le cnam Liban

L'ISAE, le CNAM au Liban

Architecture and user Guide

CNAM Accounting

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Cloud Computing?

Introduction

CNAM Accounting using Cloud Computing, the basic idea is taking applications and running them on infrastructure other than your own. Companies or individuals who offload or effectively "outsource" their hardware and/or applications are running those apps "in the cloud."
Cloud computing is generally broken down into three primary service levels

SaaS

Software-as-a-Service

IaaS

Infrastructure-as-a-Service

PaaS

Platform-as-a-Service

Cloud Computing Service Levels

In Figure 1 below, you can see how the analyst firm Gartner segregates cloud computing into three distinct classes of service.

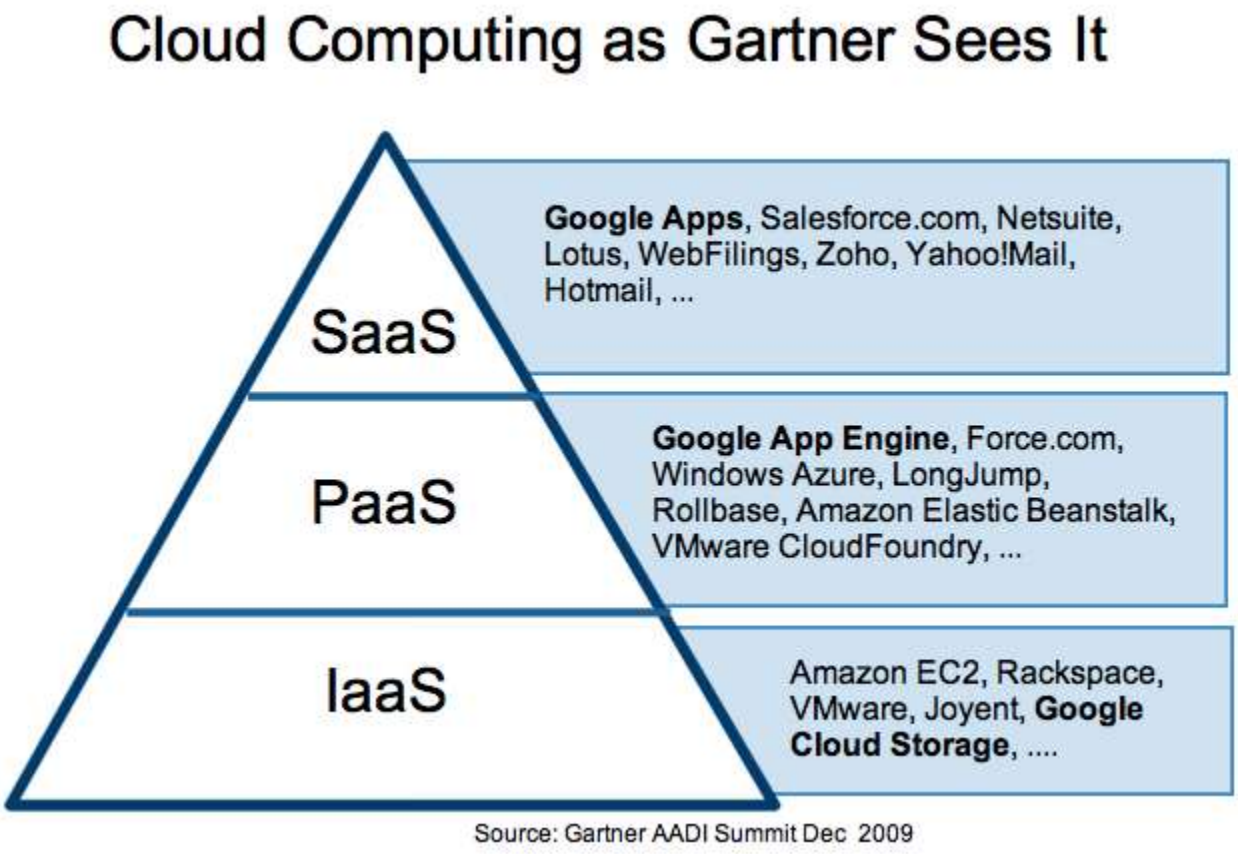


Figure 1: Cloud Computing Service Levels

Why appengine

1-Google App Engine lets you run web applications on Google's infrastructure
2- App Engine applications are easy to build, easy to maintain, and easy to scale as your traffic and data storage needs grow
3-With App Engine, there are no servers to maintain: You just upload your application, and it's ready to serve your users
4-GAE supports apps written in several programming languages (JAVA,etc..)
5-With App Engine, you only pay for what you use. There are no set-up costs and no recurring fees.
6-App Engine costs nothing to get started

The application environment

Google App Engine makes it easy to build an application that runs reliably, even under heavy load and with large amounts of data. App Engine includes the following features:

*dynamic web serving, with full support for common web technologies
*persistent storage with queries, sorting and transactions

*automatic scaling and load balancing
*APIs for authenticating users and sending email using Google Accounts
*a fully featured local development environment that simulates Google App Engine on your computer
*task queues for performing work outside of the scope of a web request
*scheduled tasks for triggering events at specified times and regular intervals

The Java runtime environment

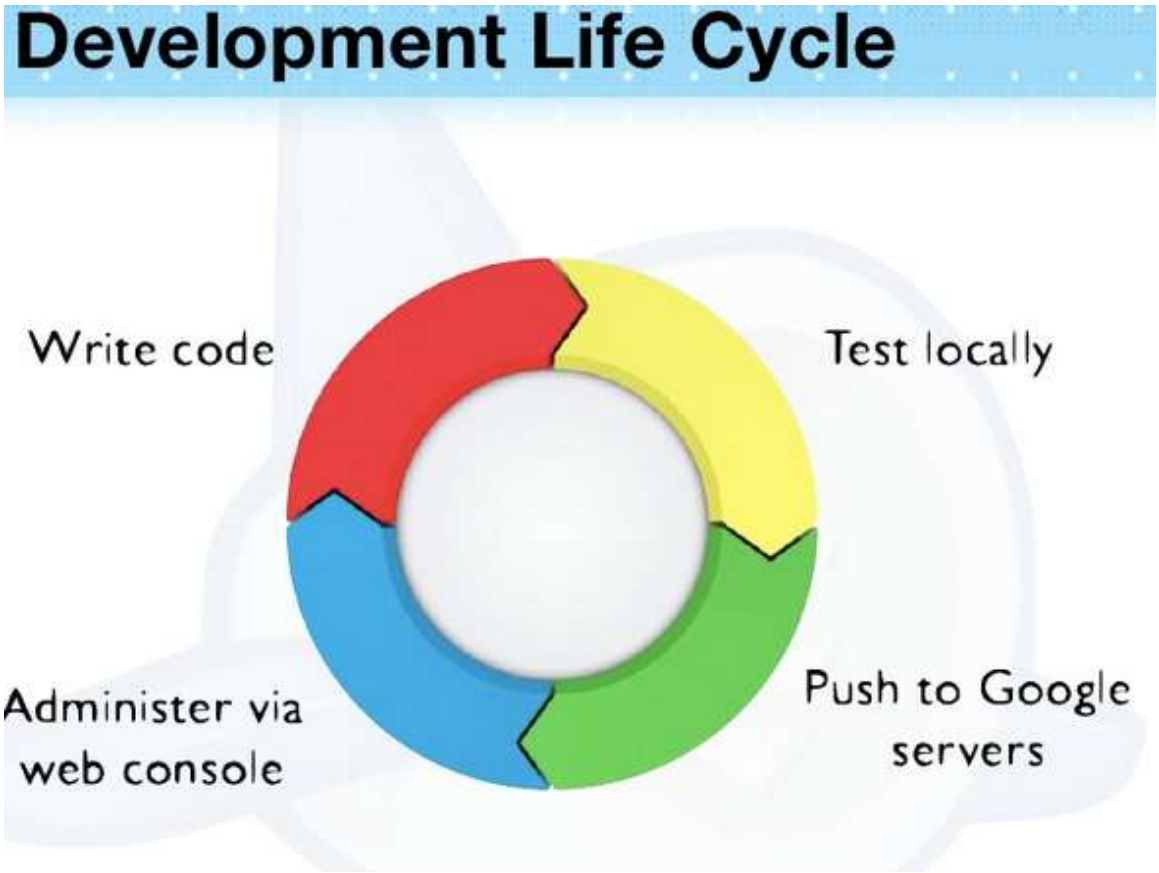
. Your app interacts with the environment using the Java Servlet standard, and can use common web application technologies such as JavaServer Pages (JSPs). The Java runtime environment uses Java 7.
Storing your data

The App Engine environment provides a range of options for storing your data (Free)

The Datastore

App Engine provides a distributed NoSQL data storage service that features a query engine and transactions. Just as the distributed web server grows with your traffic, the distributed datastore grows with your data. You have the choice between two different data storage options differentiated by their availability and consistency guarantees.
The App Engine datastore is not like a traditional relational database. Data objects, or "entities," have a kind and a set of properties. Queries can retrieve entities of a given kind filtered and sorted by the values of the properties.

Developing live cycle



Administration

One of the benefits in choosing to host your apps on PaaS systems is being freed from administration. However, this means giving up a few things... no longer do you have full access to your logs or be able to implement custom monitoring of your app (or your system). This is further impacted by the sandbox runtime environment mentioned above.

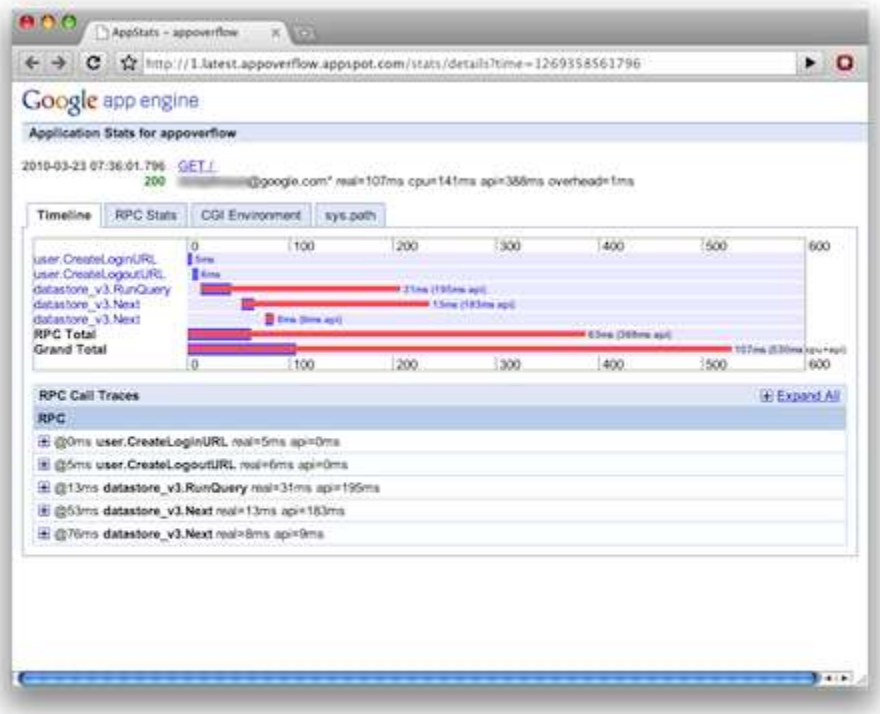


Figure 4: Application Performance via Appstats

Figure 1: Google App Engine Administration Console

Figure 2: Google App Engine SDK Admin Console

Architecture

Below are some figures about the Google app engine and some other extra available services

Structure of Google app engine

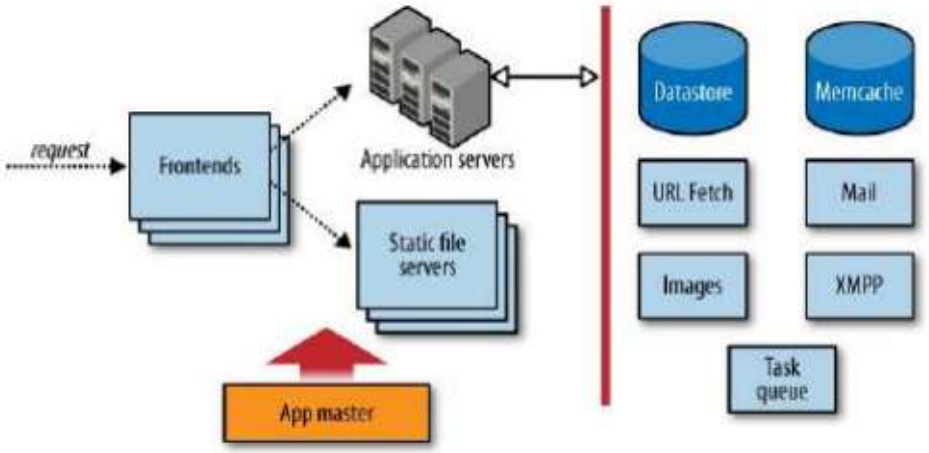
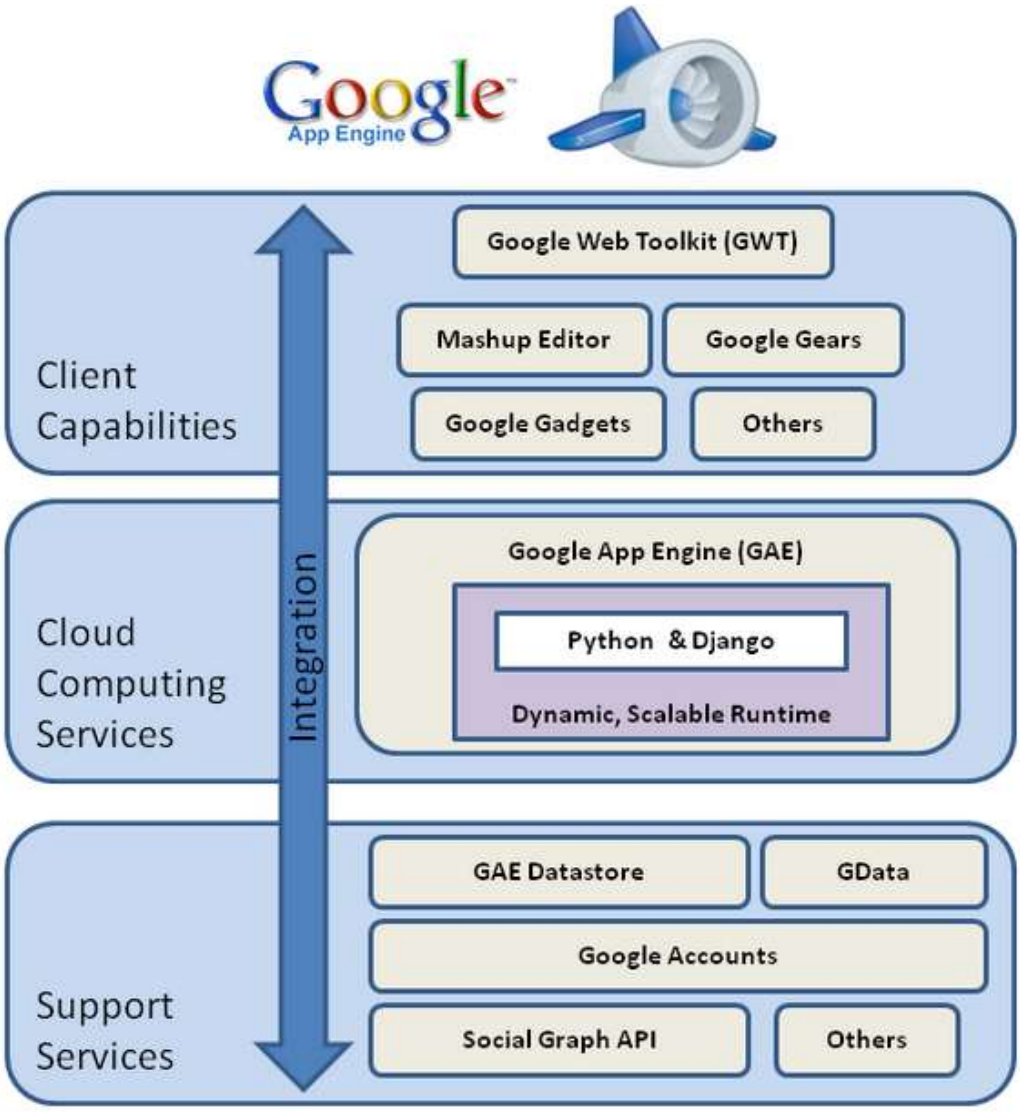


FIGURE 4: STRUCTURE OF GOOGLE APP ENGINE (13)

Google app engine services



Mobile solutions of Google app engine

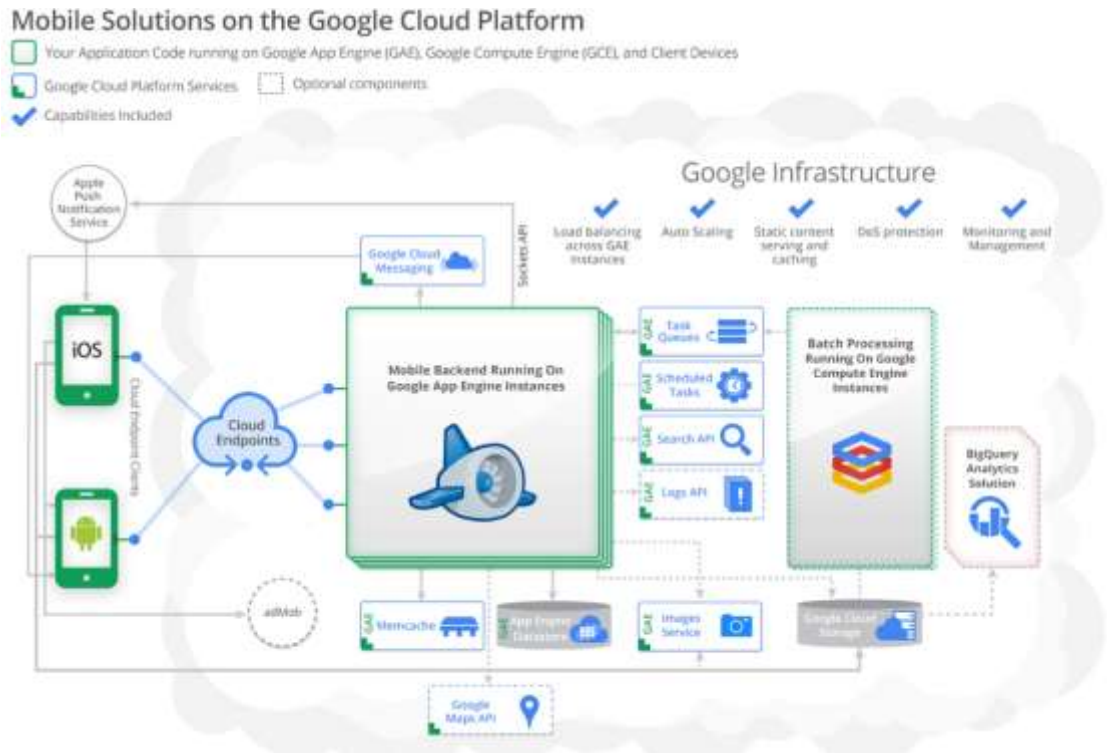


Diagram of layers and Components

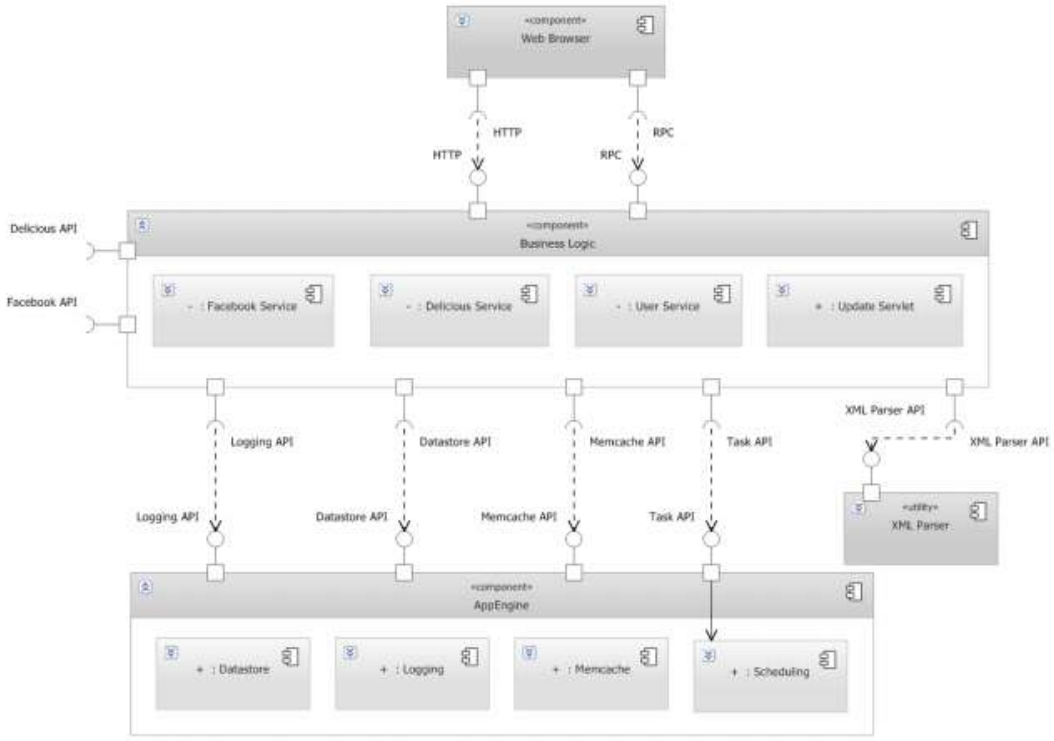
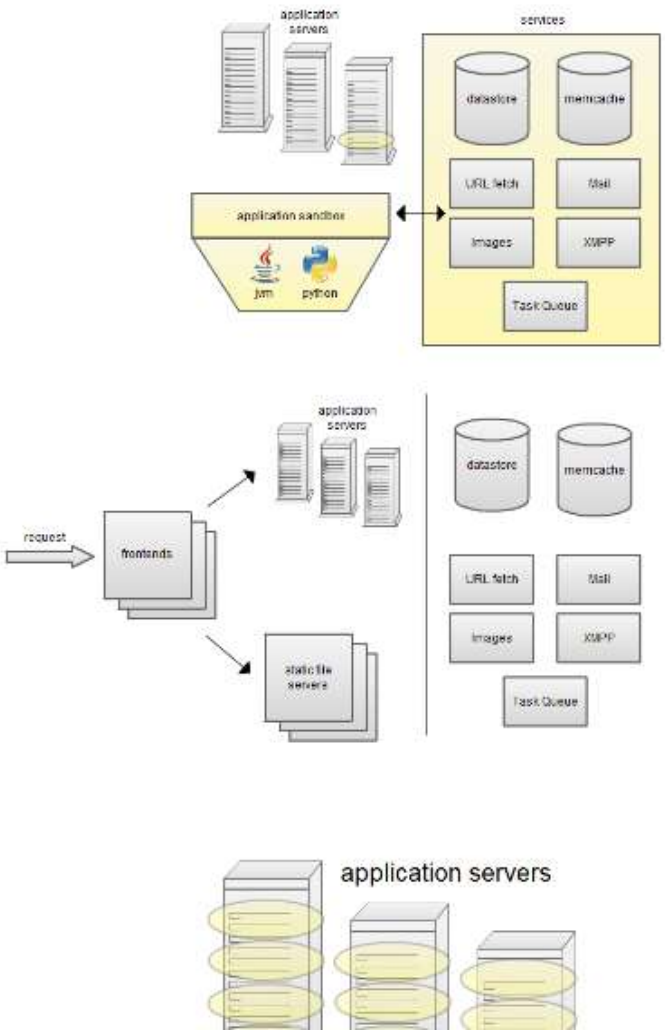


FIGURE 7: DIAGRAM OF LAYERS AND COMPONENTS (OWN ILLUSTRATION)

App engine Architecture



Download and install GAE

Course Builder only supports GAE SDK version 1.7.0. Download the GAE SDK appropriate for your platform from the following links:

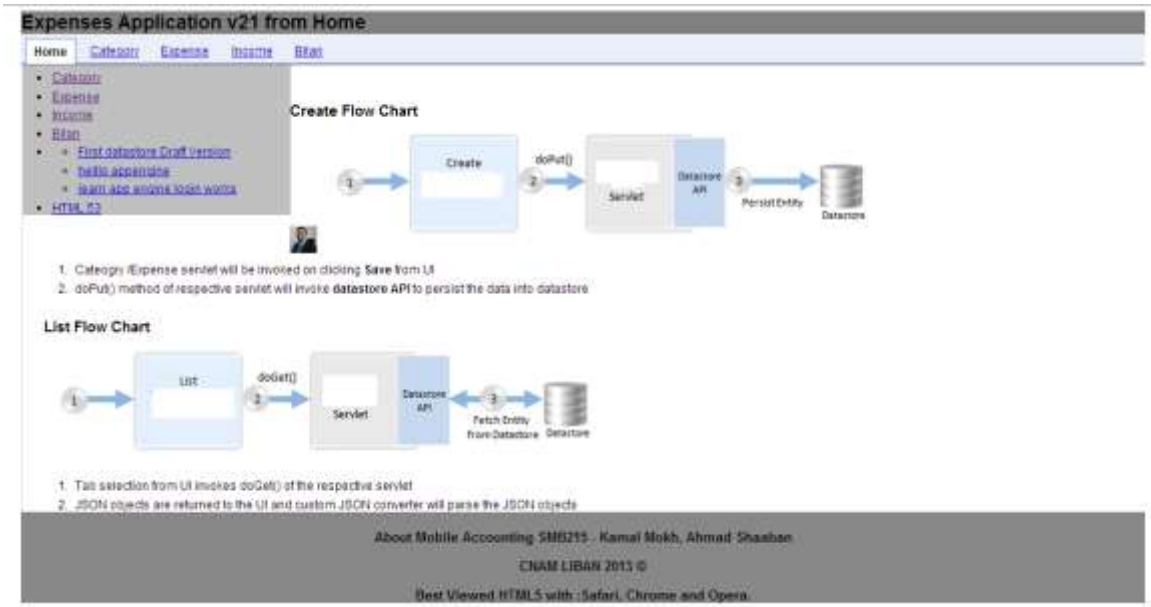
- GAE SDK 1.7.0 for Windows
- GAE SDK 1.7.0 for Mac
- GAE SDK 1.7.0 for Linux

References

https://developers.google.com/appengine/training/intro/whatisgae
https://developers.google.com/appengine/training/intro/

User guide (screen shots) Web Interface

Home page



Manage Category

Create Cateogry

Create Category

Category Name	
Category Description	
	Save Cancel

Edit / Delete Category

ll Categories

ategory Search Add

	Category Description	Action
	OME	Delete | Edit
	masrouf l sayara vovlo	Delete | Edit
	House Building	Delete | Edit
	Monthly	Delete | Edit

Manage Expense / Income

Expenses listing

Expense Name	Amount	Expense date	Category	Date created	Action
Ahle	60000	Mon Sep 02 04:51:54 UTC 2013	ANI	Tue Jan 01 00:09:00 UTC 2013	Delete | Edit
CAR	150000	Mon Sep 02 04:50:59 UTC 2013	CAR	Tue Jan 01 00:09:00 UTC 2013	Delete | Edit
ome	100000	Fri Sep 13 14:30:46 UTC 2013	House	Fri Sep 13 14:30:46 UTC 2013	Delete | Edit
banzen	100000	Fri Sep 13 14:31:39 UTC 2013	House	Fri Sep 13 14:31:39 UTC 2013	Delete | Edit
fawzatlenemara	2500000	Fri Sep 13 14:26:17 UTC 2013	House	Fri Sep 13 14:26:17 UTC 2013	Delete | Edit
sfi7a	750000	Fri Sep 13 14:29:28 UTC 2013	House	Fri Sep 13 14:29:28 UTC 2013	Delete | Edit
3mar Tajar	3000000	Fri Sep 13 14:17:02 UTC 2013	House	Fri Sep 13 14:17:02 UTC 2013	Delete | Edit
ContractorToBuildamodwsa2fwafi2a	4000000	Fri Sep 13 14:21:10 UTC 2013	House	Fri Sep 13 14:21:10 UTC 2013	Delete | Edit
zabtdarak	500000	Fri Sep 13 14:18:40 UTC 2013	House	Fri Sep 13 14:18:40 UTC 2013	Delete | Edit
faezel	4000000	Fri Sep 13 14:25:45 UTC 2013	House	Fri Sep 13 14:25:45 UTC 2013	Delete | Edit
Others	500000	Mon Sep 02 07:09:23 UTC 2013	House	Tue Jan 01 00:09:00 UTC 2013	Delete | Edit
tasli7	60000	Fri Sep 13 14:30:18 UTC 2013	House	Fri Sep 13 14:30:18 UTC 2013	Delete | Edit
HomeRent092013	600000	Fri Aug 30 12:23:24 UTC 2013	Monthly	Fri Aug 30 12:23:24 UTC 2013	Delete | Edit

Search Expense

All expenses

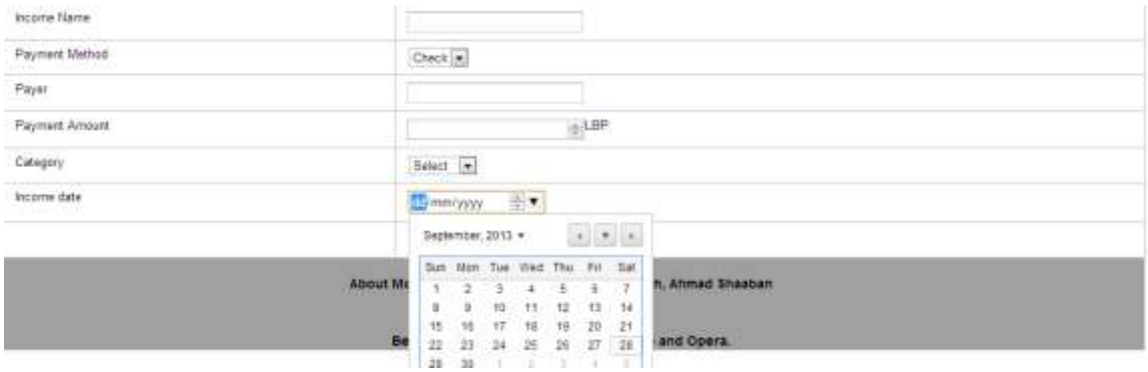
expense ▼ Search Add

Create New Expense

Create expense

Expense Name	
Expense Amount	LBP
Expense date	dd/mm/yyyy ▼
Category	Select ▼
	Save Cancel

Adding new income with Calendar (html5)



Bilan

Select Category Monthly

Account	Sign in
Category Selected is	**House**

All Expenses(-)

Category	Description	Date	Amount
House	banzen	Fri Sep 13 14:31:39 UTC 2013	100,000 ل.ل
House	ome	Fri Sep 13 14:30:46 UTC 2013	100,000 ل.ل
House	tasli7	Fri Sep 13 14:30:18 UTC 2013	60,000 ل.ل
House	sfi7a	Fri Sep 13 14:29:28 UTC 2013	750,000 ل.ل
House	fawzettenemara	Fri Sep 13 14:26:17 UTC 2013	2,500,000 ل.ل

All Incomes (+)

Category	Description	Date	Amount
House	PersonalLoan	Fri Aug 30 12:17:37 UTC 2013	15,500,000 ل.ل

Balance	Income Total	Expense Total
11,990,000 ل.ل	15,500,000 ل.ل	3,510,000 ل.ل

Android user Guide