CHC5904 Digital Studies of Chinese Culture
Hands-on Assignment #2
Fall 2025

Due Date: November 23, 2024 (Sunday) 11:59pm

Submission Format:
- **You need to submit 1) A reflective essay, and 2) slideshow file.**
- **Combine everything into a PDF file and upload the single PDF file to Turnitin. You can check the similarity rate after submission.**

Grading:

1. 5%: A reflective 500-to-1000-word English essay on your experience of using the relevant Gen AI and DH tools to solve the problem. In your essay, please includes all possible screenshots of your workflow (1%) and your thoughts on the relevant tools (4%).

2. 10%: Your solution to the problem in a **no more than 10 slides** PowerPoint (PPT style, in either PPTX or PDF format, You will lose points if your file exceeds the max page limit) presentation file following the following format:
   - Introduction: Propose your 1-2 research questions here.
   - Your methodology, tools: What is your methodology? What are the tools you used?
   - Findings and Results: You may only pick and highlight the results and findings related to your research questions.
   - Reflection: What is your answer to your research questions?

     Note: Include a OneDrive or GoogleDrive or StroryMaps or Github Repo or Any Public Website Link inside your PPT file for each assignment. This link should contain all your original data (a spreadsheet of your text data), all your analysis results, and also your code if any.

   You may also add additional slides listing out all your References following APA or MLA or Chicago style. This does not count into the page limit. (Include any possible website links or screenshots/images links or cited books information inside your PPT file for each assignment.)

Problem: Imagine you are a data analyst or a research assistant working for someone who needs insights into premodern Chinese fiction. Make use of the following data resources and tools to generate your insights.

Required Tools:

- Data source: Ctext (https://ctext.org/), CHGIS (https://chgis.fas.harvard.edu/pages/intro/)
- Results Presenting: StoryMaps (https://storymaps.com) or Streamlit (https://streamlit.io/)
- Network Analysis Visualization: Gephi (https://gephi.org/) or NetworkX (https://networkx.org/) or other alternative network visualization tools
- GIS Analysis: StoryMaps (https://storymaps.com) or QGIS (https://qgis.org/) or ArcGIS (https://www.arcgis.com/index.html)
- PolyU GenAI (https://genai.polyu.edu.hk/) and Python (https://www.python.org/)

OPTION 1

In the famous Chinese novel *Dream of The Red Chamber* 紅樓夢, there are 3 major characters :賈寶玉、林黛玉、薛寶釵. There are also other minor characters such as 襲人、鴛鴦、賈母、賈政, and others.

Pick at least <u>1 main character</u> from 10-20 chapters. Conduct close reading of the text, identify, visualize and analyze this character's interactions and social networks with other minor characters. Offer insights into the social network of this central character. Make use of various network analysis algorithms (betweenness centrality, closeness centrality, in-degree, out-degree etc) introduced in our class to offer your insights.

Results Presentation: You can present the results via a StoryMaps (https://storymaps.com) or Streamlit (https://streamlit.io/) link

Texts to deal with:

- *Dream of The Red Chamber* 紅樓夢: https://ctext.org/hongloumeng

All original texts need to come from Ctext.org(https://ctext.org/). Other websites are not acceptable.

OPTION 2

In the famous Chinese novel *The Scholar* 儒林外史, there are at least 7 location names :
南京、蘇州、杭州、北京、揚州、濟南、湖州 mentioned in the fiction where various scholars held various activities.

Pick at least 5 places from 10-20 chapters. Conduct close reading of the original text, identify and compare the frequency of the appearance of these places across chapters. Offer insights into the comparison. It would be better to compare the related activities held by different characters. Please use GIS tools to visualize the frequency on a map.

Results Presentation: You can present the results via a StoryMaps (https://storymaps.com) or Streamlit (https://streamlit.io/) link

Texts to deal with:

- *The Scholars* 儒林外史: https://ctext.org/rulin-waishi

All original texts need to come from Ctext.org(https://ctext.org/). Other websites are not acceptable.