

Nov 17 - I had my Juniotech class, and in this class we decided what my project was going to be - classification of lung diseases

Dec 1 - in my Juniotech class I got a review on how to do ADVANCED IMAGE RECOGNITION.

Dec 5 - as homework I got, need to find datasets related to my topic, which is lung disease

website: <https://www.kaggle.com/datasets/onkarmanohardalvi/lungs-disease-dataset-4-types>.

↑

Dec 6 - I finally found a dataset containing all files needed: train and test

plus the 4 different disease:

COVID-19 - because it's a recent pandemic

tuberculosis - a really really bad disease

viral pneumonia - both are very similar, showing how well

bacterial pneumonia - project can work.

↳ 10 000 pictures ↳ diversity.

Dec 8 - I started to make my code, and thought how I can improve it, but everything I tried ended up with many ERRORS

Dec 14 - I had to restart my computer because of a virus ~~so~~, so I had to find the dataset, which I did, but ~~I went~~ when I went to unzip my code, it wouldn't go through. AFTER A HOUR, I realized that all the photos didn't go through properly. (stupid)

↙ start double spacing.

Dec 15 - I finish my code, with each lung disease having its own

accuracy. it was obviously a lot of work, loading all the

datasets and then unzip them. I thought of how to improve

the code, but I lost track of my idea in MULTIPLE WEBSITES.

biologists are tracking the whooping crane population growth at Wood Buffalo National Park, AB. The crane population increased by 2.3% per year from 2002 to 2008. There were 124 whooping cranes in 2002 and n is the number of cranes in 2008.

Did You Know? The whooping crane is the only crane in North America.

Dec 20 - i started doing research on each lung disease, what is it?

what are the symptoms??

how can we prevent it??

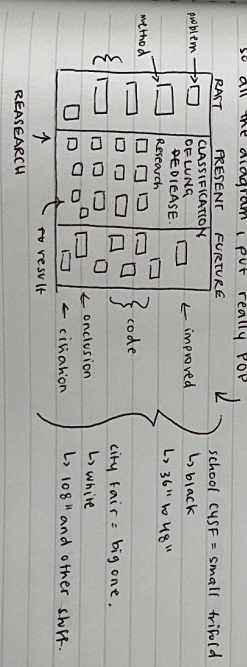
but i got really tired so i told myself i'd finish LATER.

Jan 6 - i continued my research on each disease, and finished

and right after i created a tri-fold plan, so i knew what to

put on it. i got this idea of making the tri-fold all black

so all the diagrams i put really POP



RESEARCH.

LUNGS (Continued)

- lung are vital organs in the body (respiratory system)
 - they play a crucial role in exchanging gases, carbon dioxide and oxygen to sustain life
 - this exchange come from through millions and millions of sacs called ALVEOLI, which are surrounded by multiple different blood vessels.
- process :
- inhalation : the air is arriving toward the lungs, then exhalation : when carbon is expelled from the body
 - when the lung is in a horrible state it can make overall well-being horrible as well.

BACTERIAL PNEUMONIA.(BP)

- is a disease hurting the lung tissue caused by bacteria, like most lung diseases
- just like viral pneumonia, BP can cause inflammation of the lungs, and cause difficulty breathing as many of the symptoms, like cold, fever, and shortness of breath
- the main difference between VP and BP is BP is more severe and way more common. There so similar, so imaging is a very helpful way of differentiating them. VERU SIMILAR.

...life biology
... about 0.0025 mm in diameter. How
... Park, Ar. The cran. pop. populat.
... a growth rate of 7.3%
... 2008. The rate of ...
... The rate of ...
... = 17%

TOBERCULOSIS (TB)

- tuberculosis (TB) is a big bacterial infection = mycobacterium
- mainly affects lungs but can 100% affect other lungs
 - ↳ spreads through air droplets
- when infected person sneezes
- world standing health concern, but efforts have been taken
 - ↳ testing everyone in medical field. (tell my brother story)
 - ↳ still trying to find effective way to eliminate disease.
- About 1/4 (quarter) of the world are affected by TB
 - ↳ usually cured by anti antibiotics (long-term treatment)
- with without treatment, mostly likely you won't survive.

MACHINE LEARNING

IMAGE RECOGNITION

- aka computer vision
 - ↳ growing area in ai, giving machines the ability to interpret and recognize visual image
- ↳ requires algorithms and computers and enable the machine to detect patterns. advance deep learning. (CNN's)
 - ↳ for example, convolutional neural network → improve accuracy of image → classify image.

...uble every year
rest in Jasper National
000 beetles. The formula
population, P , after n years.
remain ideal, how many beetles will
from now?
ing
by

12. A red blood cell is about 0.0025 mm in diameter
would it appear if it were magnified 10^4 times
13. Wildlife biologists are tracking the
population growth at Wood
Park, AB. The crane population
a growth rate of 2% per year.
2008. There are 1000 cranes
The rate of change is
 P .

Jan 27- today i had to present online ~~infodoku~~ in front of my
coding
whole class, it was hard because it was online, and also the fact i
have to judge present. BUT we made it through the nervous parts,
and got feedback of how to improve it.

- add code into ~~mate~~ my slide
 - graph
 - pronunciation (aleroi).
- Jan 28- i reprinted my paragraphs, and cut them out, being a really boring PROCESS.

Jan 31: i put everything on the trifold and planned where everything
goes, where to decrease the font or increase it.

Feb 6- i glued everything ~~ere~~ to the trifold, and recorded my 5
minute video, requested by ms. lai. it took many many ~~tr~~ tries
but i finally got the ~~wite~~ right one. now we wait till
the school science ~~f~~ fair

Feb 17- i got into the city fair 2024!!
April 11, 12, 13 at Olympic oral
since it's a month away we need to perpare

- To do list:
- get bigger trifold ← thursday
 - ↳ □ print slides and glue/ print circuit title } Friday
 - ↳ □ create 10 minute video } Friday/saturday
 - add CT scan into this book.

every year
Jasper National
The formula
after n years
in the forest four years ago?
main ideal, how many beetles will
m now?

12. A red blood cell is about 0.0025 mm in diameter
would it appear if it were magnified 10^4 times?
13. Wildlife biologists are tracking the
population growth at Wood
Park, AB. The crane population
a growth rate of 7.3% per year.
2008. There were 100 cranes in
The rate of growth was

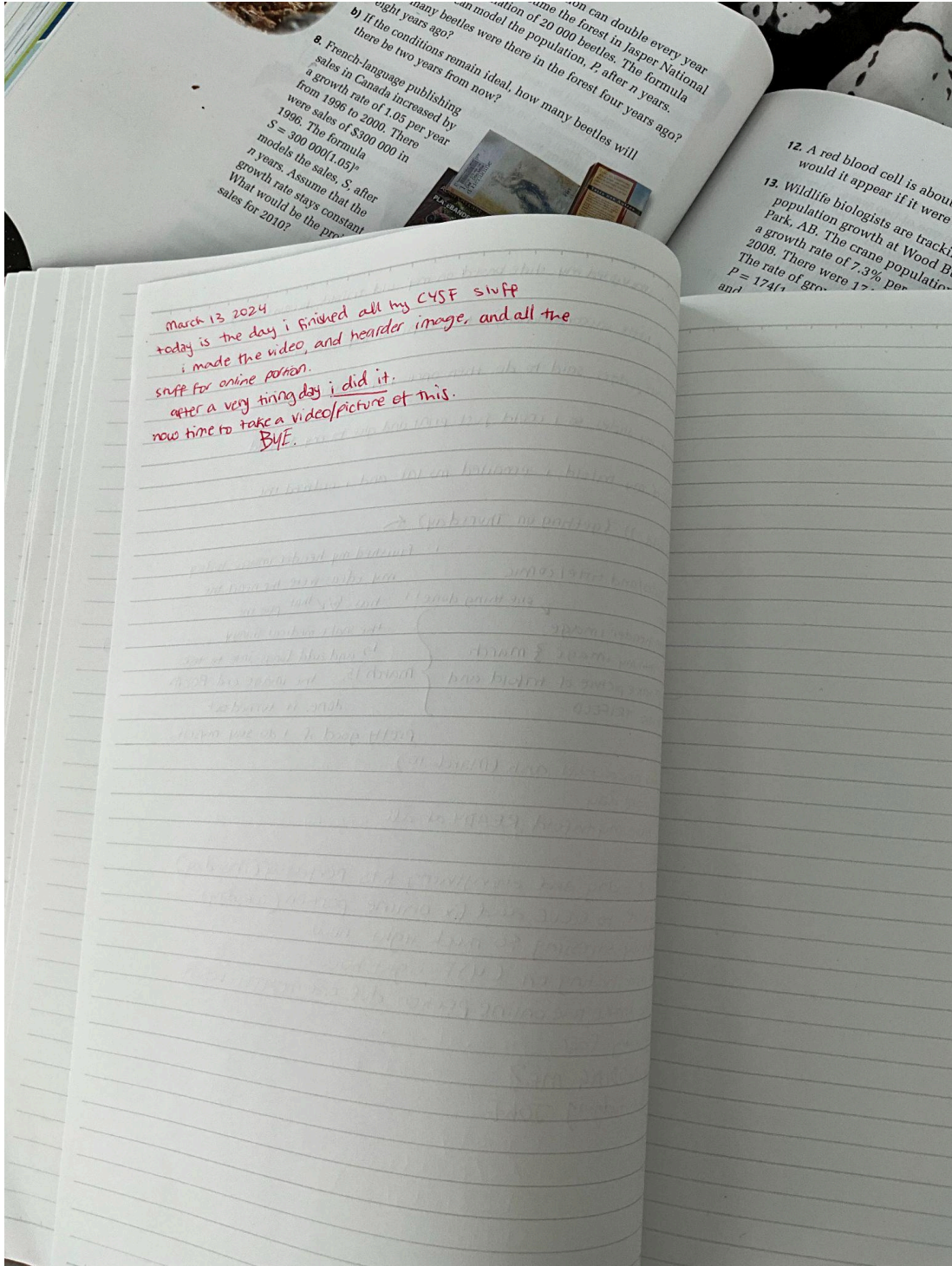
Feb 18 - i reorganized my slide based on my old trifold, because they
were a little uncoordinated, i took a picture my ipad and
wrote what judges said to do. then once i finished that
i edited my slides, so i could just print and glue to my trifold.

speaking of my trifold, i emailed ms. lai and i ordered the
big trifold :)). (getting on Thursday) ←

- to do:
- print slides/and title/comic
 - video
 - ✓ create header image
 - ↳ my image } march
 - ↳ take picture of trifold and submit into TRIFOLD
- one thing done!!
- i finished my header image today
 - my ideas were the heart the
 - has ♥ that plus the
 - the snake medical thingy
 - ↳ and add lungs into to the
 - march 15. the image and BOOM
 - done. it turned out
 - pretty good if i do say myself.

Today was an actual rush (March 10)
ok so 5 more day
i dont have my trifold READY at all.
horrible

i did it & today and everything fits perfectly (Monday).
now i have to GIVE, and fix online portion (Tuesday)
i'm literally stressing so much right now
OMG. i am hating on C4SF right now.
like who make the online portion due one MONTH before
me actually fair.
R U KIDDING ME?
this is a fudging JOKE.



Sorry for the google doc -> i had a paper logbook not an online one and the website wouldn't allow me to upload a file.