



/ BW Feedback

Monday next week (NBGrader, team challenge, etc)



/ Ready to Cluster?

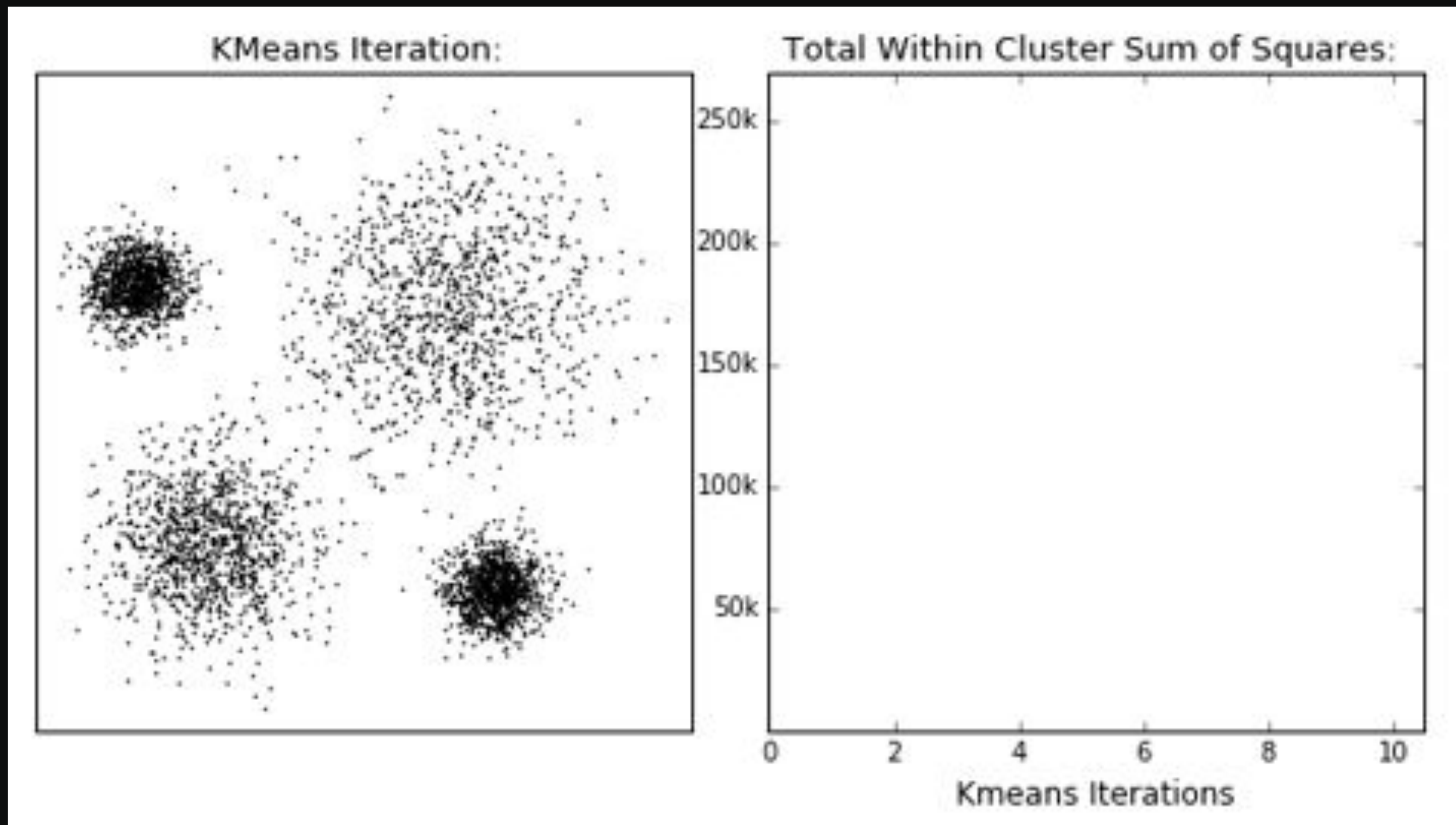
Unsupervised learning.

TeamTalk

- The code doesn't matter. The **team integrity** is more important.
- Be humble and don't disrespect others.
- The objective is **not for you to do all the work**. Think about what would happen in a real life situation. If you feel you know more, mentor others
- Sometimes you won't agree. Bring it up, discuss it and figure out a way in which it can be solved.
- Compromise, give and take. Above all, **be generous first**, ask later.



Your challenge today 🔥



Warning It is hard. Tips:

- Research, assess and discuss before.
- Organize // Split tasks. Let others deliver.
- Divide and conquer.
 - Either do separate parts or
 - Try parallel approaches
- K-means sometimes won't work
 - Re-initialize the seeds.
 - Find some other clever tactics



11:30am lecture: Classes



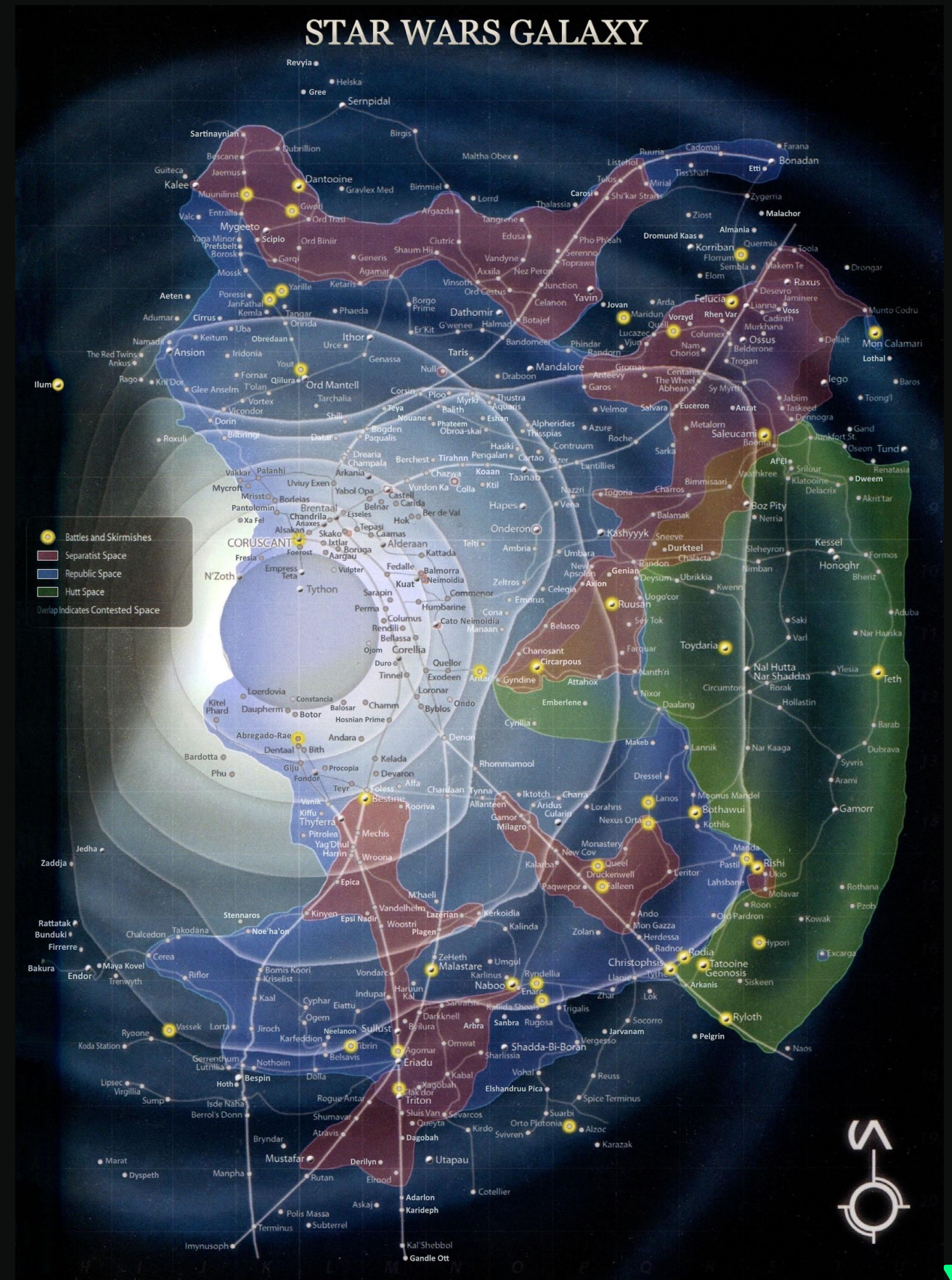


We must protect // eliminate Baby Yoda



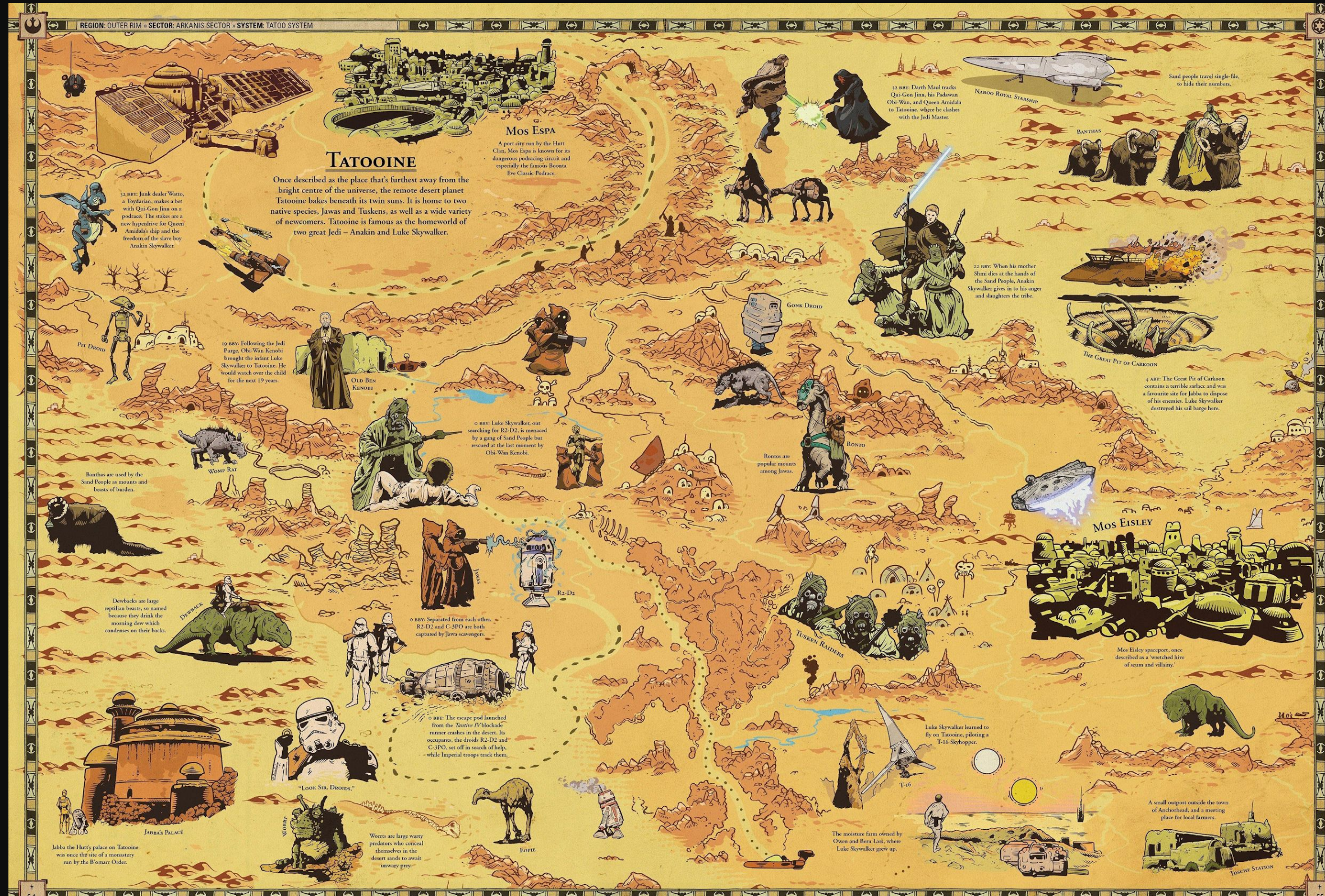
Challenge #1:

- Find the approx location of baby yoda is in the galaxy



Challenge #2:

- Find where baby yoda is in the secret planet
 -





Only one side of the force will win. 1Life, 1 Bounty



The rescue mission:

- You can accumulate points. We won't know who has Baby Yoda until 6pm GMT+1



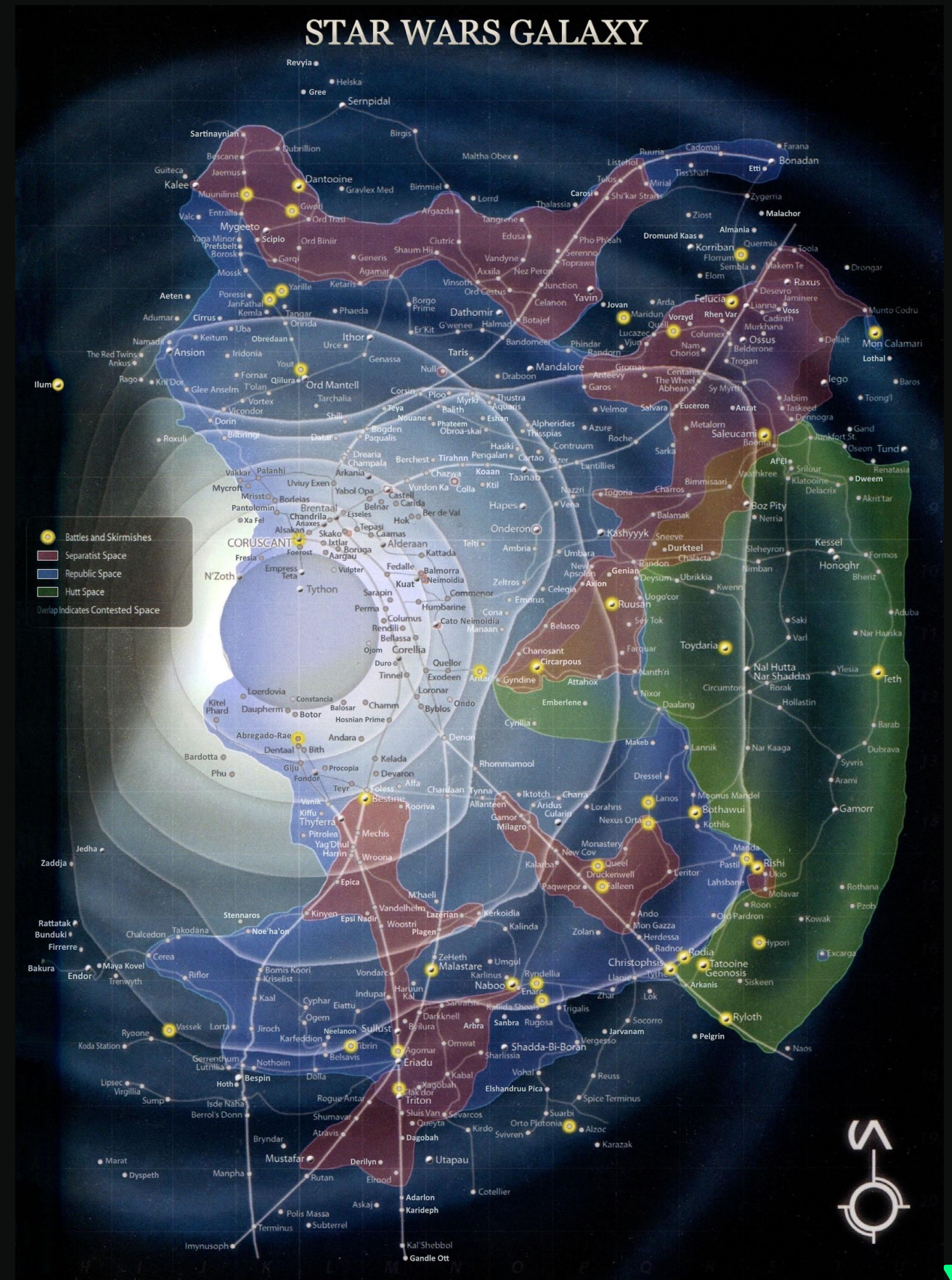
Challenges:

- To claim Baby Yoda, you must be the first to DM the empire with your code. Starting 3pm



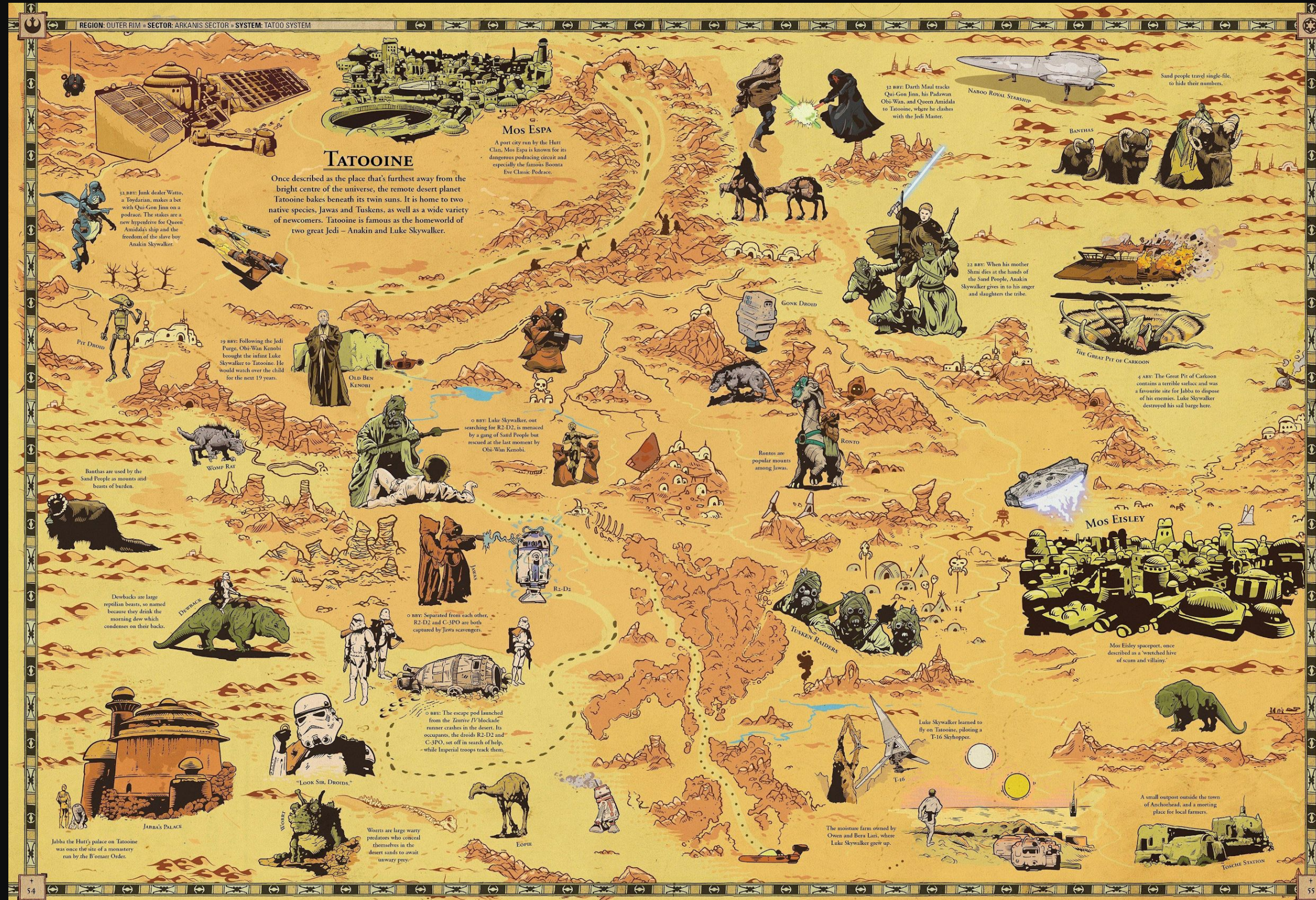
Challenge #1:

- Find the approx location of baby yoda is in the galaxy
 - 2D dataset
 - Use KMeans
 - Plot the clusters
 - Find the coordinates of the planet where it is hidden
 - Input it in the **force finder**



Challenge #2:

- Find where baby yoda is in the secret planet
 - Use PCA (top 2 components) to project the Jedi Force
 - Use KMeans
 - 5D Dataset
 - Using classes

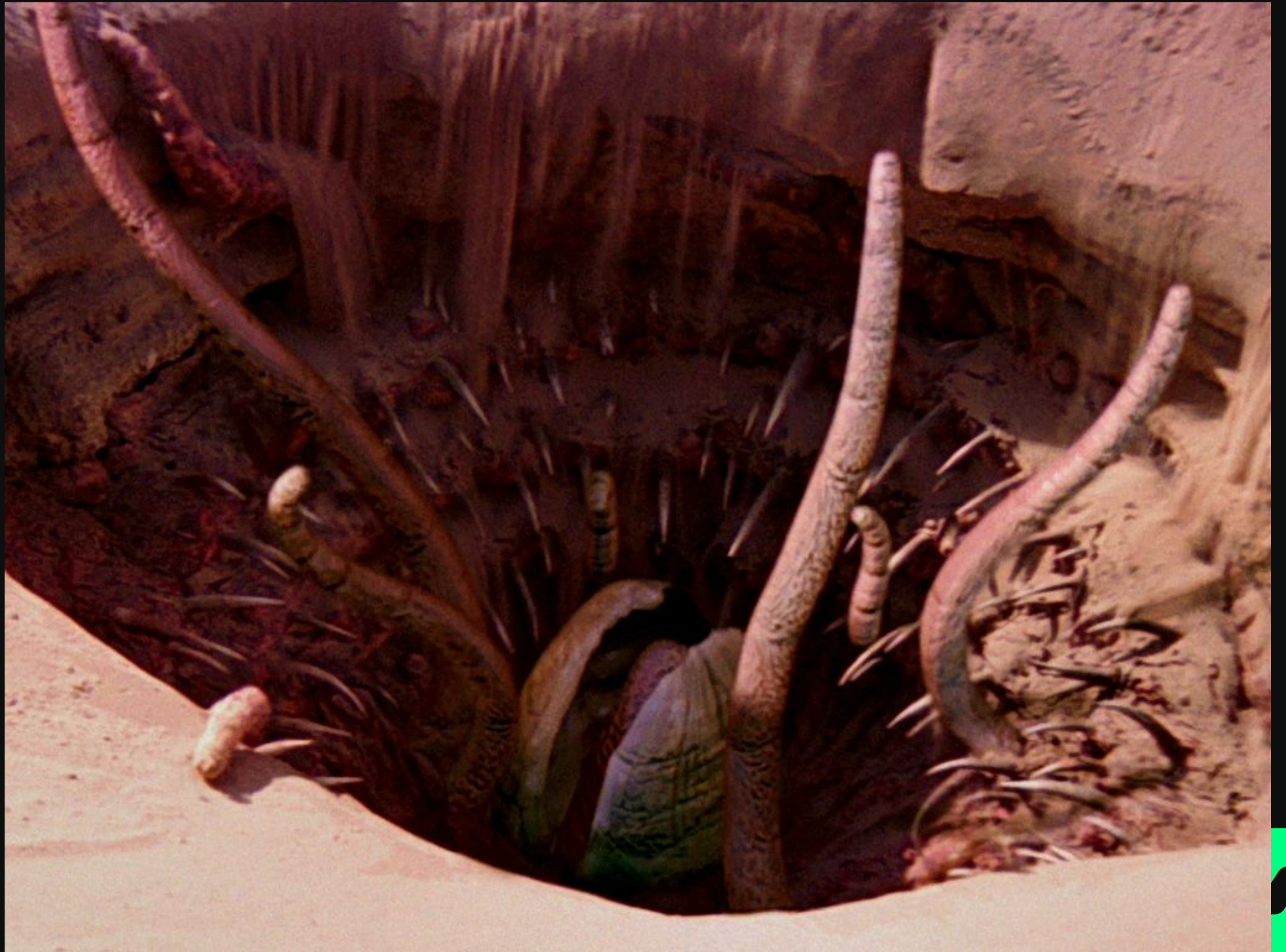


Tasks

1. We think there are 3 different galaxies in our cluster of data find them and map them.
2. Generate a map only of the uppermost galaxy
3. we think BeBe Yoda is in the rightmost planet of this galaxy. Plot the highlighted planet on the original data
4. input the coordinates into the force finder
5. From the planet data you will need to extract the force concentration and its two principal components. Map them.
6. Find BeBe Yoda in the closest point to the gravitational center of the two principal components of the force. Highlight in a map the gravitational center and the closest point.
7. Deliver the force coordinates to high command.

Bonus Points:

- +2 Points for using KMeans ++
- +5 Points for creating your own KMeans with a class
- +5 points for being 1st
- +3 points for being 2nd
- +10 points for deploying in streamlit
- +1 points for a github readme





/ Teams

Use the good side of the force.



Team Yoda



Thomas Johnson-Ellis | HedayaAli | Fabio Fistarol



Team Obiwan



Mark Skinner | Olatunde Salami | Stephen George



Team Leia



| Nurlan_Sarkhanov | Udawala_Hewage_Dilan
| Joshua Batt | Thanh Nguyen



Team Mandalorian



| Lakshmipathi rao Devalla | Madina Zhenisbek | Gavaskar
Kanagaraj



Team Young Skywalker



Marvin c | Alessio Recchia | Umut Aktaş | Gabriel Pasca



Team Bobba Fett



| MagdaMostazo | Shahid Qureshi | bilal hussain
| Farrukh Bulbulov



Team General Grievous



| Deniz Elci | Vladimir Gasanov | Sven Skyth Henriksen



Team Dooku



| Agathiya Raja | Paramveer Singh | Daniel Biman |

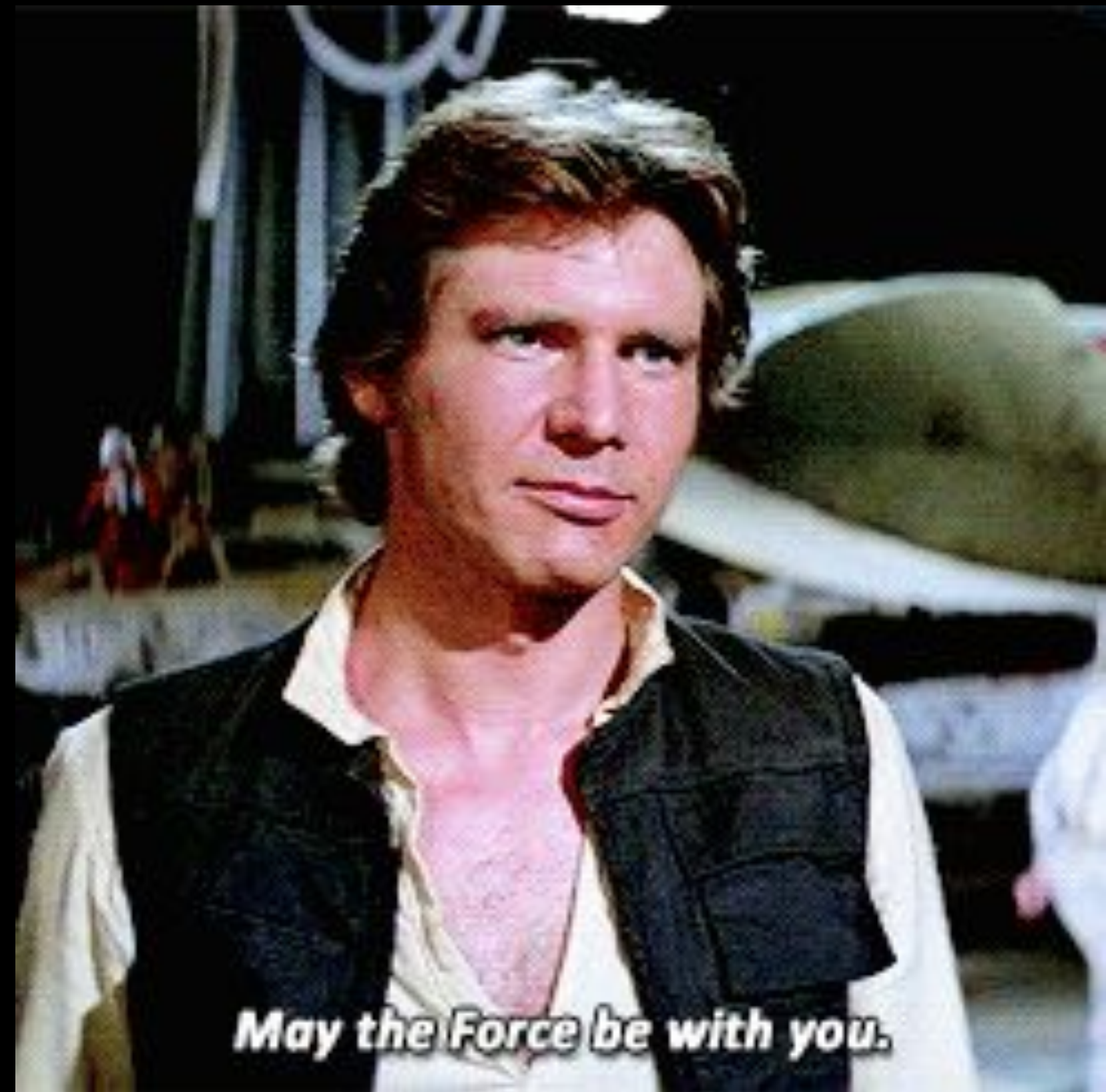


Q&A

What are your doubts?



Godspeed Soldiers







/ Results
