Title: Ready for Take-Off

Qn: Will Singapore Changi Airport be able to recover after COVID?

Audience: People who are looking forward for travel to return to normal

Background	Due to the pandemic there has been a disruption to air travel due to the increased restrictions set forth by many countries. Singapore Changi airport has been one such country that has seen the effects of a such decrease in air travel and traffic to our once busy air hub. This story would seek to learn more about how air travel has changed since the start of covid and investigate whether there is hope for air travel. We will then investigate whether there is a relationship between this recovery and ticket prices.
Analysis	I will be analysing this by looking at passenger and aircraft movement at Singapore Changi airport. I will seek to draw trends between the peak of the pandemic and the corresponding passenger and aircraft movement during that period. Thereafter, I will investigate whether we can see a decrease in flight prices as the flights to Singapore start to increase and the boarders open
Recommendation	
Data	a. https://www.statista.com/statistics/867835/singapore-number-of-passengers-changi-airport/ b. https://www.changiairport.com/corporate/our-expertise/air-hub/traffic-statistics.html c. https://www.statista.com/statistics/1045378/singapore-aircraft-departures-changi-airport/ d. https://ourworldindata.org/grapher/international-travel-covid e. https://www.changiairport.com/corporate/our-expertise/air-hub/traffic-statistics.html
Problem Statement	Covid-19 has impacted air travel, making it more difficult and expensive to travel to other countries compared to Pre-Covid.
Findings	

Scene:	Description:	Data and features used:
1.	This brings users through a story of COVID-19 and its effects on air travel.	https://www.statista.com/statistics/867835/singapore-number-of-passengers-changi-airport/
2.	We start to look at **Pre-covid** Changi airport This Data would show users the rise in passenger traffic at Changi Airport	https://www.statista.com/statistics/867835/singapore-number-of-passengers-changi-airport/
3.	We will see the effects of Covid on Changi airport **During Covid** This data shows the travel restrictions caused my COVID-19 around the world. I will focus to analyse Singapore's key markets.	https://ourworldindata.org/grapher/international-travel-covid?tab=table
4.	We will see how Changi Airport Recovers from covid **Post Covid** This data aims to show how Singapore is recovering well with it having 2 of the most busiest routes in the world.	https://www.oag.com/busiest-routes-right-now
5.	**But has travel changed due to the pandemic?** - I am gonna analyse the change in price and flight frequency and analyse the affordability in relation to pre-covid levels - Hindsight: Covid has made travel less accessible to everyone (you can't travel to as many countries and even if you do it is expensive)	https://www.google.com/travel/flights/search?tfs=CBwQAhojagwIAhIIL20vMDZ0MnQSCjIwMjMtMDQtMjdyBwgBEgNQVkcaI2oHCAESA1BWRxIKMjAyMy0wNS0wMXIMCAISCC9tLzA2dDJ0cAGCAQsI_____AUABSAGYAQE https://www.statista.com/statistics/1045378/singapore-aircraft-departures-changi-airport/

Implementation of Concepts:

Week:	Concept :	Implementation:	Line Number :	Filename:
Week 2 - Basic HTML website Setup	Div Headers	Usage of HTML, CSS and Javascript to make the website and allow it to fit the aesthetics I want. I will also learn how to adapt codes I find on the web to suit the needs and functions of muy website.		Index.html appscripts.css
Week 3 - Using JS to give functions to my website	Changing Font Background			
Week 4 - Functions	Creating Charts	"Var" is used to help in my graph creations. I also plan to include a feedback session at the end of the page where viewers can select whether they passed covid and are ready to travel.		main.js
Weel 5 - Event	Button	I will be using a button feature at the start of the story to allow people to enter and view the situation at different points.		index.html
Week 6 - Loop	Eventlistener	I want to create an even listener where when i scroll down, a plane moves across the screen from left to right.		
Week 7 - Charts	Line, Bar, Pie Charts Geographical charts (possibly)	Charts will be used throughout the story to compare the trends. 1. Increase in covid cases (Line chart) 2. Airports with strict airport regulations (geographical chart)		main.js
Week 8 - Datasets				
Week 9 - Fetch				

		3. Decrease/Increase in aircraft movement (Line chart) 4. Decrease/Increase in passenger movement (line chart) 5. Popular countries to travel to post-covid (Bar Chart) 6. Price of tickets over time (Line Chart)		

Additions:

Week	Changes	Why
10	I created a header that moves with the website when I scroll. This allows users to click the different buttons which follow them when they view the website and what to go to specific points.	I got the inspiration for this from another website and found that it allowers users to easily compare the results like I want between pre, during and post covid which will enhance the experience when they are trying to form links.
11	I edited my original idea of wanting ot	

Week 10 Questions :

1. **What is your project about?**
   Travel Recovery

2. **What is the data you plan to use?**
   https://www.statista.com/statistics/867835/singapore-number-of-passengers-changi-airport/ [This shows the change in passenger traffic in Changi Airport over an 8-year period, right before COVID]
   https://www.oag.com/busiest-routes-right-now [this data was to show that Singapore still realms 2 of the 5 busiest international airport routes in the world with regards to seat number
   https://ourworldindata.org/covid-cases [will use this to show an increase in COVID-19 infections and the corresponding passenger and flight levels]
   Have changed my original data set and am still looking for new additions

3. **What is the question you plan to answer?**
   Will Changi Airport be able to recover fully after COVID-19?

4. **Why is this an important question?**
   Tourism remains one of the main pillars of Singapore's economy and Singapore has continued to provide travellers with a unique experience immediately as you step into Singapore Changi Airport (Singapore Tourism Board). After losing its spot to Doha Airport as the World's Best Airport during COVID-19, Singapore Changi Airport has once again reclaimed its title as the World's Best Airport for the 12th year (Skytrax, 2023) and has even taken over Hong Kong International Airport to become the busiest airport in Asia post covid (Simple Flying). But I want to investigate whether things have changed before and after COVID-19.

   https://www.channelnewsasia.com/singapore/big-read-singapore-tourism-sector-covid-19-fallout-977476
   https://simpleflying.com/singapore-changi-becomes-asias-busiest-airport/
   https://www.worldairportawards.com/the-worlds-top-10-airports-of-2023/

5. **Which rows and columns of the dataset do you plan to use, to answer this question?**
   Since I am using various datasets, I will be using the values that are relevant to the scenario I will be explaining, mainly focusing on passenger numbers and aircraft movement specific to Changi Airport.

<u>Challenges:</u>

Week 10 :
1. Finding a dataset is more difficult than expected
    a. Although I found some datasets, the files have over 10,000 over datapoints which makes it difficult to filter and give insights
    b. Finding dataset to show change over a significant amount of time (years) have proved to be difficult as I have only been able to find changes over 1-2 years of months.
2. Finalising formatting
    a. I have been getting inspiration over the past few weeks from various websites and that has led to various changes in terms of colour pallet or what I want to be present on my website
    b. I also have found it abit overwhelming when dealing with a complete website as you need to know exactly where you need to place certain elements and how to give yourself notes to remember what certain functions or codes do.

Week 11 : (All data used thus far are linked above)

The data I have used thus far comprise a mixture of passenger and flight data out of Singapore Changi Airport. As my website will be going through different periods such as pre, during and post covid, I have utilised data to show the change over time to highlight the magnitude of impact COVID-19 seems to have on air travel.

I also utilised a summarised version of data from our world data to showcase the relationship between the increase in covid cases and the decrease in travel in relation to flights and passenger numbers (not done yet). However, one problem I have encountered is the inability to condense the data. COVID-19 world data involves a lot of data and my CSV file kept hanging even after filtering I was left with lots of values which make it difficult to input into my code. Moving forward I will try to use the fetch function to call on data as a whole or even try to find the aggregate average to summarise the data and get absolute numbers which would be more manageable to deal with.

https://www.scmp.com/news/asia/southeast-asia/article/3180668/singapore-airfares-cost-27-cent-more-covid-19-so-why-are
https://www.channelnewsasia.com/business/singapore-airlines-expects-2023-airfares-decline-rivals-add-capacity-3049611

Week 12:

Looking back, I have changed my data quite a bit. I had originally wanted to tell my data through the POV of Thomas who will aim to analyse his travel plans. However, I felt using Thomas as a device to drive my story while unique would not allow me to analyse the data how I would have wanted. I would rather be able to present a professional website that is easy to understand.

The data sources I used for my website were primarily from Statista, Our World In Data as well as from Changi Airport Group themselves. I aimed to provide a variety of statistics ranging from passenger numbers, aircraft departures, COVID-19-induced travel restrictions and even a trend in flight prices. I found that these provided a deeper insight into the effects of COVID-19 on different aspects: airlines, consumers and airports. I have updated the data I have used above.

My data story will bring users through Changi airport pre covid-19, during covid-19 as well as post covid-19.