PROJECT MILESTONE 5 REPORT

PROJECT NAME	ChatBot Flight Booking System	**DATE OF STATUS ENTRY**	December 9, 2023
PROJECT CODE	BDM3035 T3F23 CFBS	**PERIOD COVERED**	December 3, 2023 to December 09, 2023
PROJECT MANAGER	Auradee Castro	**DATE OF COMPLETION**	December 15, 2023
MEMBERS	Auradee Castro (c0866821), Bhumika Babu (c0867081), Miraj Sinya (c0863371), Olivia Deguit (c0878491), Roger Mais (c0863147)		

PROJECT STATUS

PROJECT STATUS	ON TRACK	**SUMMARY**	Fully tested chatbot application and introduced a customer review feature. Additionally, created a Power BI presentation covering 'Transaction Analysis' and 'Sentiment Analysis'.
TASKS	Extensively tested all chatbot features to resolve errors from database restructuring. Additionally, introduced a new chatbot feature enabling users to leave a review regarding his flight experiences, integrating the VADER model to categorize sentiments.		
	Developed a comprehensive Power BI presentation covering 'Transaction Analysis' and 'Sentiment Analysis,' providing insights into total transaction metrics, monthly transaction breakdowns, sentiment trends from customer reviews.		

PROJECT COMPONENTS

COMPONENT	STATUS	OWNER / TEAM	NOTES
BUDGET	UNDER	MetaMorph Team	Reduced expenses allocated for the development of passport reader feature by saving on resources
RESOURCES	ON TRACK	MetaMorph Team	Tools installation and configuration completed - Python and Jupyter Notebook - Power BI Desktop - AWS account and services - Landbot - Github Repository and Project Board - Microsoft Teams - CDATA (for DynamoDB and Power BI connection)
TIMELINE	ON TRACK	MetaMorph Team	Project is progressing as planned without major blockers
SCOPE	ON TRACK	MetaMorph Team	Passport reader feature using machine learning was excluded from the project plan, which was discussed and approved by the stakeholder. **See Milestone 4 report.**

PROJECT PLAN ADJUSTMENTS: SCOPE AND DESIGN REVISIONS

TASK NUMBER	DESCRIPTION	OWNER / TEAM	NOTES
CFBS-10	Removal of passport reader from the project plan	MetaMorph Team	Passport reader was removed from the original project plan due to model's small accuracy result in extracting texts from the US passports, which might impact app user experience. This change has prior approval from the stakeholder. **See Milestone 4 report for detailed information regarding the removal of passport reader.**

WORK ACCOMPLISHED

TASK NUMBER	DESCRIPTION	OWNER / TEAM	NOTES
CFBS-07	Fully tested chatbot application	Roger Mais, Olivia Deguit	Thorough testing was conducted on all features within the chatbot application to address and rectify errors resulting from database restructuring. The GitHub project board is employed to systematically monitor and manage any bugs or issues identified in the application, adhering to industry-standard practices for issue resolution. See Project Board containing all tickets of the bugs captured during testing: https://github.com/users/abccastro/projects/3/views/4?filterQuery=label%3Abug Link to check and validate the application's features: https://landbot.pro/v3/H-1762252-XMGB0WW049SS8UP1/index.html
CFBS-14	Power BI presentation showcasing insights derived from datasets related to flights and reviews	Miraj Sinya	Completed the development of a Power BI presentation focusing on 'Transaction Analysis' and 'Sentiment Analysis' to offer valuable insights for informed decision-making in business. Transaction Analysis highlights: - Aggregate details including total transaction amount, customer count, and transaction count - Monthly breakdown of transaction amount - Distribution of transactions across different days of the week - Transaction frequency based on origin and destination Sentiment Analysis includes: - Comprehensive overview of customer reviews, encompassing the total number and the percentage breakdown of positive, negative, and neutral sentiments - Sentiment trends over different months See the Power BI presention: a. PDF: https://github.com/abccastro/ChatBot-Online-Flight-Booking/blob/main/Powerbi%20Dashboard/Airlines_reviews.pdf b. PBIX: https://github.com/abccastro/ChatBot-Online-Flight-Booking/blob/main/Powerbi%20Dashboard/Airlines_reviews.pbix
CFBS-09	Integration of the VADER model into the chatbot application enables the detection of sentiment in reviews	Roger Mais, Auradee Castro	Incorporated a new functionality into the chatbot application, prompting users to share their review on the flight experience. The VADER model is seamlessly integrated into this feature, analyzing the sentiment of the reviews to categorize them as POSITIVE, NEGATIVE, or NEUTRAL before storing the review in DynamoDB. See video showing how the feature works: https://drive.google.com/file/d/15o9edVoke1nCD_ViosiS45KL8y9KIbtp/view

RISKS AND ROADBLOCKS

TASK NUMBER	DESCRIPTION	OWNER / TEAM	FIX / RESOLUTION

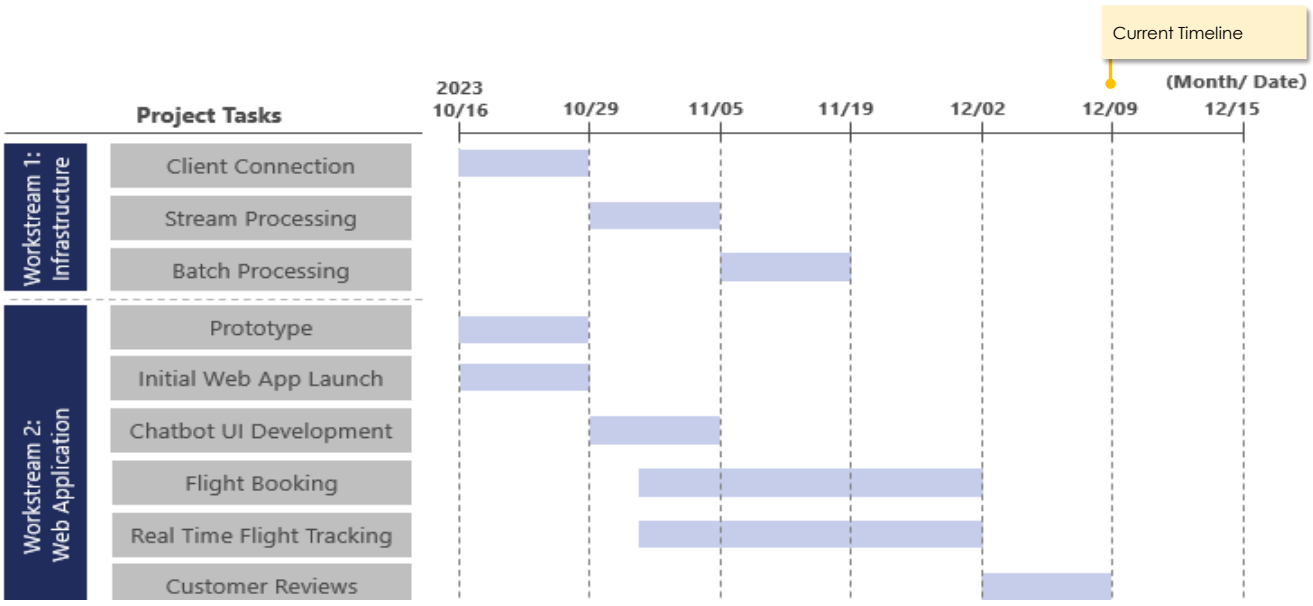
HIGHLIGHTS AND KEY TAKEAWAYS

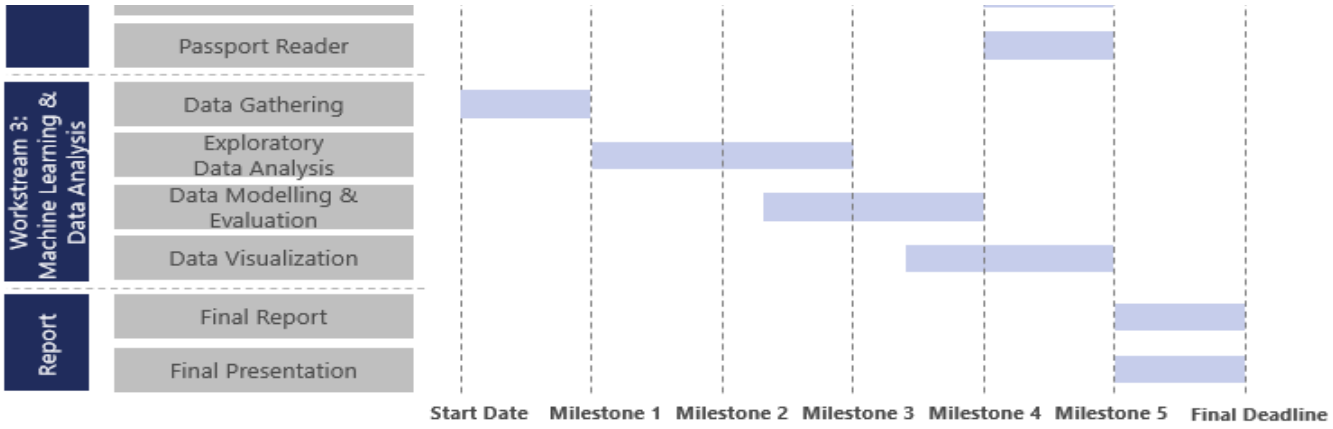
Fulfilled all requirements outlined for milestone 5 as communicated to stakeholder, with the exception of the passport reader task, which has been excluded from the initial project plan and approved by stakeholder.
Conducted rigorous testing on all chatbot features to rectify errors stemming from database restructuring, employing the GitHub project board to systematically monitor and manage identified bugs or issues, adhering to industry-standard practices for issue resolution
Successfully developed a Power BI presentation emphasizing 'Transaction Analysis' and 'Sentiment Analysis' for informed business decision-making, featuring aggregate transaction details, monthly breakdowns, and sentiment trends from customer reviews.
Effectively fulfilled all project requirements without any unresolved issues. Regular communication with stakeholders ensured they were informed of any modifications made to the initial plan.

UPCOMING WORK

TASK NUMBER	STATUS	DETAILS
CFBS-15	ON TRACK	Project final report containing the following information: a. Overview of the Project b. Test Cases c. Demonstration of the Application d. Performance metrics e. Information placement f. Personal Experience and Lessons Learned g. Additional Information h. Code Inclusion
CFBS-16	ON TRACK	Final presentation containing the following information: a. Overview of the Project b. Model Architecture c. Dataset Utilization d. Test Cases e. Demonstration of the Application f. Performance metrics

PROJECT MILESTONE AND TIMELINE




Passport Reader
Workstream 3: Machine Learning & Data Analysis
Data Gathering
Exploratory Data Analysis
Data Modelling & Evaluation
Data Visualization
Report
Final Report
Final Presentation
Start Date
Milestone 1
Milestone 2
Milestone 3
Milestone 4
Milestone 5
Final Deadline