Multi-Doc Summarization COVID-19

Sharon Wang Week 12

Location & Time Organization Strategy

- 1. Organize sentences in summary by country.
- 2. Within each country, organize by date.
- 3. Output first the country with the largest summary to the country with the smallest summary.

Organizing by Location

- 1. Determine if there is a GPE entity in the sentence using spaCy NER.
- 2. Use Python library pycountry to determine what country the GPE entity belongs to (works for cities, subdivisions, and countries). Pycountry allows access to ISO location knowledge bases.
 - a. GPE entity = Beijing \rightarrow country = China
 - b. GPE entity = Ontario \rightarrow country = Canada
 - c. GPE entity = Italy \rightarrow country = Italy
- 3. If no GPE entity is found in the sentence, check the original article in which the sentence is from. Start with the context closest to the sentence and expand outwards.

'Mask' Location & Time Organized Summary

- UNITED STATES: 36 2009-08-13 A 2009 study by researchers in the U.S. and Singapore uses schlieren imaging to show airflow from a person's mouth a) without a mask b) with a medical mask and c) with an N95 mask. 37 2020-02-28 While noting increased orders for masks, respirators, gloves and other protective gear, regulators said there are no reported shortages of those items in the U.S. 38 2020-03-22 Honeywell is also ramping up production of coveted N95 medical masks in Rhode Island, Trump said at a dinner-hour press briefing. 39 2020-03-29 In the U.S., the Centres for Disease Control has suggested homemade masks as a last-resort for health care workers dealing with coronavirus if no medical-grade masks are available. 40 2020-03-30 Last week, U.S. President Donald Trump and his administration ordered key suppliers based in the U.S. to stop exporting protective equipment, drawing backlash from other leaders and from 3M, which produces N95 masks. 41 2020-04-02 At the briefing, U.S. Vice-President Mike Pence said updated CDC guidance on the wearing of face coverings and masks will come in the next several days. 42 2020-04-05 " the statement concludes. \"will interfere with the ability of PPE manufacturers to export when doing so is consistent with United States policy and in the national interest of the United States.\" WATCH | Canadian politicians slam Trump's 'inhumane' efforts to halt mask exports: Provincial and municipal leaders are criticizing U.S. President Donald Trump for attempting to halt e<u>xports of N95 masks to Canada.</u> 43 2020-04-06 Sign up for the Coronavirus Brief, a daily newsletter that offers the latest news and answers to your questions Get the latest on the COVID-19, crisis in the U.S. Fight over N95 masks 44 2020-04-15 New York New York Gov. Andrew Cuomo issued an executive order directing his state's 19 million residents to wear masks or substitutes when in any public situation where maintaining social distancing is not possible. 45 2020-04-21 U.S. President Donald Trump called out 3M two weeks ago for exporting its N95 masks outside the country, but the U.S. Federal Emergency Management Agency has since carved out exemptions for Canada and Mexico to ensure the exports can continue. 46 2020-04-21 Minnesota-based 3M has filed a lawsuit against an Ontario company that allegedly claimed a phoney affiliation with the U.S. medical-gear maker to sell hard-to-find N95 face masks at exorbitant prices. 47 2020-05-02 Even though researchers aren't sure exactly how people without symptoms transmit the disease, the new evidence has prompted both U.S. and Canadian officials to suggest apparently healthy people wear masks in public to protect others -48 2020-05-02 Major U.S. airlines to require passengers to wear masks. 50 JAPAN: 51 2020-01-24 " Chinese tourists wear masks in the Ginza shopping district in Tokyo on Jan. 24. 52 2020-02-26 \"However, due to the uncertainty, the [school board] takes no risks with the safety of the children and its staff and has decided to terminate its travel contract to Japan.\" A person wearing a masks sits in front of a countdown clock for the Tokyo 2020 Olympics in Tokyo. 2020-03-15 A child, wearing a protective face mask, following an outbreak of coronavirus, uses hand sanitizer at Stella Kids, daycare centre in Tokyo. 2020-04-19 " People wearing face masks visit Inokashira Park in Tokyo on April 19. 56 ITALY: 2020-02-25 Andrews said many people in Milan are wearing masks and grocery store shelves are being stripped bare. 58 2020-03-13 With Italy reporting the most virus cases and deaths anywhere in the world except China, the pandemic is increasingly wearing on the EU's cherished core principle, which envisions a border-free Europe where citizens can freely live, work and travel. FRANCE: 2020-04-28 A woman wearing a face mask walks in a street during nationwide confinement measures in Paris. 2020-05-11 France's prime minister says shops will be able to ask customers to wear a mask come May 11. KOREA, REPUBLIC OF: 2020-02-20 " Workers wearing protective gears move a patient suspected of contracting coronavirus from an ambulance to the Kyungpook National University
 - Hospital in Daegu, South Korea.

 65 2020-02-40 Workers wearing protective gears move a patient suspected of contracting colonavirus from an ambutance to the kyungpook mationat oniversity Hospital in Daegu, South Korea.

 66 2020-02-40-15 A woman wearing a face mask to help protect against the spread of the new coronavirus casts a vote for the parliamentary elections at a polli
 - 66 2020-04-15 A woman wearing a face mask to help protect against the spread of the new coronavirus casts a vote for the parliamentary elections at a polling station in Seoul.

'Symptom' Location & Time Organized Summary

having developed a mild fever, as well as nausea, a cough and muscle pain.

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CANADA:
2 2020-04-06 " A government of New Brunswick infographic lists only three symptoms of COVID-19: cough,
    difficulty breathing and fever.
3 2020-04-13 Anyone in Alberta with fever, cough, shortness of breath, runny nose or sore throat can now
    be tested by filing a request online.
    2020-04-21 Alberta, on the other hand, makes testing available to anyone showing symptoms of the virus
    - cough, fever, shortness of breath, runny noses and sore throats.
    CHINA:
    2020-01-22 "Health officials stress precautions for travellers to prevent infection while in China,
    such as staying away from animal markets, washing hands, observing cough hygiene, not coming into
    contact with sick people and telling health-care providers about their travel if flu-like symptoms
    occur.
   2020-02-03 Yaffe said the majority of cases under investigation meet the case definition, which says
    that the person would have been in Hubei province within the past 14 days and have a fever or cough.
    ITALY:
    2020-02-26 The health ministry had determined that people with fever and flu symptoms returning from
    Italy and six other countries should be considered suspected cases.
12
    BRAZIL:
13
    2020-02-26 According to Brazil's health ministry, the man began to show symptoms compatible with the
    illness, such as a dry cough, throat pain and flu symptoms.
    BAHRAIN:
    2020-04-20 A South Korean businessman returned then from a trip to Bahrain and quickly developed a
    cough and fever.
    UNITED STATES:
    2020-03-13 0:51 \"We didn't want to stay in New York [and] be unable to come back and maybe get
    sick.\" Still, just days after returning from the U.S. on March 13, Levesque began to feel unwell,
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'Economy' Location & Time Organized Summary

January-March in the worst downturn since the Great Recession.

consumers and employees might be too worried to return to business as usual.

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59 2020-01-27 Economic fallout World shares slipped to their lowest in two weeks as worries grew about the economic impact of the coronavirus on China, the
    world's second-biggest economy.
60 2020-02-14 China is struggling to restart its economy after the outbreak of the coronavirus.
61 2020-02-15 Why cruise ships are a hotbed for viral outbreaks5th presumptive case of coronavirus found in B.C. Anti-disease measures are causing losses so
    severe that economic forecasters have cut their outlooks for China's growth this year.
62 2020-02-17 The outbreak is expected to intensify pressure on China's economy, with multiple companies struggling to restart production after an extended
     Chinese New Year holiday.
63 2020-02-18 Wang says that while the country's giant companies are big enough to outlast the crisis, especially with government help, a significant and
    dynamic part of China's economy is based on much smaller businesses that could disappear, leading to lingering economic effects.
64 2020-03-02 The OECD report said global economic growth was weak but stabilizing before the outbreak of COVID-19, the respiratory illness caused by the
    novel coronavirus that originated in Wuhan, China.
65 2020-03-16 The outbreak of COVID-19 has had a devastating effect on China's service sector and industries from autos to cellphones, although President Xi
    Jinping has pledged that economic growth targets for the year will still be met.
66 2020-04-16 AnalysisPandemic, an economic meltdown, now a 3rd crisis: China-U.S. tensions Prominent economist Alexei Kudrin, the architect of many of
    Russia's most successful financial reforms and now an auditor of government spending, told a Russian business publication that the economic implications of
    the outbreak are close to catastrophic.
67 2020-08-13 "Lee says the bank still expects China to rebound from the economic malaise, though BMO now puts Chinese full-year growth for 2020 at 5.3 per
     cent.
69 GERMANY:
70 2020-04-14 1:08 Gopinath said the cumulative loss to the global gross domestic product, the broadest gauge of economic output, could amount to $9 trillion
    - more than the economies of Germany and Japan combined.
71 2020-04-20 Some shops are reopening in much of Germany as Europe's biggest economy takes its first tentative step toward restarting public life after a
     four-week shutdown.
    2020-04-29 Altmaier told reporters in Berlin, presenting the government's updated growth forecast for Europe's largest economy.
74 ITALY:
    2020-04-10 In Italy, the industrial lobbies in regions representing 45 per cent of its economic output urged the government to ease its two-week lockdown
    on all non-essential manufacturing, saying the country \"risks definitively shutting down its own motor, and every day that passes the risk grows not to be
    able to restart it.\" The head of the World Health Organization, Tedros Adhanom Ghebreyesus, warned that a premature lifting of restrictions could \"lead
     to a deadly resurgence.\
76 2020-04-30 Italy has registered 27,967 coronavirus deaths, the highest tally in Europe, and has introduced some of the world's toughest lockdown measures,
    which look certain to tip the fragile economy into a deep recession.
    UNITED STATES:
79 2018-08-13 Tensions between Washington and Tehran have been high since 2018, when President Donald Trump withdrew the U.S. from Iran's nuclear agreement
    with world powers, and imposed sanctions that have forced Iran's economy into recession.
80 2020-02-23 U.S. pressure and sanctions have plunged Iran's economy into recession, and the elections took place under the threat of the coronavirus.
81 2020-04-16 " said Elise Gould, a senior economist at the Economic Policy Institute in Washington,
82 2020-04-30 In the U.S. and other jurisdictions, seniors and vulnerable groups are being told to \"shelter in place\" at home until the final phases of the
    economic restart because of the increased risk of sickness and death.
83 2020-04-30 News of the medical advance lifted world markets, outshining gloomy economic data showing the U.S. economy contracted nearly five per cent in
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2020-04-30 Many economists are skeptical that the U.S. economy will bounce back quickly later in the year, noting that the virus could flare up again or