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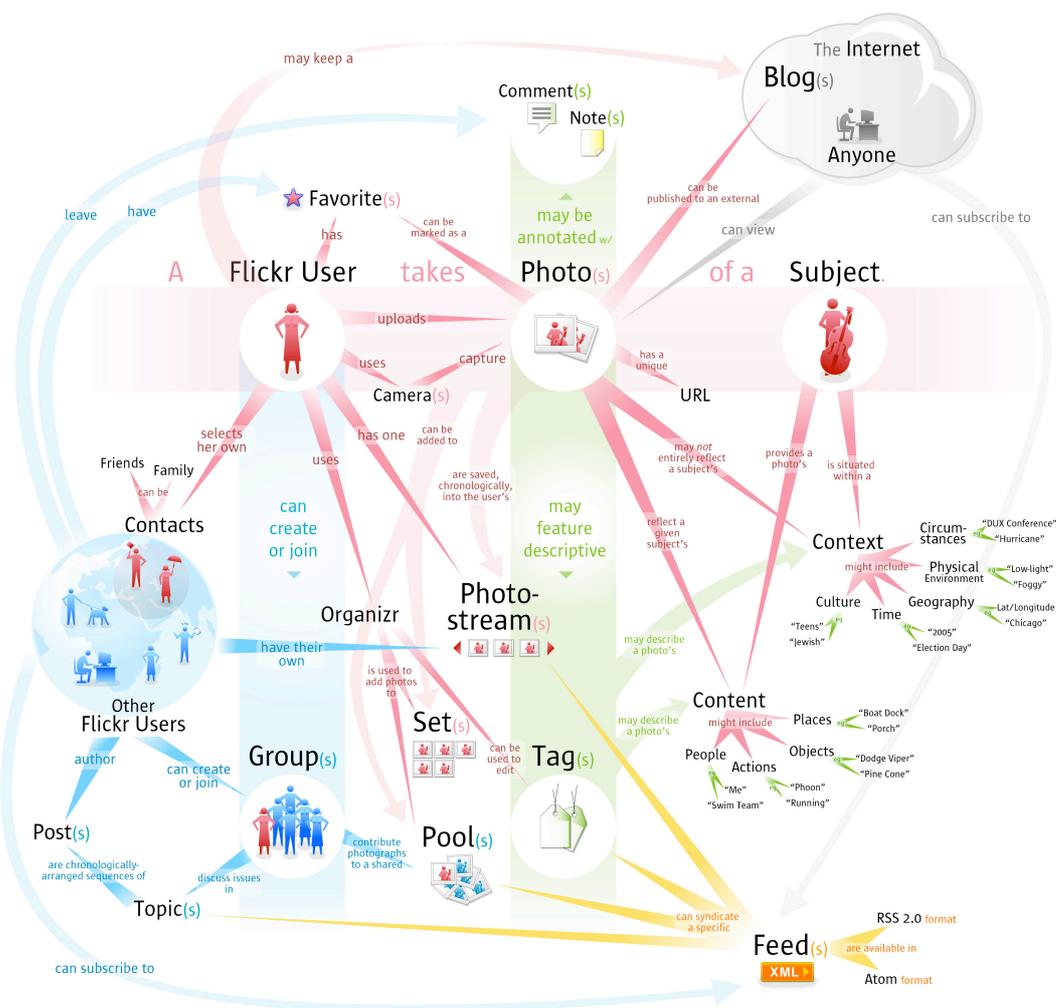


Figura A.3: Contexto Flickr completo. Crédito: <http://soldierant.net/>

B

Módulos de software da framework

O software integrante da *framework* proposta na seção 3.2 encontra-se disponível como um projeto open-source em <http://code.google.com/p/recfwk/>. Neste endereço são disponibilizados – além de downloads e exemplos de uso – mais detalhes sobre os pacotes, classes e interfaces integrantes dessa *framework*, que descrevemos rapidamente a seguir.

B.1

Packages

recfwk.engine Provides implementations for the main framework interfaces.

recfwk.filters Provides interfaces and implementations for data filters.

recfwk.io Provides implementations for data input and output.

recfwk.model Provides basic entities for implementing and conducting experiments with recommenders: Items, Recommendations, Users etc.

recfwk.util Provides misc utils: I/O, statistics and probability, performance measuring, string manipulation etc.

recfwk.vis Provides interfaces and implementations for representing performance results and experiment parameters graphically.

B.2

Package recfwk.engine

Provides implementations for the main framework interfaces.

Contains all implementations not falling on the other categories such as data filters, basic entity models, data loaders etc.

B.2.1

Class Summary

BaseConfig Holds the most important config parameters.

ExperimentRecorder Records experiment results to disk

SetRetrievalEvaluator Evaluates how well a recommender suggests items that should belong to a given set, by verifying whether a recommended item is indeed on the training set (repeated hold-out technique)

B.3

Package `recfwk.filters`

Provides interfaces and implementations for data filters.

B.3.1

Interface Summary

Filter filters a stream of data tuples

B.3.2

Class Summary

RandomSampleFilter random filter: randomly selects a given percentage of all filtered tuples

B.4

Package `recfwk.io`

Provides implementations for data input and output.

B.4.1

Class Summary

CSVItemTupleReader Reads data from text comma-separated files.

CSVItemTupleWriter writes a list of tuples to disk as comma-separated text files

B.5

Package `recfwk.model`

Provides basic entities for implementing and conducting experiments with recommenders: Items, Recommendations, Users etc.

B.5.1

Interface Summary

ItemSimilarity Stores the similarity between two content items

ItemTupleReader Reads data tuples

ItemTupleWriter Persists data tuples

Recommender Provides recommendations to target items.

B.5.2

Class Summary

Item Holds basic info about a content item

Recommendation Represents a recommendation made.

RecommendedItem Represents a recommended item.

B.6

Package `recfwk.util`

Provides misc utils: I/O, statistics and probability, performance measuring, string manipulation etc.

B.6.1

Class Summary

IOUtils I/O-related utility methods that don't have a better home.

RandomUtil Provides helpers for common random/statistics functions.

StopWatch Performance helper for measuring time lapses.

StringUtils Misc string utils.

B.7

Package `recfwk.vis`

Provides interfaces and implementations for representing performance results and experiment parameters graphically.

B.7.1

Interface Summary

BasicPlot Provides basic plot functions.

PlotBivariatePerformance Plots experimental data where you have a series two variables and an associated performance rate.

PlotHistogram Plots frequency histograms of given a series of entities or events and their associated count of occurrence.

PlotUnivariatePerformance Plots (line charts) experimental data where you have a series of performance rates and the associated value of an experiment variable.