Temasek POLYTECHNIC

🧭 PLAN

Name: Justin yeap	Date 10 Feb 2019
Assignment Requirements To create a advanced microservice application backend and frontend using any form of web technologies	

Ideas/Issues (Topic knowledge)		
What I know	What I don't know	What I need to find out/work on
Monolithic Services SOA Services JSON Web Services Node JS Hosting Locally Mongodb	Microservices C++ Docker Docker Swarm Kubernetes AngularJS Language and Compiler Design and creation Hosting Remotely/ Server Administration Big Data management and data cleaning	How to code microservices Learn C++ Learn Kubernetes and Docker architecturing and coding AngularJS Tutorial and creation Create a language and resulting compiler after reading Setting up a server Importing Big data into the DB, 120 GB of stock data

Action (Identify resources/information)	
Get help from	Resources I should use
Kubernetes and Docker Forums Kubernetes and Docker Tutorials Regex Book Primer books on compiler Github C++ Reference Boost C++ reference	Everything I get help from

Time Management	
What I need to do	By when must I complete
Learn Angular Learn Kubernetes learn Docker Relearn C++ Learn Boost Library Setup microk8s and Mongodb Code dashboard Code watchlist component Code information fundamentals component Code Compiler in c++ - after experiement with diff compiler types Code Algorithm Services in C++ Code Kubernetes Architecture Code Docker File Code MongoDB Service Code watchlist service Code Data Importer and download from Thomson Retuers Crawl Stock and fundamental data Code Info Service Code Analyze Component of dashboard including editor and graph learn cmake language and build c++ libraries	Before Fweb's deadline as it's a joinr project

🚌 PERFORM

Name	Date
Strategies that I am using to	

1. monitor progress/keep on task (is the task taking longer than expected?)

Yes, went through 4 compiler revisions - Nodejs line based > C++ Line based > C++ positined based > C++ regex based
Went through 2 data importer revisions - Nodejs importer > Faster c++ importer
Went through 3 Mongodb Service Revisions - docker replication > kubernetes local Storage > docker Compose swarm
Had trouble importing/crawling large fundamentals and stock data due to slow internet'

AngualrJS Dashboard is going well and progressing and expected
C++ services creation took a little longer than expected but overall went well

2 algo services revisions - Python to C++

2. locate resource/get help (where & how)

Keep referencing tutorials online for angular, dockr and kubernetes
Debug till get it right for kubernetes, data importing, c++ services and Regex angualr creatin (test out diff regex)
C++ book at home
Experiment and try out diff methods till right
cmake tutorials

3. check understanding (understand everything I need to understand)

Yes, learned new language yaml and regex(for compiler)
Yaml was learned for docker/kubernetes
learned to code kubernetes file and docker file as well as architect it like autoscale, replication, etc
understand C++ decently
found enjoyment in angular
understand boost libraries now
understand C++ OS streams for data importing
understand CMAKE language

4. motivate myself
Just persevere to get a good mark
Drink more coffee
seek Dr Chia for guidance

Resources/Information I have gathered

https://docs.mongodb.com/manual/reference/
https://www.boost.org/doc/libs/1_69_0/doc/html/boost_asio/reference.html

https://en.cppreference.com/w/
https://cmake.org/documentation/
https://www.regular-expressions.info/
https://docs.docker.com/get-started/
https://docs.docker.com/get-started/part4/
https://kubernetes.io/docs/tutorials/
https://angular.io/docs
https://kubernetes.io/docs/tutorials/stateful-application/cassandra/
https://developers.thomsonreuters.com/thomson-reuters-tick-history-trth/thomson-reuters-tick-history-trth-rest-api/learning
https://www.amazon.com/Quantitative-Trading-Build-Algorithmic-Business/dp/0470284889

⤭ MONITOR

Name	Date
Evaluating Potential Information Sources	

Authority & Credibility
- Who is/are the author(s)?
- What makes the author an authority on this subjects? What are his/her credentials?
- Is there any contact detail?
- Is this page/article part of a larger site? Who is responsible for this site?
- Is the site accredited or endorsed by a reputable organisation?
- Is this page a peer-reviewed, public-reviewed or scholarly article?
- Is the material taken from other sources fully credited?

Scope, Coverage & Relevance
- Who is the intended audience (general/specialized readership, scholars, etc.)?
- Are the content and level appropriate for the assignment?

Bias & Accuracy/Reliability
- How is the information presented (fact, opinion, propaganda, etc.)?
- If presented as a fact, is it accurate? Can you cross-reference somewhere else?
- Is there a bias (commercial, technologies, cultural, etc.)?
- Is the biasness clearly stated and appropriate for the assignment?

Currency/Timeliness

- What is the resources' date of publication, or date of posting to the site?
- Does this date tell when the resource was created, or when it was last updated?
- How recent is the information contained in the source?
- Is some of the information out of date? Is it still appropriate for the assignment?

Quality
- Is the information clearly written and well-organised?
- Is the new research being done/reported or is the author viewing old research?
- Does the author agree/disagree with the majority of other viewers/authors in the field?

Commercialism
- Is the author selling something – a product/solution, an idea, a brand, etc.?
- Does the resource/page have a corporate sponsor?
- Do you have to enter personal identification/information in order to proceed?
- Is this commercial solution/product appropriate for the assignment?

REFLECT

Name	Admission Number
Class: P01 / P02 / P03 / P04	Date

Write a reflection on your learning

Describe
- Write about how you plan to complete your tasks for the assignment
- Describe how you monitor your own progress while doing the assignment
- Do you think you have progressed well? Did you have better time management?

Examine
- Examine how you went about in doing the assignment and how did you close the gap in your learning.

Articulated Learning
- Write about some strategies or skills you have acquired while working through the assignment.
- Given another assignment/project, might there be anything you would do differently from what you have done?
- How would you rate yourself as a Self-Directed Learner?

Evaluation
The Plan-Perform-Monitor-Reflect (PPMR) process has helped me to challenge myself towards achieving the desired standards I set for my assignment.

☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree