

API

API Manager

Dashboard

Library

Credentials

Google Cloud Platform

CSE303

Client ID for Web application

Client ID

1045084773912-tj3p85npujh23vtuoh80vnfmivksnqmd.apps.googleusercontent.com

Client secret

yKxR2xDnrg87WNGnni6DUtoD

Creation date

Sep 22, 2016, 8:59:45 PM

216216

Restrictions

Enter JavaScript origins, redirect URIs, or both

Authorized JavaScript origins

For use with requests from a browser. This is the origin URI of the client application. It can't contain a wildcard (http://\*.example.com) or a path (http://example.com/subdir). If you're using a nonstandard port, you must include it in the origin URI.

http://www.example.com

Authorized redirect URIs

For use with requests from a web server. This is the path in your application that users are redirected to after they have authenticated with Google. The path will be appended with the authorization code for access. Must have a protocol. Cannot contain URL fragments or relative paths. Cannot be a public IP address.

http://54.68.34.252.xip.io:8080/auth/google/callback

http://CSE303.appspot.com/auth/google/callback

https://CSE303.appspot.com/auth/google/callback

http://www.example.com/oauth2callback

Save

Cancel

11:40 AM

9/23/2016

Filter by tags and attributes or search by keyword									
Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP	
mongo	i-075adf3541aa2d264	t2.micro	us-west-2a	running	2/2 checks ...	None	ec2-52-88-223-243.us-...	52.88.223.243	
mcd	i-09a3a239e4529f693	t2.micro	us-west-2a	running	2/2 checks ...	None	ec2-52-37-27-140.us-w...	52.37.27.140	
node	i-0abf29804676a475f	t2.micro	us-west-2a	running	2/2 checks ...	None	ec2-54-68-34-252.us-w...	54.68.34.252	

#### Security Groups associated with i-0abf29804676a475f

Ports	Protocol	Source	launch-wizard-5
8080	tcp	0.0.0.0/0	✓
22	tcp	0.0.0.0/0	✓

Instance state	running	Security groups	launch-wizard-5. view rules
Instance type	t2.micro	Scheduled events	No scheduled events
Private DNS	ip-172-31-30-90.us-west-2.compute.i	AMI ID	ubuntu/images/hvm-ssd/ubuntu-trusty-14.04-amd64-server-20160714 (ami-d732f0b7)
Private IPs	172.31.30.90	Platform	-
Secondary private IPs			
VPC ID	vpc-e6121982		
Subnet ID	subnet-f3f0c297		

Launch InstanceConnectActions ▾

Filter by tags and attributes or search by keyword

	Name ▾	Instance ID ▴	Instance Type ▾	Availability Zone ▾	Instance State ▾	Status Checks ▾	Alarm Status	Public DNS ▾	Public IP
<input type="checkbox"/>	mongo	i-075adf3541aa2d264	t2.micro	us-west-2a	🟢 running	✅ 2/2 checks ...	None	🔔 ec2-52-88-223-243.us-...	52.88.223.243
<input checked="" type="checkbox"/>	mcd	i-09a3a239e4529f693	t2.micro	us-west-2a	🟢 running	✅ 2/2 checks ...	None	🔔 ec2-52-37-27-140.us-w...	52.37.27.140
<input type="checkbox"/>	node	i-0abf29804676a475f	t2.micro	us-west-2a	🟢 running	✅ 2/2 checks ...	None	🔔 ec2-54-68-34-252.us-w...	54.68.34.252

Instance state

Instance type

Private DNS

Private IPs

Secondary private IPs

VPC ID

Subnet ID

running

t2.micro

ip-172-31-29-49.us-west-2.compute.i

172.31.29.49

vpc-e6121982

subnet-f3f0c297

Security groups

Scheduled events

AMI ID

Platform

launch-wizard-7 . view rules

No scheduled events

ubuntu/images/hvm-ssd/ubuntu-trusty-14.04-amd64-server-20160714 (ami-d732f0b7)

-

Security Groups associated with i-09a3a239e4529f693			
Ports	Protocol	Source	launch-wizard-7
22	tcp	0.0.0.0/0	✅
11211	tcp	sg-75845b0c	✅

Launch InstanceConnectActions

Filter by tags and attributes or search by keyword

	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP
<input checked="" type="checkbox"/>	mongo	i-075adf3541aa2d264	t2.micro	us-west-2a	running	2/2 checks ...	None	ec2-52-88-223-243.us-...	52.88.223.243
<input type="checkbox"/>	mcd	i-09a3a239e4529f693	t2.micro	us-west-2a	running	2/2 checks ...	None	ec2-52-37-27-140.us-w...	52.37.27.140
<input type="checkbox"/>	node	i-0abf29804676a475f	t2.micro	us-west-2a	running	2/2 checks ...	None	ec2-54-68-34-252.us-w...	54.68.34.252

Instance type	t2.micro	<div>Security Groups associated with i-075adf3541aa2d264</div> <table><tr><th>Ports</th><th>Protocol</th><th>Source</th><th>launch-wizard-6</th></tr><tr><td>22</td><td>tcp</td><td>0.0.0.0/0</td><td>✓</td></tr><tr><td>27017</td><td>tcp</td><td>sg-75845b0c</td><td>✓</td></tr></table>		Ports	Protocol	Source	launch-wizard-6	22	tcp	0.0.0.0/0	✓	27017	tcp	sg-75845b0c	✓
Ports	Protocol	Source	launch-wizard-6												
22	tcp	0.0.0.0/0	✓												
27017	tcp	sg-75845b0c	✓												
Private DNS	ip-172-31-25-81.us-west-2.compute.i														
Private IPs	172.31.25.81	Security groups	launch-wizard-6, view rules												
Secondary private IPs		Scheduled events	No scheduled events												
VPC ID	vpc-e6121982	AMI ID	ubuntu/images/hvm-ssd/ubuntu-trusty-14.04-amd64-server-20160714 (ami-d732f0b7)												
Subnet ID	subnet-f3f0c297	Platform	-												
Network interface	eth0	IAM role													





# Student Athlete Surveys

🔑 Login or [Use Google Sign-In](#)

Email

Password

Login

Need an account? [Signup](#)

Or [take the survey](#).



# Student Athlete Surveys

Log Out

Name	Status	
test123	FINISHED	Results
	(New Survey)	Begin
test2	FINISHED	Results
test3	Question #7 (summarizing)	Resume
test4	(New Survey)	Begin



# Student Athlete Survey

The current survey has not yet started



# Student Athlete Surveys

Log Out

Click 'Begin' to start the survey

Begin





# Student Athlete Survey

On average, how many hours a day do you dedicate to your sport?

Less than 1

1-2

2-3

3-4

More than 4



# Student Athlete Survey

Thank You

The next question will load shortly...



# Student Athlete Surveys

Log Out

## Question Summary

On average, how many hours a day do you dedicate to your sport?

Less than 1

1-2



2-3

3-4

More than 4

Start Next Question



# test4

On average, how many hours a day do you dedicate to your sport?

Less than 1

1-2

2-3

3-4

More than 4

(1/1)

On average, how many hours a day do you dedicate to academics outside of the classroom?

Less than 1

1-2

2-3

(1/1)



# Student Athlete Survey

The current survey has ended



Reserved Instances  
Scheduled Instances  
Dedicated Hosts

IMAGES

ELASTIC BLOCK STORE

Group: Taylor Brown; Stephen Friedman

- 1) One major benefit of using mlab since they are a SaaS (software as a Service) the user does not need to worry about updating since the provider takes care of all the backend issues. Also, this is usually far easier to setup than a VM with mongodb on it allowing for rapid development with little planning. The user, however, does not know who else they are sharing resource with on the mongodb SaaS leading to performance possible being less than expected. Also, it is understood that since the user does not know the security around their information on the SaaS there may be holes that the provider does not know about. If the user is using their own VM with mongodb they will have a full view of the possible security holes.
- 2) Since we are using mongodb it is possible that Eventual Consistency will become an issue. Mongodb is a nosql database and is document based, this means the data is replicated on multiple servers, the clients can access any of the servers to retrieve the data. This means that a user writes a piece of data to one of the servers, that has not been copied to the rest. Then another user reads the most up-to-date copy of this data from this server. However, this client also access another server and receives an old copy. This means that a bug could form in the app that allow a user to access data that is old when is means to access something that is up to date. Leading to the totals on the survey becoming messed up and incorrect.
- 3) The app does a good job of storing the config within the environment that it is configuring. Since the app has broken up the configuration of the different pieces into the respective spots in the structure of the app it follows the requirement to have a strict separation of config from the code. None of the configuration information is hardcoded into the app code, it is always calling on the separate configuration files that are needed

to run it. It also does not have just one configuration file but many to break the whole configuration up into the specific pieces that are being configured.

- 4) The app does a very poor job in codebase revision control. An app should be using a tracking system that allows for separation between developing code and production code. All of these should be connect to a codebase that they then build off of. Since the app has all the code stored on the node VM with no connection to gitHub or another version control system it means any update to the code will have an immediate effect on the app. This is very poor design for an app as it can lead to it not working at all times and leads itself to possible errors.
- 5) The bug is in fact not solvable. In the event where a user has for example survey question #7 open, and the admin closes that question while the user still has the question open, the user will be able to fill out their selection and submit their answer. However, this is not a problem because of MongoDB utilizing eventual consistency. This means that even though the user was able to submit their answer after the admin had closed the question, the database will not will not store their answer because it is able to recognize that the survey question was closed before the survey answer was submitted.
- 6) It is in fact possible to prevent a user from taking a survey twice while keeping their anonymity. This answer follows the assumption that the survey taker would need to receive a link to the survey in order to complete it. Upon the admin sending out the survey to the user, the admin should create a unique key that a user must enter upon the start of the survey. The admin shall store this key in the database upon sending out the key and the link to the survey taker. In the database, the key is not associated with any user information, just the key itself should be stored. When the user goes to take the survey and enters in the provided key to begin the questions, the database should check

that the key exists. If the key exists in the database the survey should begin and the key should be deleted from the database. If the key is invalid, the survey should not commence. So, after a user uses their key to take the survey, they will not be able to reuse the original key that was provided to them. Thus, a user will only be able to take a survey once while their answers remain anonymous.

- 7) The way the application works now is that the questions are pulled from the database each time the user takes on the next survey question. Doing so requires pulling from the database an equal amount of times as there are survey questions. Rather than pulling each question each time the user loads a new survey question, all survey questions could be loaded into memcached upon the admin starting the survey. This would lessen the amount of times that data would have to be pulled from the database. Thus, when a user navigates to each question in the survey, they would be pulling the questions out of memcached as opposed to the expensive computation of pulling from the database.
- 8) Heroku is inferior to the AWS VMs that we have created for a few reasons. Mainly, the developer can add whatever software system they are most comfortable in using to the system. They are not beholden to the offerings of Heroku. This means that the user has greater control over making the system work to the specific needs of the app versus trying to force or hack what Heroku gives them to work with. With AWS you can also break up the caching of the app, with Heroku this is not possible as you do not have this low level access. The AWS also allows for the developer to choose what hardware to use, enabling greater fine tuning to the needs of the app and the software that it uses.
- 9) One reason using Heroku would be better is if there was a plan for the app to be scalable. It is far easier to scale the app in Heroku than it is with AWS. Also, for the app Heroku would force the use of git, or another similar system, allowing for much better use

of codebase revision control which this app is lacking as of now. This is due to how heroku deploys, the developer has to push into the git repo that Heroku provides.