

Moc

Assignment 1

Sven Köhler
Hasso Plattner Institute
2019-11-07

	Do			
11:00				
12:00	Algorithmix Friedrich/ Göbel H E.51	Big Data Systeme Rabl HS 2	Advanced Visual Media Enhancement Trapp, Semmo, Pasewaldt, Shekhar A 2.1	Software Analysieren, Te sten und Verifizieren Lambers A-1.1
13:00		D-School Advanced Track		
14:00	Process Mining Weske/ Leopold/ Pufahl A-1.1	Programming Experience Hirschfeld Lincke H E.52	Methods of Cloud Computing Polze Beilharz HS 2	
15:00				

> 50 % of points per assignment
for exam submission

Organization

Each assignment is due 2-3 weeks later.

They involve long-running experiments and registration processes so

START EARLY

<https://www.dcl.hpi.uni-potsdam.de/teaching/mocc/#assignments>

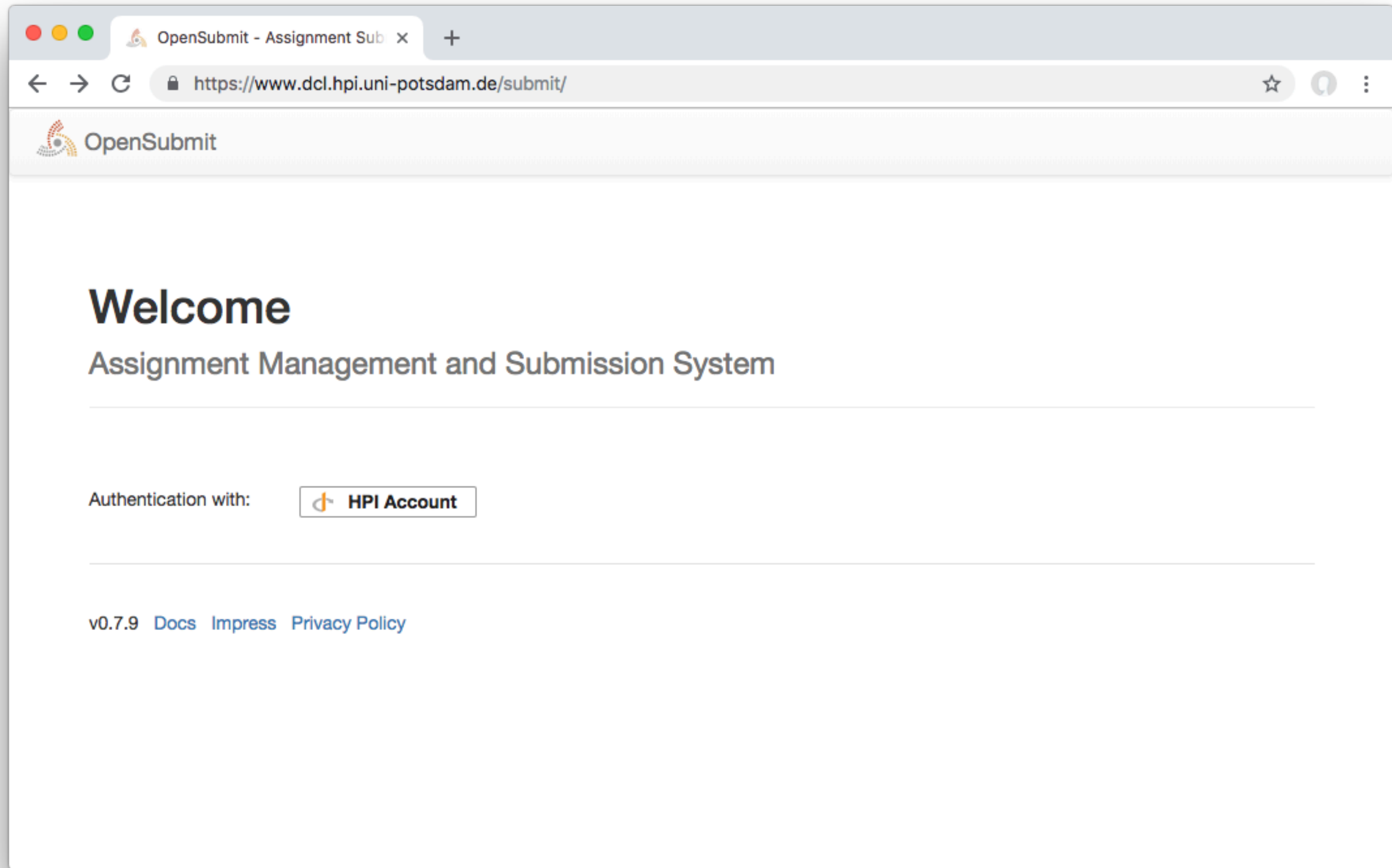
task 1:

FORM GROUPS

of 2-3 students

level your experience, own at least one credit card.




Submission System



<https://www.dcl.hpi.uni-potsdam.de/submit>

HPI Identity Provider - Login

https://openid.hpi.uni-potsdam.de/openidlogin

 HPI IDENTITY PROVIDER  BETA 

Login

Log in with your HPI account to get started.

User name:

Password:

Build number: 300

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User Settings

Username

svn.koehler

First name

Sven

Last name

Köhler

Email

svn.koehler@student.hpi.de

Student ID (optional)

Study program

Use **firstname.lastname** and your **HPI mail address**!

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Your Courses

Course	Owner	Open Assignments
POWER Block Course WS18/19	Sven Köhler (sven.koehler@...)	0
Methods of Cloud Computing WS 18/19	Sven Köhler (sven.koehler@...)	1
Betriebssysteme I WS18/19	Andreas Grapentin (andreas.grapentin@...)	4

Courses: 1 selected ✓ Save Changes

Search

- ☐ Datenbanksysteme II WS2018/19
- ☐ Betriebssysteme I WS18/19
- ☐ POWER Block Course WS18/19
- ☒ **Methods of Cloud Computing WS 18/19**

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You can filter to only see MOCC assignments


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Dashboard

Sven Köhler <sven.koehler@hpi.de>

Open

Course	Assignment	Deadline	Group work	Graded	Action
Methods of Cloud Computing WS 18/19	Assignment 1: Benchmark EC2+GCE (Validation script)	Nov. 29, 2018, 11:59 p.m. (2 weeks, 1 day left)	Yes (3)	Yes	<div>+ New Submission</div>

Create new submissions from dashboard

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https://www.dcl.hpi.uni-potsdam.de/submit/assignments/429/new/

Authors

Sven Köhler (sven.koehler@...) ▾

beilh

☐ Jossekin Beilharz (jossekin.beilharz@...)

Attachment

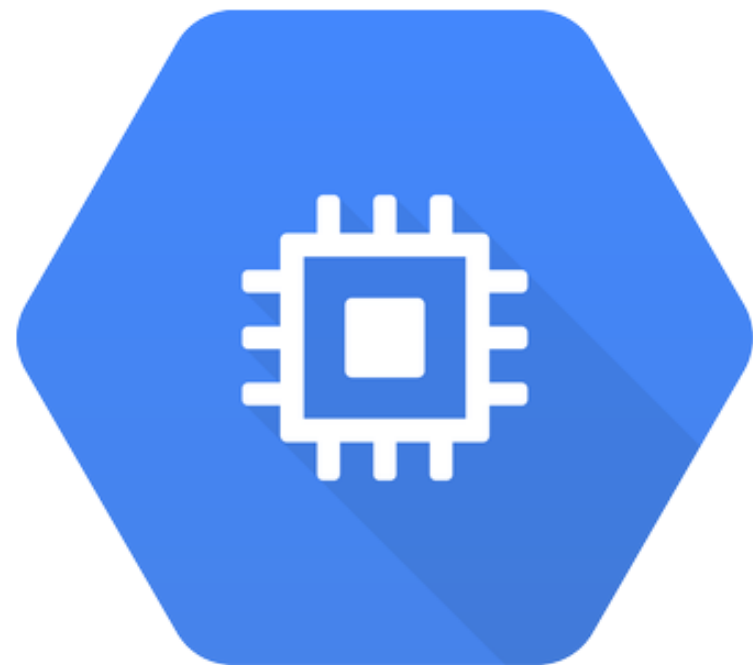
Choose file No file chosen

✓ Save

v0.7.9 [Teacher backend](#) [Docs](#) [Impress](#) [Privacy Policy](#)

Only **one person** submits.

Add your group members when uploading
your solution.



**Google
Compute
Engine**

Assignment

In this assignment you will:

- Set up VMs in Amazon EC2 and Google CE
- Run 48 hours of benchmarks (CPU/memory/disks)
- Document your steps
- Evaluate your measurements

You can find help:

- On the assignment sheets
- In the linked online resources of Amazon and Google
- Stack Overflow/Google
- By asking your fellow students

due: 21.11.2019



pay-as-you-go: per cpu hour, submitted data, issued requests

Recommended: Amazon AWS Educate Starter

- You receive a small number of credits to use EC2 virtual machines
- Limited feature set, but enough to solve assignments
- (only us-east-1 c region)

Alternative: full Amazon AWS Educate account

- You receive 100\$ AWS credits for FULL AWS usage (more than enough to solve all assignments)
- Requires credit card!

It will not be charged if you follow our instructions. **You are responsible!**

Always **shut down** your VMs when you are done!

You can share an Amazon AWS account using IAM

<https://aws.amazon.com/iam/>

Google Cloud: Education Grants

We provide **each person** with 50\$ coupons for education purpose. Should be enough for all assignments. But **do not cash in** all coupons in your group **at once**, in case you mess up.

Most newly created accounts receive an additional 300\$ credits. Google Cloud may require a credit card for ID purpose (not charged).

<https://www.dcl.hpi.uni-potsdam.de/teaching/mocc/assignments/gcp-coupon>

SHUT DOWN YOUR VMS

(if you don't need them to prevent burning your credits)



Setup your VMs using CLI tools

aws
gcloud

Document your entered commands,
mask out keys/ids/etc.

Tips: script, awk, sed, cut, cron

HELLO, 911? I JUST TRIED TO TOAST
SOME BREAD, AND THE TOASTER GREW
AN ARM AND STABBED ME IN THE FACE!

DID YOU READ THE
TOASTER'S MAN PAGE FIRST?

WELL, NO, BUT ALL
I WANTED WAS—



Docs linked in the assignment

Pain story:

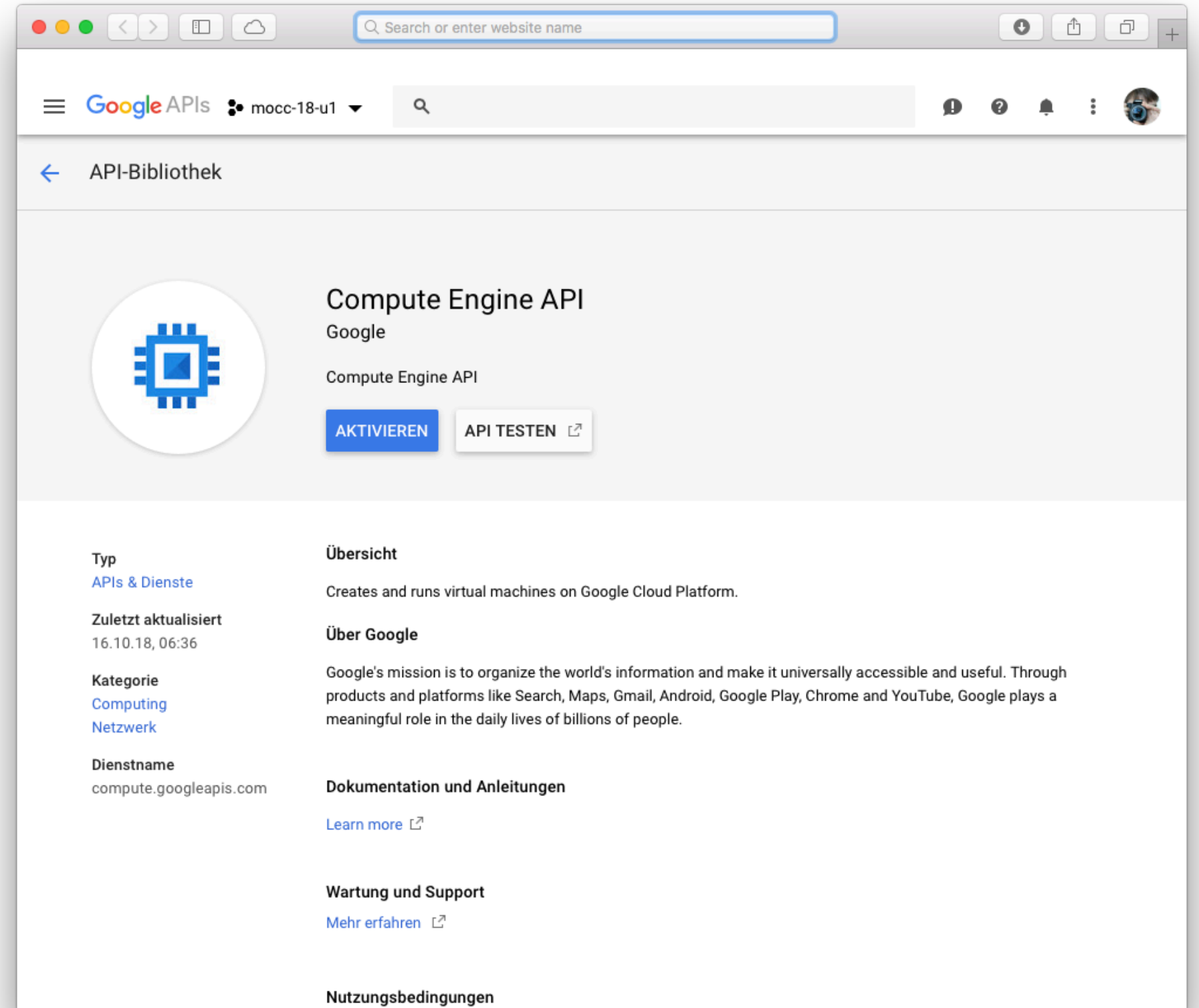
AWS Educate Starter
is **us-east-1c** only.

AWS Regions



Pain story:

You need to **explicitly activate** Google Compute Engine in the web interface first.





open questions

SHUT DOWN YOUR VMS

