

## Lab #5 – Platform-as-a-Service (PaaS)

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### Introduction

Welcome to Lab #5.

### Background

This lab introduces the Google App Engine (GAE) Platform-as-a-Service (PaaS).

### Goals of Lab

- Create and deploy an application in GAE

### Special Notes

To successfully complete this lab you will need a Google account. By default Google offers a free usage tier, which should be more than enough for this lab. However you are responsible for your own usage and any costs that may be incurred.

### Pre-requisites

- Google Account

## Introduction to Google App Engine (GAE)

The Google App Engine (GAE) PaaS supports the Java, Python, PHP and Go programming languages. For this lab we will use Java to deploy a web project.

The GAE environment is well documented and as such we will be referring primarily to online documentation.

From the GAE documentation:

*In this tutorial, you will learn how to:*

- *build an App Engine application using standard Java web technologies, such as servlets and JSPs*
- *use the App Engine datastore with the [Datastore API](#)*
- *integrate an App Engine application with Google Accounts for user authentication*
- *upload your app to App Engine*

*By the end of the tutorial, you will have implemented a working application, a simple guest book that lets users post messages to a public message board.<sup>1</sup>*

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<sup>1</sup> <https://developers.google.com/appengine/docs/java/gettingstarted/introduction>

Go through the tutorial starting from the introduction.

<https://developers.google.com/appengine/docs/java/gettingstarted/introduction>

You have completed the lab when you have gone through the tutorial and have successfully uploaded your application to App Engine.

### **Homework**

1. Open the following URL: <http://localhost:8080>. Take a screenshot.
2. Deploy your project to App Engine. Copy and paste the link of your deployed project.
3. Login to your App Engine console of Guestbook project. Take a screenshot.

## **Deliverables**

- Create a {Microsoft Word | PDF } document containing the answers to the test section.
- Name the file <Last Name>\_<First Name>\_Lab05.{docx|pdf}
- Send the file to me via slack private message

## References

Google App Engine Getting Started – Java: <https://developers.google.com/appengine/docs/java/gettingstarted/>

WAR File: [http://en.wikipedia.org/wiki/WAR\\_file\\_format\\_\(Sun\)](http://en.wikipedia.org/wiki/WAR_file_format_(Sun))