.2** 22 Aug / 31 Aug (10 days) ⓵							⊟
☰ 410	basic core functionalities...(Split)	Done	Must Have	12h	100% Dev		QA	Unassigned

404	**Sprint #1.1** 12 Aug / 21 Aug (10 days) ⓶							⊟
☰ 383	basic core functionalities	Done	Must Have	24h	100% Dev		QA	Unassigned
☰ 373	threat assessment (low, medium, high)	Done	Must Have	5h	100% Dev		QA	Unassigned

Release 2

430	**Sprint#2.5** 29 Nov / 12 Dec (14 days) ①							⊟
≡ 365	show map	Open	Must Have	24h	0%	Dev	QA	Unassigned

429	**Sprint#2.4** 15 Nov / 28 Nov (14 days) ①							⊟
≡ 375	reporting with graphs and filters	Open	Must Have	60h	0%	Dev	QA	Unassigned

428	**Sprint#2.3** 1 Nov / 14 Nov (14 days) ③							⊟
≡ 392	File attachment	Open	Must Have	5h	0%	Dev	QA	Unassigned
≡ 388	interview questions & witnesses	Open	Must Have	0h	0%	Dev	QA	Unassigned
≡ 398	logging	Open	Must Have	0h	0%	Dev	QA	Unassigned

427	**Sprint#2.2** 18 Oct / 31 Oct (14 days) ①							⊟
≡ 385	groups handle cases	Open	Must Have	0h	0%	Dev	QA	Unassigned

414	**Sprint #2.1** 4 Oct / 17 Oct (14 days) (current) ②							⊟
≡ 394	workflow and case life cycle	In Progress	Must Have	70h	61%	Dev	QA	Unassigned
≡ 426	Getting real data	In Progress	Great	10h	15%	Dev	QA	Unassigned

Release 2 cont.

431	**Sprint#2.6** 13 Dec / 26 Dec (14 days) (11)								⊟
☰ 441	User Profile	Open	Must Have	0h	0%	Dev		QA	Unassigned
☰ 386	Case Assignment & Prioritization	Open	Great	40h	0%	Dev		QA	Unassigned
☰ 382	data mining for association	Open	Great	0h	0%	Dev		QA	Unassigned
☰ 381	decision tree plugin	Open	Great	0h	0%	Dev		QA	Unassigned
☰ 380	neural network feature for classifying	Open	Great	0h	0%	Dev		QA	Unassigned
☰ 393	Roles	Open	Must Have	0h	0%	Dev		QA	Unassigned
☰ 370	graphical or visual analysis	Open	Great	0h	0%	Dev		QA	Unassigned
☰ 378	analysis tool	Open	Must Have	0h	0%	Dev		QA	Unassigned
☰ 387	prioritize suspected people	Open	Must Have	5h	0%	Dev		QA	Unassigned
☰ 367	for new crime, give suspect criminals	Open	Must Have	24h	0%	Dev		QA	Unassigned
☰ 397	show persons' history which is related to cases	Open	Must Have	20h	0%	Dev		QA	Unassigned

Release 2 cont.

432	**Sprint#2.7** 27 Dec / 31 Dec (5 days) (5)							⊟
≡	371	auto generate the visual analysis from the text report	Great	0h	0%	Dev	QA	Unassigned
≡	379	auto convert (date, location etc..) object in a written te…	Great	0h	0%	Dev	QA	Unassigned
≡	369	ability to chat or send messages	Open	Great	0h	0%	Dev	QA	Unassigned
≡	391	Notifications	Open	Must Have	15h	0%	Dev	QA	Unassigned
≡	368	information locked by its author	Open	Must Have	0h	0%	Dev	QA	Unassigned

Release 3

434	**Sprint#3.1** 3 Jan / 16 Jan (14 days) ⑤							⊟
☰ 374	daylite stuff	Open	Nice To Have	0h	0%	Dev	QA	Unassigned
☰ 384	mobile version	Open	Great	240h	0%	Dev	QA	Unassigned
☰ 376	reports speech synthesis	Open	Good	0h	0%	Dev	QA	Unassigned
☰ 399	tracking system	Open	Great	0h	0%	Dev	QA	Unassigned
☰ 389	Client and Personnel Tracking	Open	Great	0h	0%	Dev	QA	Unassigned

Release 3 cont.

439	**Sprint#3.6** 14 Mar / 24 Mar (11 days) ⊙							⊟

438	**Sprint#3.5** 28 Feb / 13 Mar (14 days) ⊙							⊟

437	**Sprint#3.4** 14 Feb / 27 Feb (14 days) ①							⊟
≡ 440	User interface should be friendly and ajaxized	Open	Must Have	0h	0%	Dev	QA	Unassigned

436	**Sprint#3.3** 31 Jan / 13 Feb (14 days) ④							⊟
≡ 401	oncall list	Open	Average	0h	0%	Dev	QA	Unassigned
≡ 400	different cities have different data	Open	Good	0h	0%	Dev	QA	Unassigned
≡ 396	store related events to the case	Open	Good	0h	0%	Dev	QA	Unassigned
≡ 372	techtical team?	Open	Nice To Have	0h	0%	Dev	QA	Unassigned

|								
435	**Sprint#3.2** 17 Jan / 30 Jan (14 days) ④							⊟
≡ 377	speech recognition to save discussion as text	Open	Good	0h	0%	Dev	QA	Unassigned
≡ 366	turn on the recorder automatically by saying greeting ...		Nice To Have	0h	0%	Dev	QA	Unassigned
≡ 395	taking picture by mobile upload it directly	Open	Good	0h	0%	Dev	QA	Unassigned
≡ 402	spell checker	Open	Good	0h	0%	Dev	QA	Unassigned

Progress

- What have been done so far

    – Sprints are done:

        • Sprint#1.1

        • Sprint#1.2

        • Sprint#2.1

        • Sprint#2.2

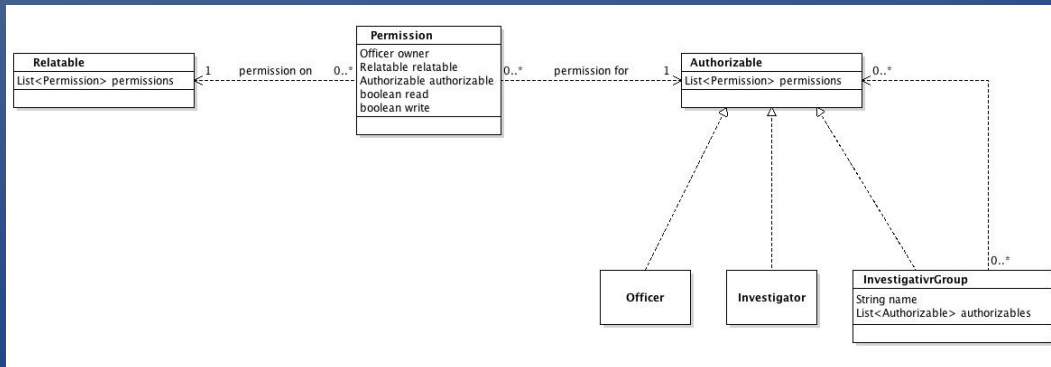   • Sprint#2.3

    – Sprint#2.4 (current sprint)

Screen Shoots

Sprint#2.1 Burn Down
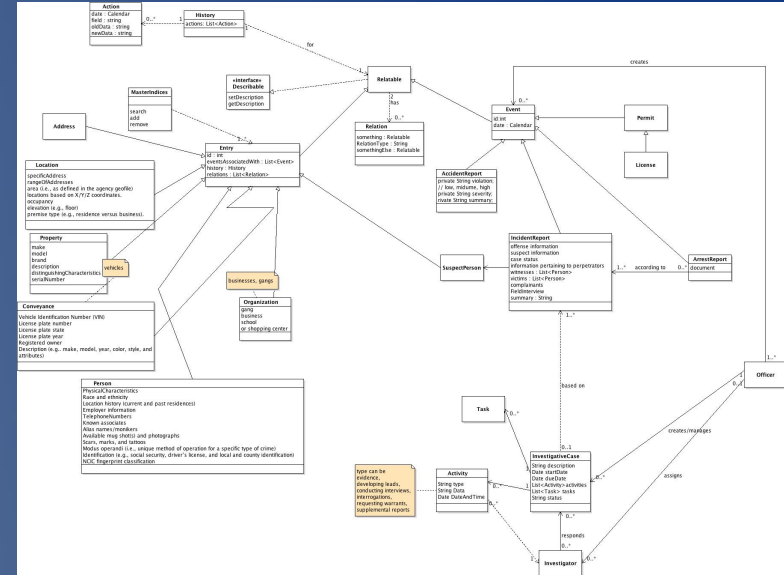
Core functionality UML

UML for permissions

Statistics

- User Stories

    - Must Have: 20 (**9** are already done)

    - Great:13 (**1** is done so far)

    - Good: 6

    - Average: 1

    - Nice To Have: 3

- The time effort done from 12Aug2014 till Now is **89** hours

- **14,569** Lines of Code so far for *.java, *.xhtml, and *.xml files (these are not Auto Generated code)

Examples of Already Existed Law Enforcement Softwares

- Column Investigative
  http://www.columncaseinvestigative.com/

- X-Fire by Agnovi
  http://agnovi.com/index.php/products-services/case-management

- i2 Integrated Law Enforcement by IBM
  http://www-03.ibm.com/software/products/en/integrated-law-enforcement

What has been done so far

- http://54.187.244.143/adala/