NoCap: Fact Checking with AI

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3. Progress of current Milestone (progress matrix)

Task	Completion %	Thomas	Anthony	Josh	Varun	To do
1. Prompt engineering	75%	20%	0%	20%	60%	Improve existing prompt to yield better output
2. Get a basic score of an article	100%	0%	0%	0%	100%	All done
3. Start process to break text down into tokens	100%	0%	0%	50%	50%	All done
4. Develop the backend database	80%	0%	0%	100%	0%	Get storage working for the large amounts of text in amazon s3
5. Article Report/Publisher Cards	100%	0%	50%	50%	0%	All done
6. Article meta data connection	50%	15%	15%	70%	0%	Connect to report page via input

4. Discussion (at least a paragraph) of each accomplished task (and obstacles) for the current Milestone:
    - Task 1: We started on prompting the LLM model. The output is roughly what we want. It is rudimentary, but the output can easily be expanded. Basic prompting ensures output is relevant to the project topic.
    - Task 2: Basic score is now output after reading an article text. The prompt engineering gets the output we want. The output also has a basic justification for the score it yields.

- Task 3: The article of a given url is extracted, and the text content is fed to the LLM model as tokens. We are now able to get the model to go over these and break down the provided material.
- Task 4: A schema was created and functions to easily input data into the db were created. The connection to the frontend was also created with queries to the db. The final product will have only read access for public apikeys, however currently they have crud permissions for testing. At the end the frontend will only have read permissions while the backend will have crud permissions.
- Task 5: We created cards for both an article/article report and the publisher. The article cards contain a list of information such as article title, author, publisher, publication date, and a link to the article, as well as the article's authenticity score. These article cards are then placed into their respective publisher cards, which shows the publisher name, as well as the publisher's average authenticity score, which is displayed in green, yellow, or red depending on how factual the article is.
- Task 6: When clicking on an article card, the report information is brought up on the Report Page, showing article information like article title, publisher, publication date and report information like authenticity score, report summary, and full details. We still need to create an article report via input and enter it into the database so that it creates a card in the database as well as immediately show the report information on the report page.

5. Discussion (at least a paragraph) of contribution of each team member to the current Milestone:
   - Thomas: Worked on getting the ai output onto the report page(in progress) as we now receive a small summary of the text of a website that we send it, I also worked on and currently working on styling where all the meta data will go.
   - Anthony: Helped with article cards for frontend home and database page that shows the information about an article's report such as title, authenticity score, author, and publication date. Created publisher cards for frontend database page that shows a publisher's name, authenticity score, and the article cards of all articles of that publisher saved in our database.
   - Josh: Worked on developing the backend database and connecting the functionality between the front and the backend. Developed the article cards and as the sorting and filtering mechanism.
   - Varun: Worked on improving backend functions. Connected backend functionality between reading an article's content, and the LLM model. Added prompt engineering to get an output for a content's rating. A score and basic justification is now outputted.

6. Plan for the next Milestone (task matrix) or

Task	Thomas	Anthony	Josh	Varun
1. Prompt Engineering	0%	0%	50%	50%
2. Improve model output	0%	0%	50%	50%
3. Show default home page cards	50%	50%	0%	0%

4. Article data connection to report page via input	30%	0%	0%	70%
5. Create logo and branding	50%	50%	0%	0%
6. Chrome extension	50%	50%	0%	0%

7. Discussion (at least a paragraph) of each planned task for the next Milestone or "Lessons Learned" if this is for Milestone 6
    - Task 1: Continue improving the prompting for the model to give additional parameters and instructions, so the article grading process becomes more like what we want. We want to avoid any logical inconsistencies.
    - Task 2: The output exists, but is still very rudimentary. We want a more descriptive output where the article grade has a stronger justification and reasoning for it. We will continue to expand this output to be more insightful.
    - Task 3: We want to ensure the user knows what the range of article authenticity is, so we would like to display example cards. These will be the article reports in our database with the highest, lowest, and median authenticity scores.
    - Task 4: The user will input the url and send it to the ai in the backend. The ai will then generate a report and update the database to include the report. This will also store the report summary and the report itself in the aws s3 storage because of the size of the report. This will then send the user to the report page after setting the global current report to the one that was created.
    - Task 5: This will be to come up and design our company/project logo, this will allow us to place this logo throughout our website.
    - Task 6: The chrome extension is the heart of our project, this will take it from “enter your url and receive a score” to one click of the extension to automatically go through those steps and output a score and a small summary of the report, where you can then click a ‘read more’ button to take you to the website to receive all information including the report page.
8. Date(s) of meeting(s) with Client during the current milestone: see Faculty Advisor meeting date below
9. Client feedback on the current milestone
    - see Faculty Advisor Feedback below
10. Date(s) of meeting(s) with Faculty Advisor during the current milestone:
    - Friday Nov 21st
11. Faculty Advisor feedback on each task for the current Milestone
    - Task 1: The function to get the score and summary from the model is complete. The advisor suggested adding prompting that would make the LLM model provide references from the article, and from sources it uses to fact check the article. The advisor also suggested adding prompts that grade the content based on its premise (scientific journal, opinion piece, etc.)
    - Task 2: A basic score and explanation is in the current output. The advisor suggested including references and confidence scores for output.This is to strengthen the reasoning for the score, and show how confident the model is in its assessment.

- Task 3: We can extract the content of an article, and provide it as a list of tokens to the model. The advisor suggested adding additional context in the prompts to disregard any nonrelevant text that gets scraped (Advertisement text, headlines for other articles, etc.)
- Task 4: no comments made about the ai connection to report page, everything worked as intended.
- Task 5: Article and publisher cards look good, including different filter types. Recommended we include a legend to show the meaning of the different colors, might add this to the home page as well.
- Task 6: For the connection from the database to the report screen, suggested we add the confidence score and references that we will prompt engineer onto the report page. We need to lastly ensure any references or articles that the model gives us are real and can be reached on the Internet.

12. Faculty Advisor Signature: _____ Date: _____

13. Evaluation by Faculty Advisor
    - Faculty Advisor: detach and return this page to Dr. Chan (HC 209) or email the scores to pkc@cs.fit.edu
    - Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10)

Thomas	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Anthony	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Josh	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Varun	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

    - Faculty Advisor Signature: _____ Date: _____