

AI-based Email Classifier Project Proposal

1. Synopsis:

The goal of this project is to use Large Language Models (LLM) and AWS services to create an automated email classification system. Incoming emails will be sorted by the system into pre-established groups like spam, sales, and support, which will expedite email handling and speed up response times.

2. Project Overview:

2.1 Objectives

Establish an automated system for classifying emails; Integrate AWS services with LLM to process emails efficiently; Boost organizational effectiveness and email response times.

2.2 Key Components

- Amazon Simple Email Service (SES) for email reception
- Amazon Lambda for Processing and LLM Integration
- Large Language Model Classification Engine (OpenAI GPT API, for example)
- Storage: DynamoDB or AWS S3
- Amazon Simple Notification Service (SNS) for notifications

3. Technical Design

3.1 Process of Emails

- incoming emails that AWS SES has received.
- Email content delivered to LLM for classification
- AWS Lambda function activated to process the email
- Classification result stored in AWS S3 or DynamoDB
- Notifications issued via AWS SNS (if required)

3.2 Components Specific Information

AWS SES:

- Configure to receive incoming emails and trigger Lambda function

Amazon Lambda:

- Extract the email's information and content.
- Get data ready for processing in LLM.
- Respond to LLM API queries
- Store classification outcomes

LLM Integration

- To classify content, use the OpenAI GPT API or something comparable.
- Provide rapid engineering to ensure precise classification.

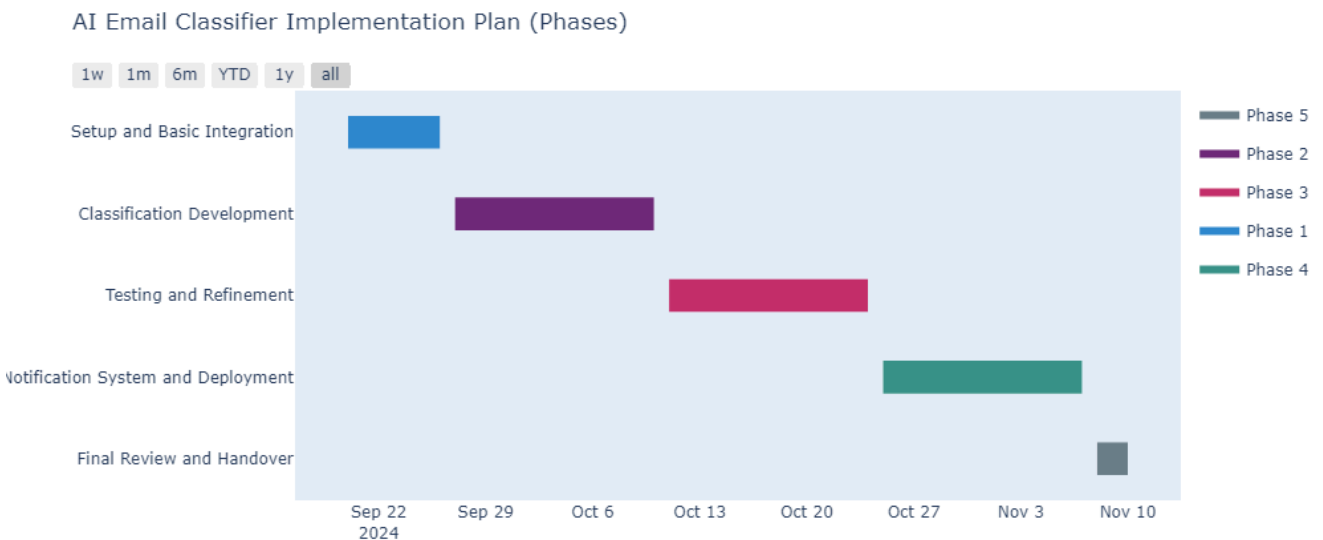
AWS S3/DynamoDB:

- Store classified emails and metadata

AWS SNS:

- Configure subscriptions and topics to receive notifications

4. Implementation Plan



AI Email Classifier Project Milestones:

Date	Milestone	Description
2024-09-20	Project Kickoff	Initial team meeting and project setup
2024-09-26	AWS Services Setup Complete	All necessary AWS services are configured and ready
2024-10-10	Basic Classification System Operational	Initial version of the classifier is functional
2024-10-24	Refined Classification with High Accuracy	classifier achieves target accuracy after testing and refinement
2024-11-07	Fully Deployed System with Notification Capabilities	system is deployed to production with all features operational
2024-11-10	Project Completion and Final Deliverables	All documentation is complete and project is handed over

6. Budget Considerations

- AWS service costs (SES, Lambda, S3/DynamoDB, SNS)
- LLM API usage fees

7. Future Enhancements

- Implement machine learning model for continuous improvement
- Develop a user interface for managing classification rules
- Integrate with existing CRM or ticketing systems

8. Conclusion

This AI-based Email Classifier project leverages cutting-edge AWS services and LLM technology to significantly improve email management efficiency. By automating the classification process, organizations can expect improved response times, better resource allocation, and enhanced customer satisfaction.