

first

a word about xp

average person: 1365

tasks	xp	total	grade
start	1365	1365	D+
team participation	85	1445	C-
Cassandra Abduction	50	1495	C
1/2 of pt1 of exam & turn in pt 2 blank	96	1591	C+
demo partially working sprint 2 within 1 week	80	1671	C+
map-reduce or other in- class work	50	1721	B-

tasks	xp	total	grade
start	1365	1365	D+
team participation	85	1445	C-
Cassandra Abduction	50	1495	C
1/2 of pt1 of exam	70	1565	C
demo partially working sprint 2 within 1 week	80	1645	C+
map-reduce or other in- class work	50	1695	B-
mostly correct pt2 exam	150	1845	B
good effort final project	155	2000	A-

take away

the average person can get a B with modest effort

questions on xp?

a few weeks ago I was thinking ...

have a first job

pressure to do well

```
self.centroids = []
for r in centroids:
    for i in range(1, len(self.data)):
        self.centroids.append(self.data[i][r])
```

```
self.centroids = [[self.data[i][r] for i in range(1, len(self.data))]  
                  for r in centroids]
```

```
def updateCentroids(self):
```

```
    """Using the points in the clusters, determine the centroid  
    (mean point) of each cluster"""
```

```
    members = [self.memberOf.count(i) for i in range(len(self.centroids))]
```

```
    self.centroids = [[sum([self.data[k][i]  
                          for i in range(len(self.data[0])  
                          if self.memberOf[i] == centroid)]/members[centroid]  
                     for k in range(1, len(self.data))]  
                    for centroid in range(len(self.centroids))]
```

pressure

stick with what you know

not

experimenting with new things

school

pressure

grades

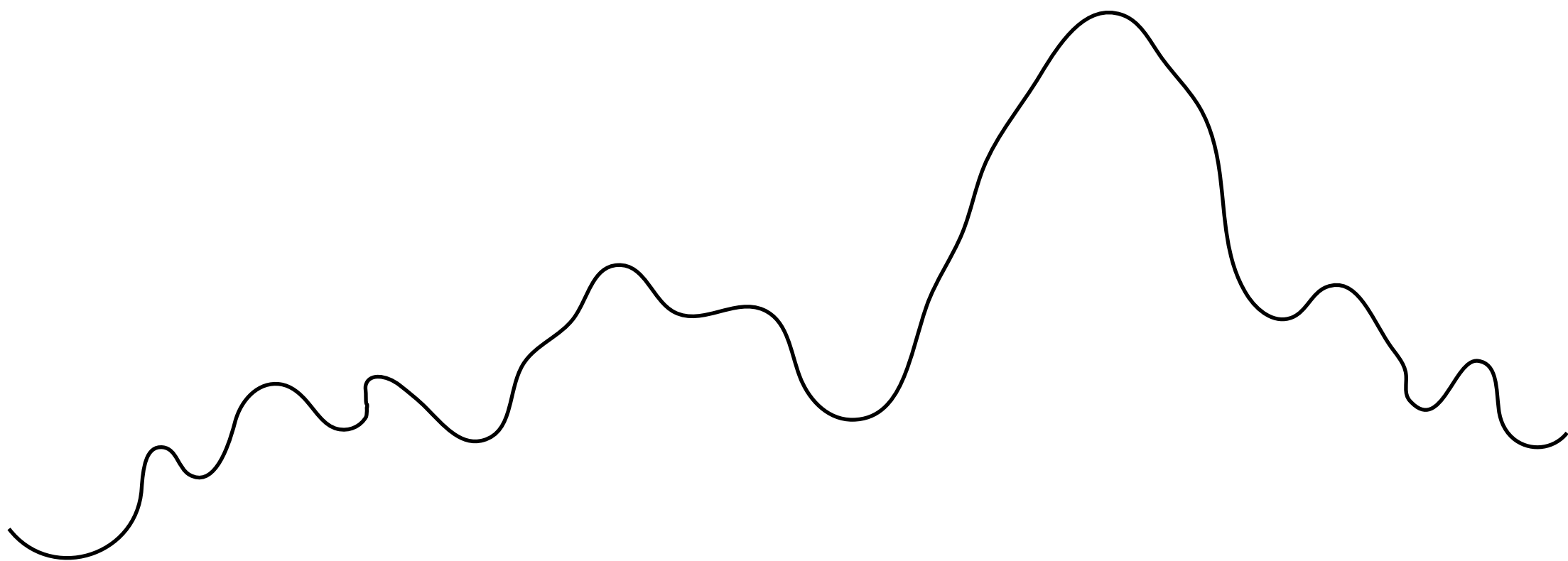
stick with what you know

not

experimenting with new things

natural tendency

relax



noSQL project

optional

final projects

- from 75-500xp
- 75xp - basic demo/tutorial project (one evening - one day project)
- 200xp (multiple days)
- 500xp - *Hail Mary* option - (painfully working through nights.)

requirements are few

- do something in noSQL
- demo it in class on the 23rd of April (the last class)
- some examples later

history

- 2014 - 3 people did this project and received an average of 200p
- 2013 - 9 people did project; average: 180

size matters

- You can do it individually, with a partner, with a team.
- I assume a team can get more done than an individual and grade accordingly.
- I make assumptions about what a person can accomplish in an evening's worth of work.
- Effort

75-100xp

- implement the sessions app we did in Cassandra.
- add Redis to sessions
- go through a tutorial that creates a virtual Cassandra cluster on your laptop and runs a few queries through it. (CassandraPlanet)
- go through a tutorial on writing a simple Flask/MongoDB app.
- do a more in-depth look at Cassandra and give a 8 minute demo in class.
- extend Cassandra Alien w/ additional features of Cassandra
- convert one of our larger sql databases to Cassandra and demo a few queries (also put it on github)

Cassandra 150xp

- 2 person team.
- do a Cassandra version of where in the world.
- will need to write script to convert world db. to cassandra) - the tough part.
- do a Cassandra version of our socket chat app. (non room version ~100xp)

Mongo/Node.js 150xp

- Follow an online tutorial to do a simple node.js mongolab blog site.

example of 250-300xp

- get a cluster of VMs running Cassandra and do a map-reduce job on them. (data analytics)
- get a small cluster of VMs running a simple flask app with a load balancer in front. (back-end developer)
- learn how to use Cassandra in Docker.

400xp

- Do anything on the previous slide on instances on Google Cloud or terminal.com (you get some free compute time)

again, it is up to you

these are just examples

deliverable

9 April: add name and idea to project sign-up

Questions

peer eval