FOOD-O-Pedia

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Agenda

- Introduction
- Google App Engine
- Application Architecture
- Use Cases
- Conclusion
- Demo

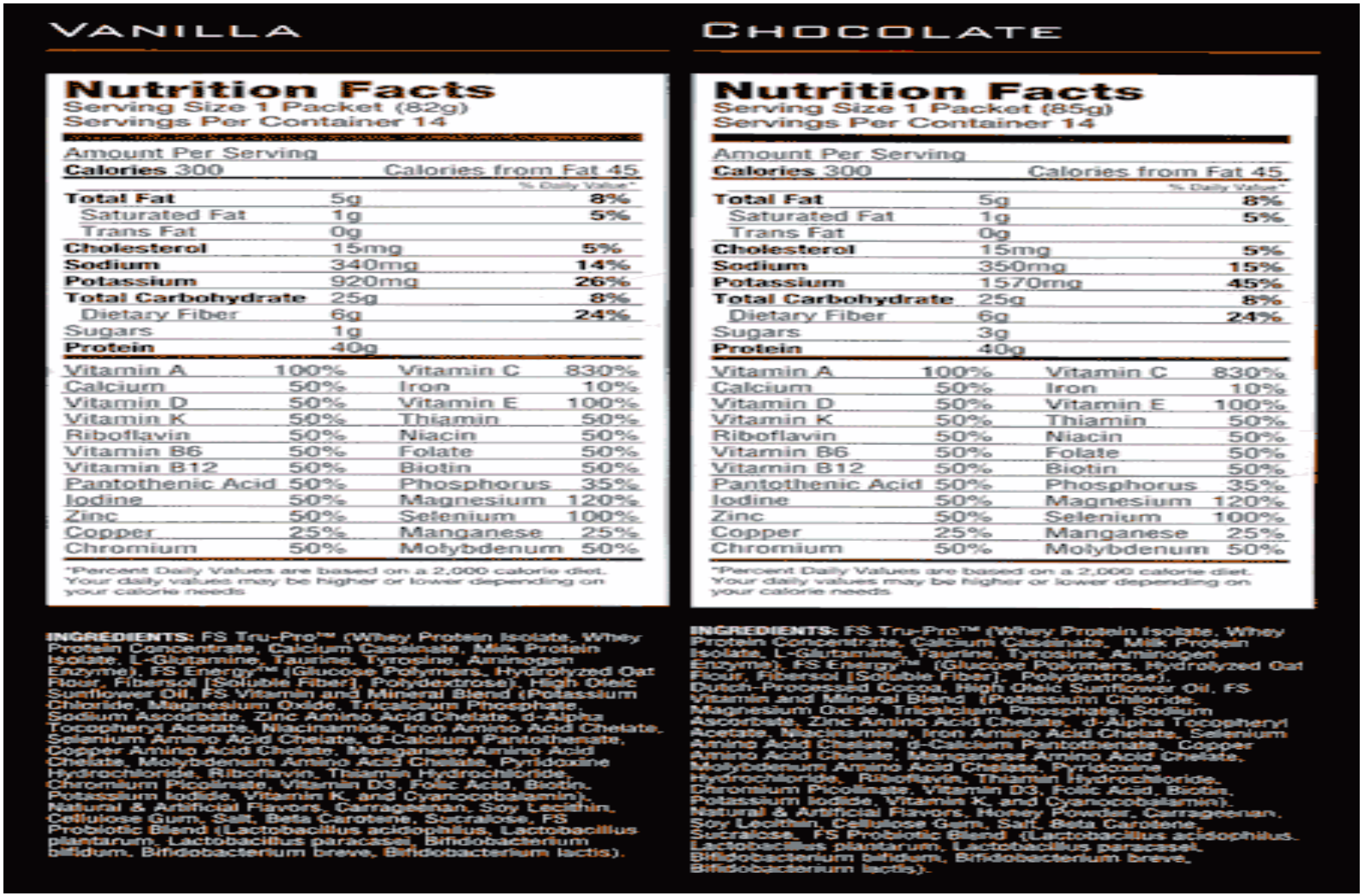
Introduction

- Food-O-Pedia is a Ingredients dictionary
- Based on Food Products.
- Easy information accessibility.
- Uses Google App Engine.
- Food-O-Pedia is a SaaS Application

Why Food-O-Pedia

- Consumers are Misguided.
- Hidden complex food names.
- No Proper information available
- Nutritional Label is not good enough.
- How it is related to my health?

Nutritional Fact Label



VANILLA

Nutrition Facts
Serving Size 1 Packet (82g)
Servings Per Container 14

Amount Per Serving		
Calories 300		Calories from Fat 45
		% Daily Value*
Total Fat	5g	**8%**
Saturated Fat	1g	**5%**
Trans Fat	0g	
Cholesterol	15mg	**5%**
Sodium	340mg	**14%**
Potassium	920mg	**26%**
Total Carbohydrate	25g	**8%**
Dietary Fiber	6g	**24%**
Sugars	1g	
Protein	40g	

Vitamin A	100%	Vitamin C	830%
Calcium	50%	Iron	10%
Vitamin D	50%	Vitamin E	100%
Vitamin K	50%	Thiamin	50%
Riboflavin	50%	Niacin	50%
Vitamin B6	50%	Folate	50%
Vitamin B12	50%	Biotin	50%
Pantothenic Acid	50%	Phosphorus	35%
Iodine	50%	Magnesium	120%
Zinc	50%	Selenium	100%
Copper	25%	Manganese	25%
Chromium	50%	Molybdenum	50%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs

INGREDIENTS: FS Tru-Pro™ (Whey Protein Isolate, Whey Protein Concentrate, Calcium Caseinate, Milk Protein Isolate, L-Glutamine, Taurine, Tyrosine, Aminogen Enzyme), FS Energy™ (Glucose Polymers, Hydrolyzed Oat Flour, Fibersol [Soluble Fiber], Polydextrose), High Oleic Sunflower Oil, FS Vitamin and Mineral Blend (Potassium Chloride, Magnesium Oxide, Tricalcium Phosphate, Sodium Ascorbate, Zinc Amino Acid Chelate, d-Alpha Tocopheryl Acetate, Niacinamide, Iron Amino Acid Chelate, Selenium Amino Acid Chelate, d-Calcium Pantothenate, Copper Amino Acid Chelate, Manganese Amino Acid Chelate, Molybdenum Amino Acid Chelate, Pyridoxine Hydrochloride, Riboflavin, Thiamin Hydrochloride, Chromium Picolinate, Vitamin D3, Folic Acid, Biotin, Potassium Iodide, Vitamin K, and Cyanocobalamin), Natural & Artificial Flavors, Carrageenan, Soy Lecithin, Cellulose Gum, Salt, Beta Carotene, Sucralose, FS Probiotic Blend (Lactobacillus acidophilus, Lactobacillus plantarum, Lactobacillus paracasei, Bifidobacterium bifidum, Bifidobacterium breve, Bifidobacterium lactis).

CHOCOLATE

Nutrition Facts
Serving Size 1 Packet (85g)
Servings Per Container 14

Amount Per Serving		
Calories 300		Calories from Fat 45
		% Daily Value*
Total Fat	5g	**8%**
Saturated Fat	1g	**5%**
Trans Fat	0g	
Cholesterol	15mg	**5%**
Sodium	350mg	**15%**
Potassium	1570mg	**45%**
Total Carbohydrate	25g	**8%**
Dietary Fiber	6g	**24%**
Sugars	3g	
Protein	40g	

Vitamin A	100%	Vitamin C	830%
Calcium	50%	Iron	10%
Vitamin D	50%	Vitamin E	100%
Vitamin K	50%	Thiamin	50%
Riboflavin	50%	Niacin	50%
Vitamin B6	50%	Folate	50%
Vitamin B12	50%	Biotin	50%
Pantothenic Acid	50%	Phosphorus	35%
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Food-O-Pedia Helps

- Narrows the search
- Information in simple language.
- Easy interpretation.
- Goal is to educate customers
- Helps to live and thrive.

Cloud Computing Categories

Google App Engine Overview

- A Platform as a Service
  - Lets you build and run web applications on the **Google infrastructure**.
  - You focus on developing your applications, let Google App Engine worry about the rest.
- Launched on 4/7/2008, out of preview 11/7/2011.
- Features: Easy, easy, and easy!
  - Easy to build
  - Easy to maintain
  - Easy to scale
  - Pay for what you use
  - **Free** to use with limited quotas
- 10 applications per developer account

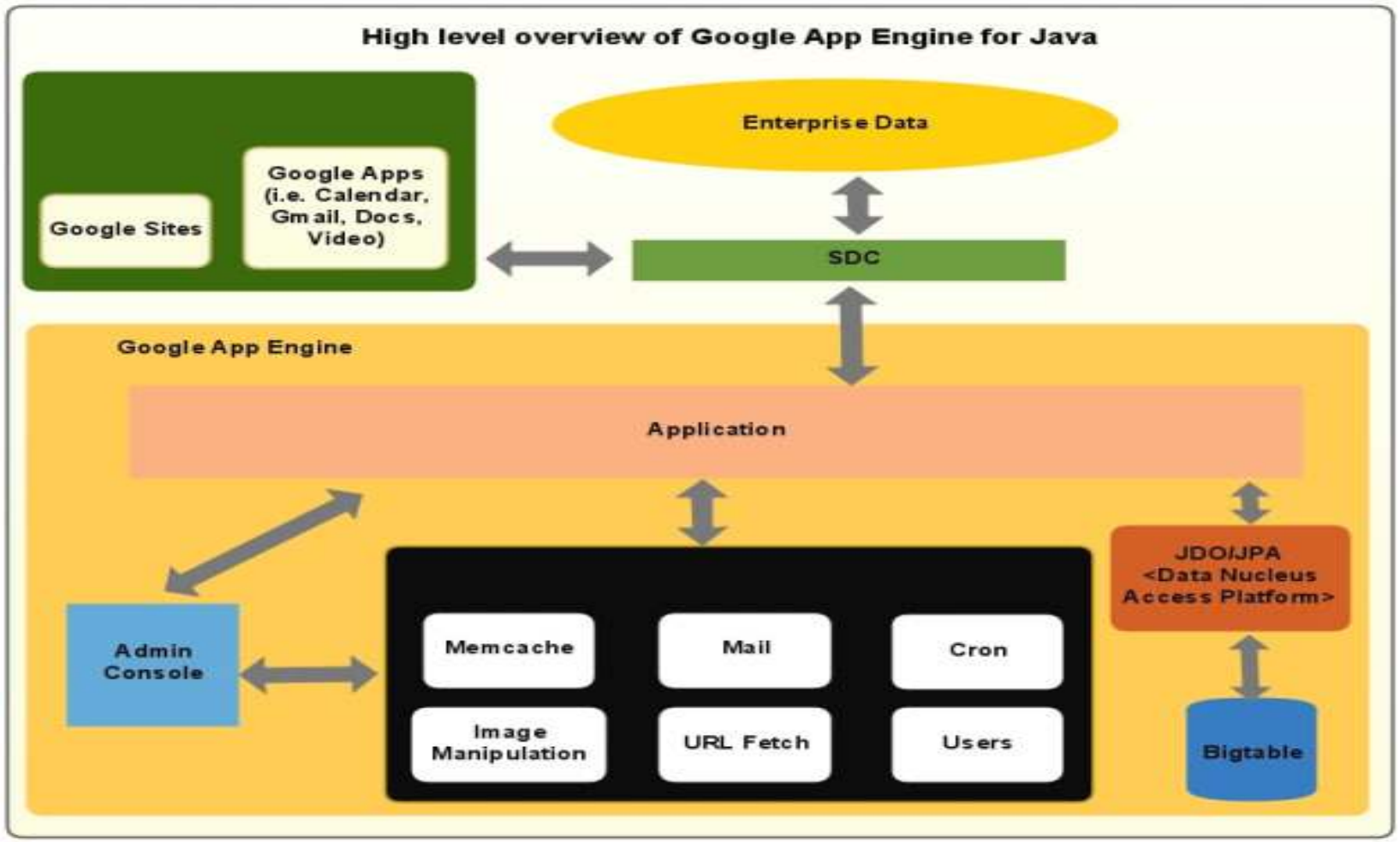
Free Resource Limit

Resource	Limit
Outgoing Bandwidth	1 GB/day, 56 MB/minute
Incoming Bandwidth	1 GB/day, 56 MB/minute
Frontend Instance Hours	28 hours/day
Backend Instance Hours	9 hours/day
Datastore Write Operations	0.05 M Ops/day
Datastore Read Operations	0.05 M Ops/day
Channels Created	100/day
Emails API	100 calls/day, 32 calls/minute

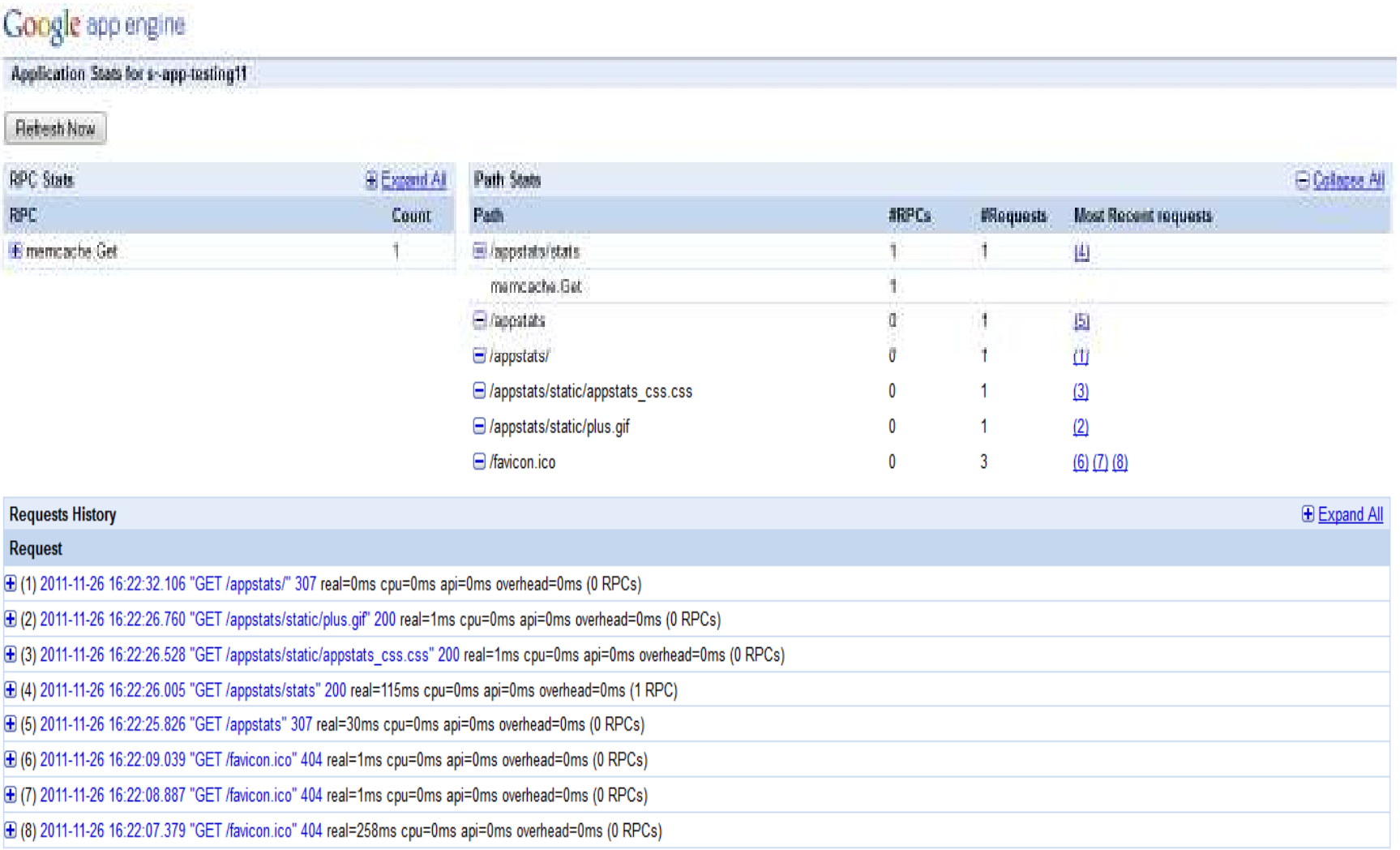
Billable Resources

Resource	Unit	Unit cost
Outgoing Bandwidth	gigabytes	$0.12
Frontend Instances	Instance hours	$0.04*
Discounted Instances	Instance hours	$0.025*
Backend Instances (B1 class)	Hourly per instance	$0.08
Backend Instances (B2 class)	Hourly per instance	$0.16
Backend Instances (B4 class)	Hourly per instance	$0.32
Backend Instances (B8 class)	Hourly per instance	$0.64
Stored Data (Blobstore)	gigabytes per month	$0.13
Stored Data (Datastore)	gigabytes per month	$0.24
Stored Data (Task Queue)	gigabytes per month	$0.24
Channel	Channel opened	$0.00001 ($0.01/100 channels)
Recipients Emailed	email	$0.0001
XMPP	XMPP stanzas	$0.000001 ($0.10/100,000 stanzas)

Google App Engine



Appstats



Google app engine

Application Stats for s~app-testing11

Refresh Now

RPC Stats — Expand All

RPC	Count
memcache.Get	1

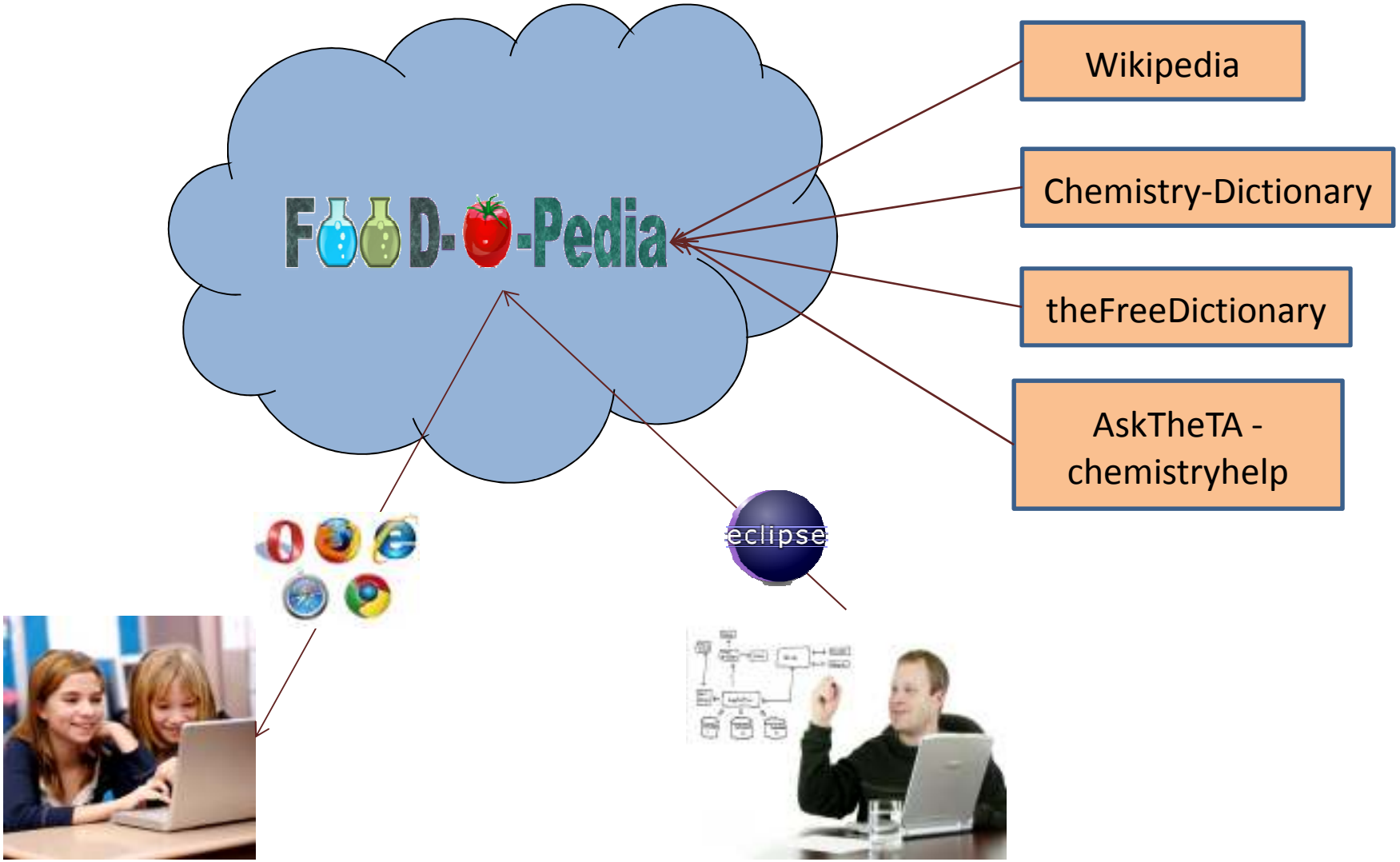
Path Stats — Collapse All

Path	#RPCs	#Requests	Most Recent requests
/appstats/stats	1	1	(4)
memcache.Get	1		
/appstats	0	1	(5)
/appstats/	0	1	(1)
/appstats/static/appstats_css.css	0	1	(3)
/appstats/static/plus.gif	0	1	(2)
/favicon.ico	0	3	(6) (7) (8)

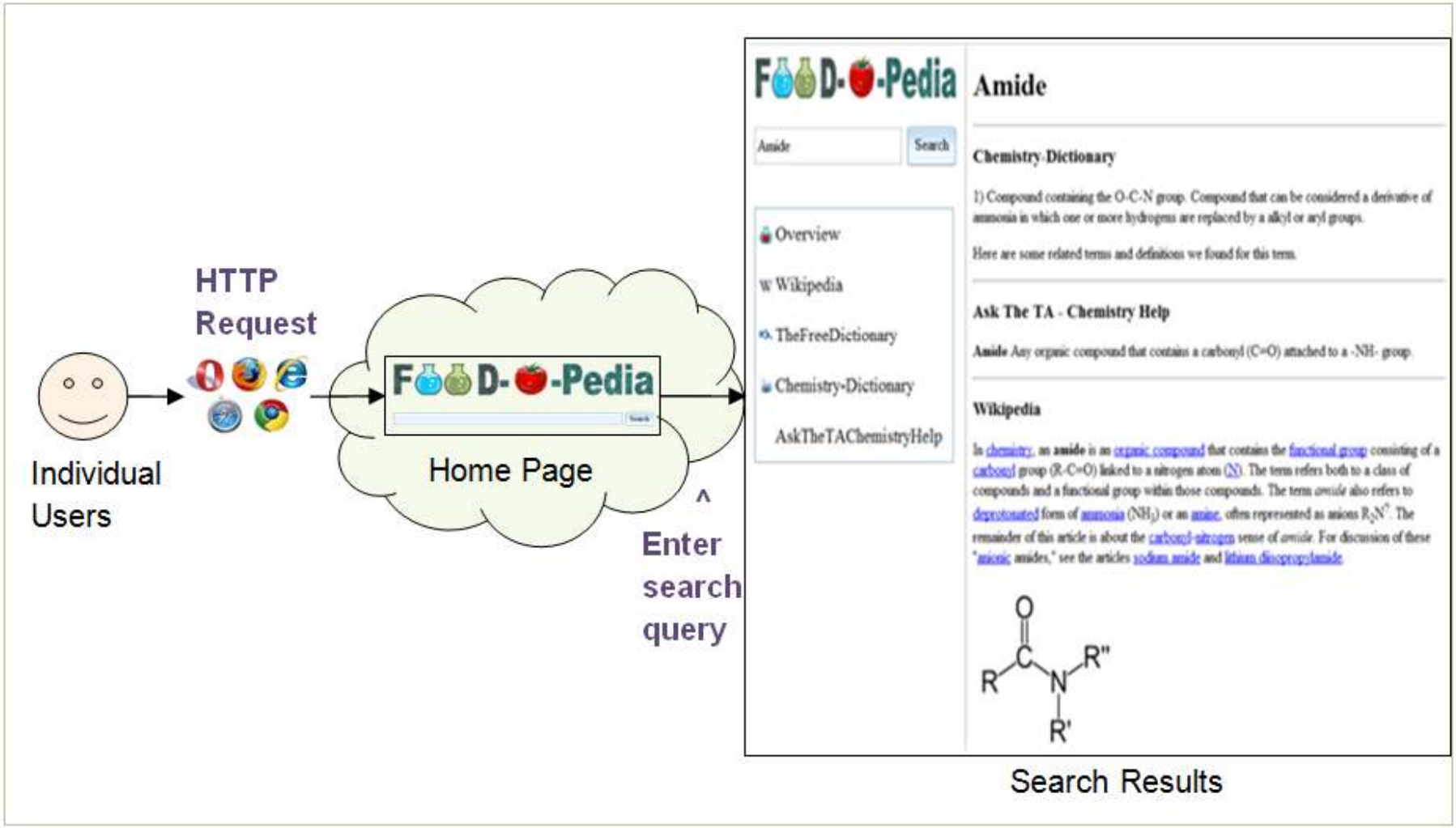
Requests History — Expand All

Request
(1) 2011-11-26 16:22:32.106 "GET /appstats/" 307 real=0ms cpu=0ms api=0ms overhead=0ms (0 RPCs)
(2) 2011-11-26 16:22:26.760 "GET /appstats/static/plus.gif" 200 real=1ms cpu=0ms api=0ms overhead=0ms (0 RPCs)
(3) 2011-11-26 16:22:26.528 "GET /appstats/static/appstats_css.css" 200 real=1ms cpu=0ms api=0ms overhead=0ms (0 RPCs)
(4) 2011-11-26 16:22:26.005 "GET /appstats/stats" 200 real=115ms cpu=0ms api=0ms overhead=0ms (1 RPC)
(5) 2011-11-26 16:22:25.826 "GET /appstats" 307 real=30ms cpu=0ms api=0ms overhead=0ms (0 RPCs)
(6) 2011-11-26 16:22:09.039 "GET /favicon.ico" 404 real=1ms cpu=0ms api=0ms overhead=0ms (0 RPCs)
(7) 2011-11-26 16:22:08.887 "GET /favicon.ico" 404 real=1ms cpu=0ms api=0ms overhead=0ms (0 RPCs)
(8) 2011-11-26 16:22:07.379 "GET /favicon.ico" 404 real=258ms cpu=0ms api=0ms overhead=0ms (0 RPCs)

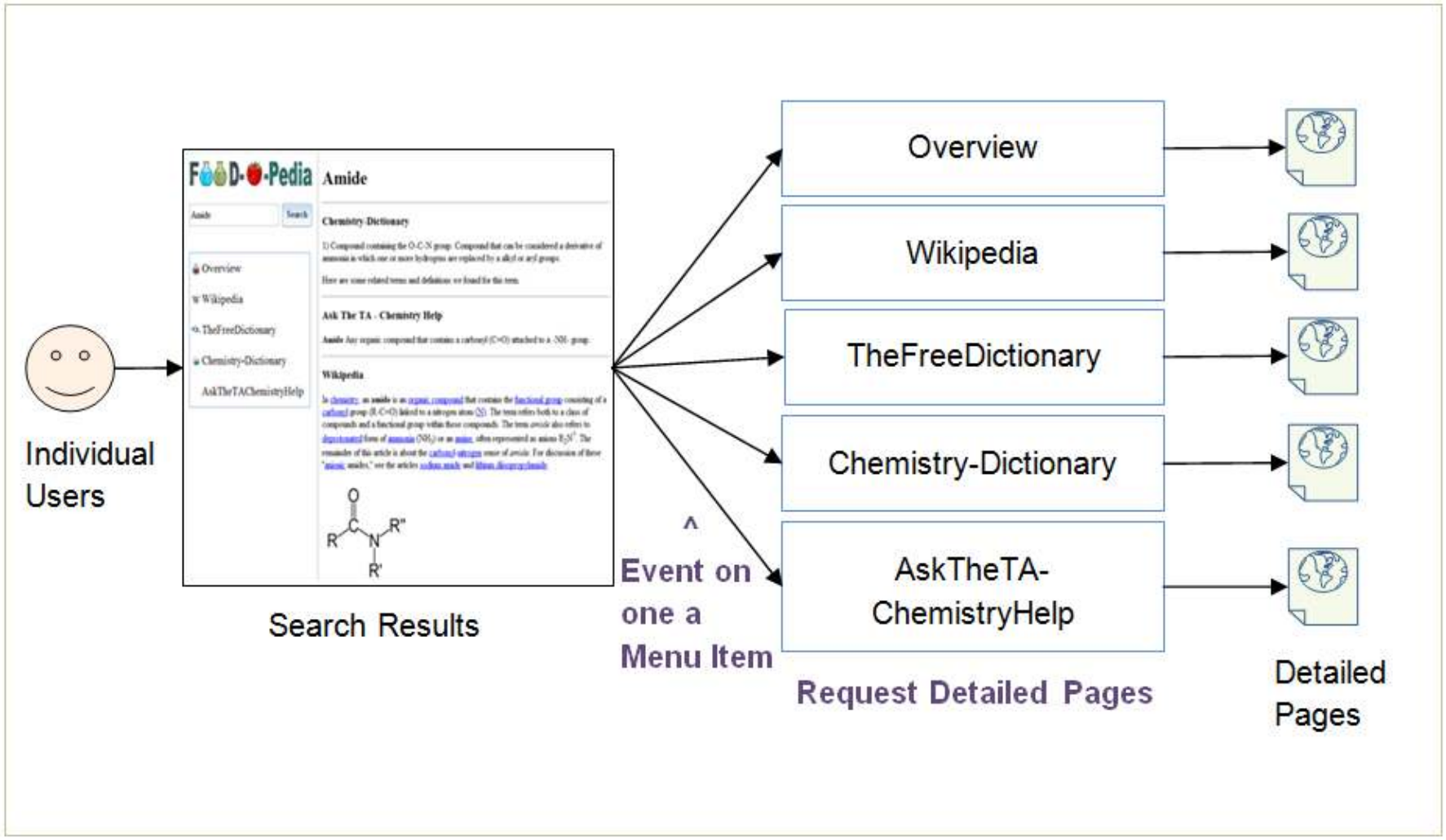
Application Architecture



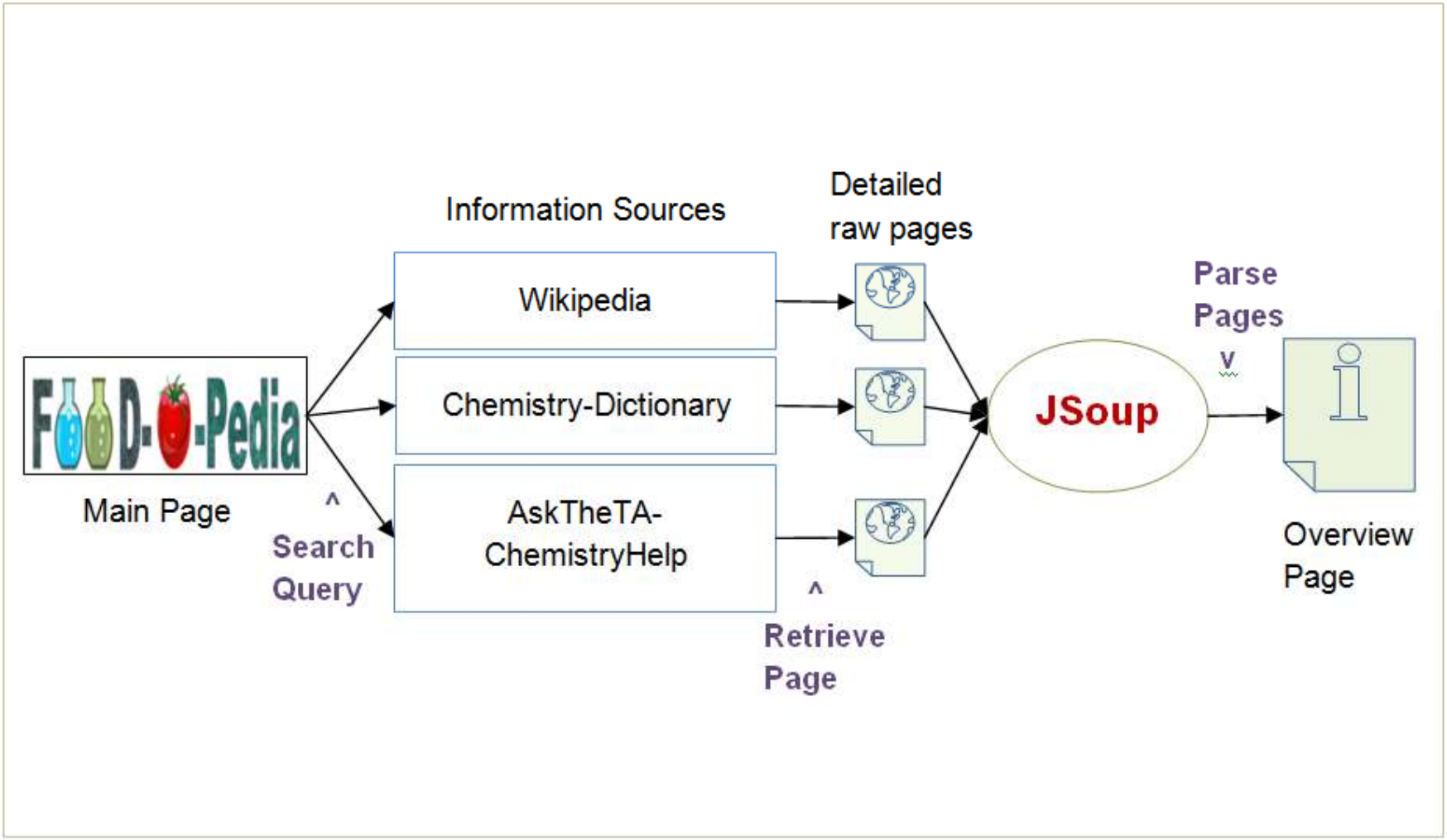
Use Case 01 –Search Request



Use Case 02 – Get Detailed Pages



Use Case 03 – Interaction between Food-o-pedia and its sources



References

- http://www.byteonic.com/2009/overview-of-java-support-in-google-app-engine/
- http://code.google.com/appengine/docs/whatisgoogleappengine.html
- http://googleappengine.blogspot.com/
- http://code.google.com/appengine/docs/quotas.html
- http://code.google.com/appengine/docs/billing.html