NoCap: Fact Checking with AI

Thomas Chamberlain tchamberlain2023@mv.fit.edu

Anthony Ciero <u>aciero2022@my.fit.edu</u>
Josh Pechan <u>jpechan2023@my.fit.edu</u>
Varun Doddapaneni <u>vdoddapaneni2023@my.fit.edu</u>

1. Marius Silaghi msilaghi@fit.edu

2. Marius Silaghi msilaghi@fit.edu FIT CSE Professor

3. Progress of current Milestone (progress matrix)

Task	Completion %	Thomas	Anthony	Josh	Varun	To do
Compare technical tools	100%	25%	25%	25%	25%	
2. Hello World demos	100%	25%	25%	25%	25%	
3. Resolve technical challenges	20%	25%	25%	25%	25%	
4. Compare and select collaboration tools	100%	25%	25%	25%	25%	
5. Requirement Document	100%	25%	30%	25%	20%	
6. Design Document	100%	20%	30%	20%	30%	
7. Test Plan	100%	70%	10%	10%	10%	

- 4. Discussion (at least a paragraph) of each accomplished task (and obstacles) for the current Milestone:
  - Task 1: We had to identify what technical tools we wanted to use, such as the programming language, API, IDE, and AI hosting service. We decided on using Python for backend, since it is an easy and scalable language to use. We decided on FlaskAPI, for its lightweight nature. We decided on VSCode for our IDE, since it is the one we are most familiar with. We decided on AWS Bedrock for AI model hosting, since it is a service one member of the team is already familiar with.
  - Task 2: We created very basic demos/programs of the technologies we have chosen for the project. This includes testing that AWS Bedrock's services work, testing that Visual Studio Code can support AWS, and basic programs to ensure every member of the team can work in the selected programming languages and environments.

- Task 3: A few technical challenges arose, such as setting up an AWS account with the necessary permissions for our project, and ensuring our IDEs are able to access these permissions. The team is using a single AWS account, and we ensured that the account worked on a single computer and IDE, before getting it to work on everyone's computers.
- Task 4: For collaborative tools, we will text and meet in person for communication, Google Docs and Slides for documentation, and Github for version control and cloud-based code sharing.
- Task 5-7: We have created our necessary documentation for our website. Our requirements document explains the purpose and scope of our project, the product description and constraints, and the specific requirements of our product, specifically functional, interface, and performance requirements. Our design document contains the overview of our system and the design of its architecture in a diagram, the data we intake, the specific components, and the user interface with drawings of our expected screens and the functions of each screen object. Our test document explains specific test cases for core features of our product.
- 5. Discussion (at least a paragraph) of contribution of each team member to the current Milestone:
  - Thomas: Helped resolve technical issues, worked on many documents including the requirements documentation and wrote the majority of the Test Documentation. This included the Table of contents, Core features 1,2, and 3, and filling out all 3. I also contributed to come up with ideas/draw how our website will look and how everything will fit on the page. I have also put my input into the task matrix.
  - Anthony: Helped select technical and collaborative tools, helped resolve technical challenges, worked on documents; Requirements: Table of Contents, Sections 1 & 2, Design: Sections 1, 4, 6.2/6.3, Test: Section 5. I helped design the image screens as well as add key screen objects ensuring page readability and navigation is user friendly.
  - Josh: Helped determine technical requirements, tools and worked on documents; Requirements: Section 3, Design: Sections 2 & 6. I helped to create the design for the front end application which would ensure ease of use. I also communicated with professors to ensure that everything was signed and submitted.
  - $\circ\quad$  Varun: Requirements: Sections 3, Design: Sections 3 & 5

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

Task	Thomas	Anthony	Josh	Varun
1. Design front end	25%	25%	25%	25%
2. Set up AI model on AWS	25%	25%	25%	25%
3. Establish basic connection with AI	25%	25%	25%	25%

4. Develop	25%	25%	25%	25%
rudimentary backend and				
API				

- 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: For designing the front end GUI of our website, we will use React UI. This is important for the user input, which will later be passed to our back end. From the back end we output the authenticity score and the report for the given article. We will design our home, report, and database screens to be accessible and user-friendly for easy navigation and understanding of our page.
  - Task 2: Set up the selected Al model (Nova Pro) on AWS Bedrock. We must set up the IAM credentials for our AWS account, and enable the specific permissions needed for this project. We need to set up an access key and a secret key, so this model instance can only be used for this project.
  - Task 3: We have to connect the AI model to our backend. This means using the AWS credentials and setting them up in our VS Code IDE. Then, we have to create a basic program that can call the Al model with our credentials. We went to ensure that this connection works as expected first, before proceeding further with the project.
  - Task 4: For developing the rudimentary backend and API, we will use AWS and Amplify and DynamoDB. Amplify is how everything in the backend connects and DynamoDB is what we will be storing our data in. All necessary information should be accessible from the front end using queries.
- 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:
  - Sept. 26
- 11. Faculty Advisor feedback on each task for the current Milestone
  - Task 1: Approved our technical tools
  - o Task 2: Described simple "hello world" demos including testing that AWS Bedrock's services work and that VSCode can support it.
  - Task 3: Group is using one AWS account to establish AI connection.
  - Task 4: Approved our collaborative tools
  - Task 5: Approved of our requirements document while reviewing our specific requirements including functional, interface, and performance requirements. Explained that we can not promise accuracy or stability of our reports as we are not the AI creators and can not affect it, only prompt engineer it.
  - Task 6: Approved of our design document, including our system architecture diagram and our screen image drawings and screen objects/actions.
  - odel

0	Task 7: Explained that we can not pron we are using is not made by us, we are	e simply using AWS Bedrock models.
	Suggested potential use of multiple momilestones.	dels for aggregate use in future
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)

	write dewrit a real fluiriber between 6 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

0	Faculty Advisor	Signature:	Date:	