

OSINT APPLICATION

Cyber Security Technologies ITMS - 548

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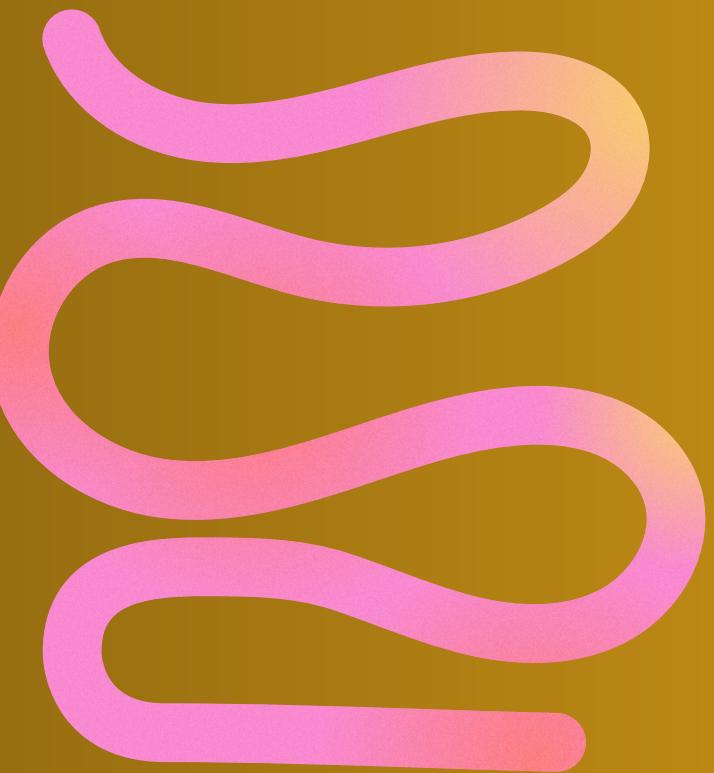


reddit



YouTube

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Project Background

The OSINT web application project aims to design, develop, and deploy a web-based platform for OSINT gathering. The application will allow users to input usernames and retrieve detailed information from social media platforms like Instagram, Twitter, Reddit, and YouTube.



Team Members



Abhijeet Pawar

Developer



Dinesh Udayan

Technical Writer



Kushal Badodekar

Technical Writer



Nidhi Suvarna

Developer



Shahana Fatima

Quality Assurance



Shalni Seth Gupta

Quality Assurance



Sree Charan

Project Manager



Yashwanth

Developer

Project Link



sree-charan/osint



A GitHub repository page for the project sree-charan/osint. The page shows basic statistics: 1 contributor, 0 issues, 0 stars, and 0 forks. A progress bar indicates 100% completion, split into two segments: blue (left) and orange (right). Below the stats, there's a link to contribute via GitHub.

1 Contributor 0 Issues 0 Stars 0 Forks

100%

sree-charan/osint

Contribute to sree-charan/osint development by creating an account on GitHub.

 GitHub

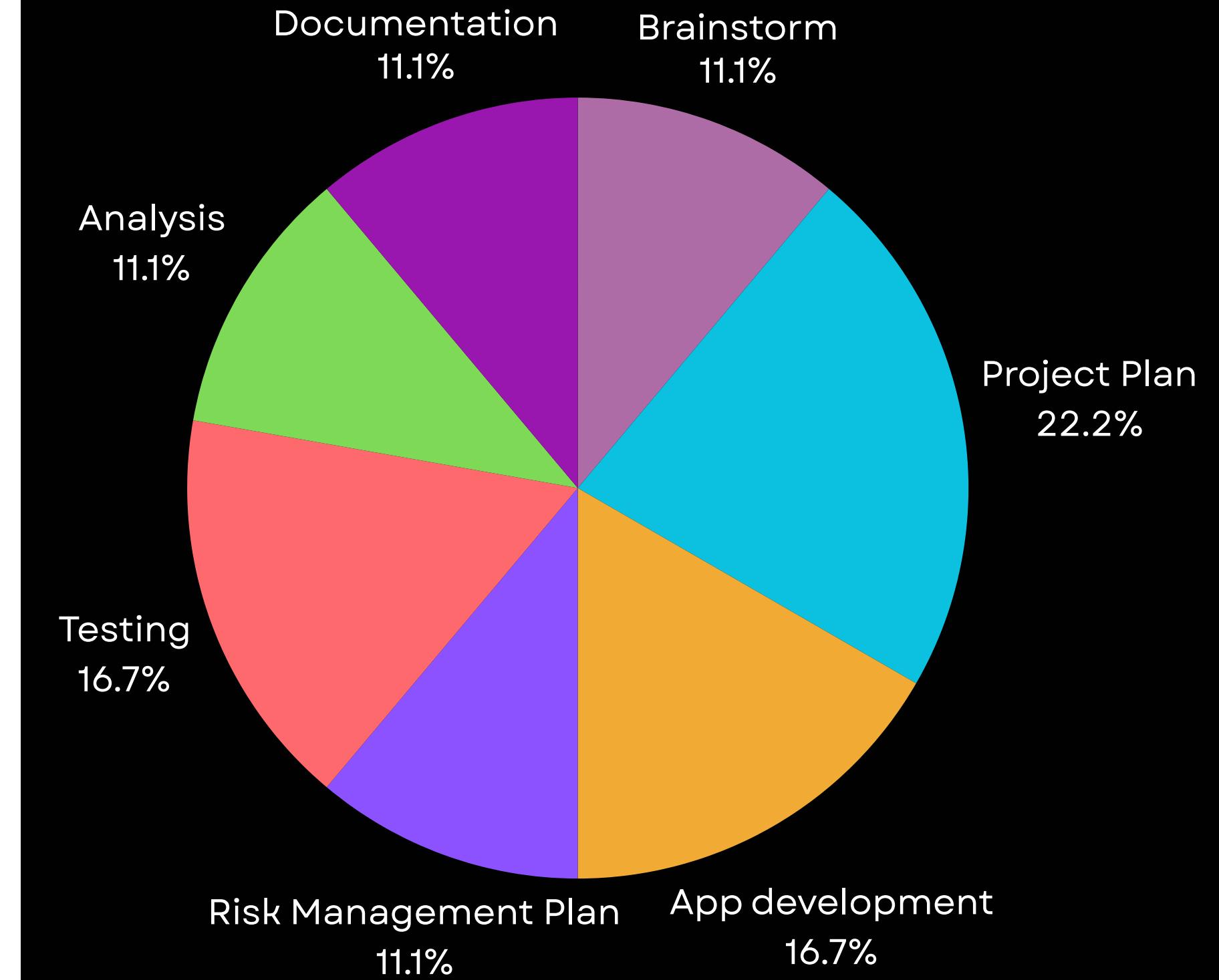
Project Scope and Deliverables

PROJECT PHASE		SCOPE	DELIVERABLES
Phases	Write a project activity or task	Write the corresponding deliverable that will come from the activity or task	
Planning	<ul style="list-style-type: none">Define project scopeIdentify essential project participantsCreating Project Plan	<ul style="list-style-type: none">Project KickoffProject objectivesSet up a development environment	
Development	<ul style="list-style-type: none">Design and implement the custom OSINTApplication requirements and specifications.	<ul style="list-style-type: none">Functional application prototypeMinimum Viable Product (MVP) with core features.	
Testing	<ul style="list-style-type: none">Conduct thorough testing of the applicationIdentify and rectify any bugs, errors, or inconsistencies.	<ul style="list-style-type: none">Test reports, bug tracking documentationError-free application ready for deployment.	
Documentation	<ul style="list-style-type: none">Create comprehensive documentation including user manualsTechnical specifications, and system architecture diagrams.	<ul style="list-style-type: none">User manuals, API documentationSystem architecture diagramstechnical documentation.	
Deployment	<ul style="list-style-type: none">Prepare the application for deploymentEnsuring seamless transitionOptimal performance.	<ul style="list-style-type: none">Successfully deployed and configured OSINT application accessible to end-usersNecessary maintenance or support documentation.	

Project Timeline

Tasks	Week 1	Week 2	Week 3	Week 4	Week 5
Planning Phase					
Development Phase					
Testing Phase					
Documentation Phase					
Deployment Phase					

Project Budget



Project Risks

Risk management is a crucial aspect of any project. It involves proactively identifying potential issues that could derail project, assessing their severity, and developing plans to mitigate or avoid them altogether. This is an ongoing process that should be revisit regularly throughout the development cycle.



List of Potential Risk

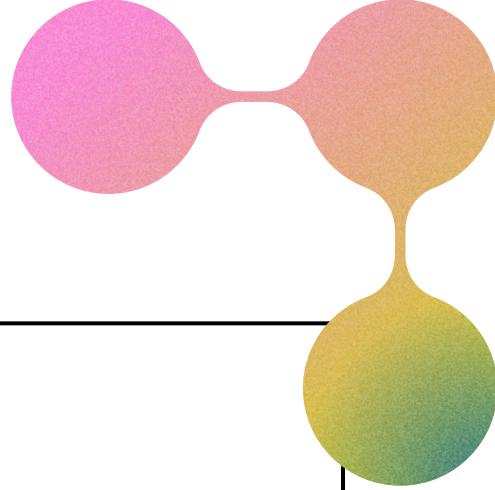
- 01** Delayed Development
- 02** Availability of skilled developers
- 03** Security Vulnerabilities
- 04** Misuse of internal APIs
- 05** Dependency on third-party libraries or services
- 06** Selected platforms may not have a public API available for data retrieval.
- 07** API rate limits and quota restrictions
- 08** Lack of clarity in communication
- 09** Changes in API endpoints or authentication methods
- 10** APIs may be deprecated or their access may be limited without prior notice

Project Risks

The risk management lifecycle consists of four key stages:

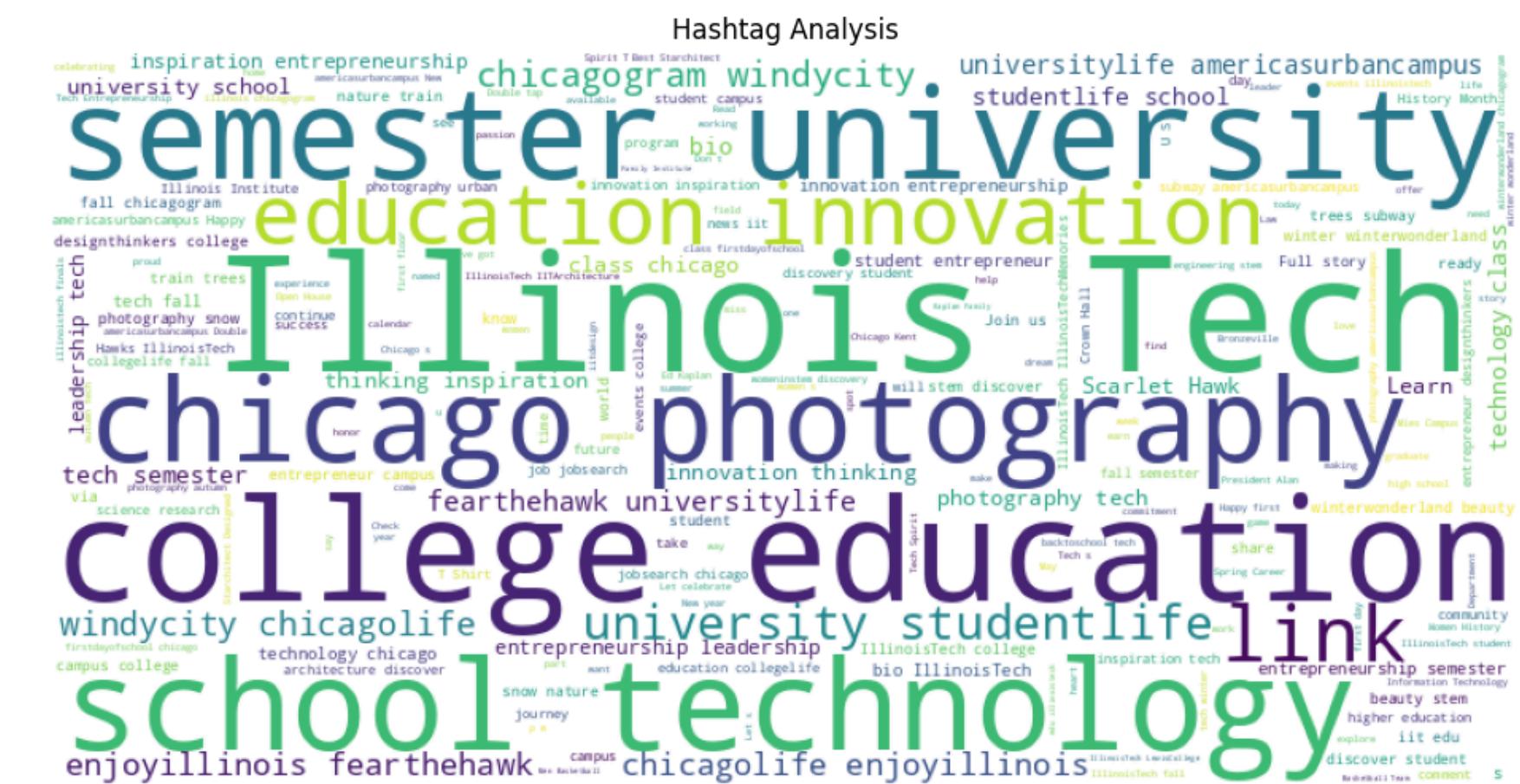
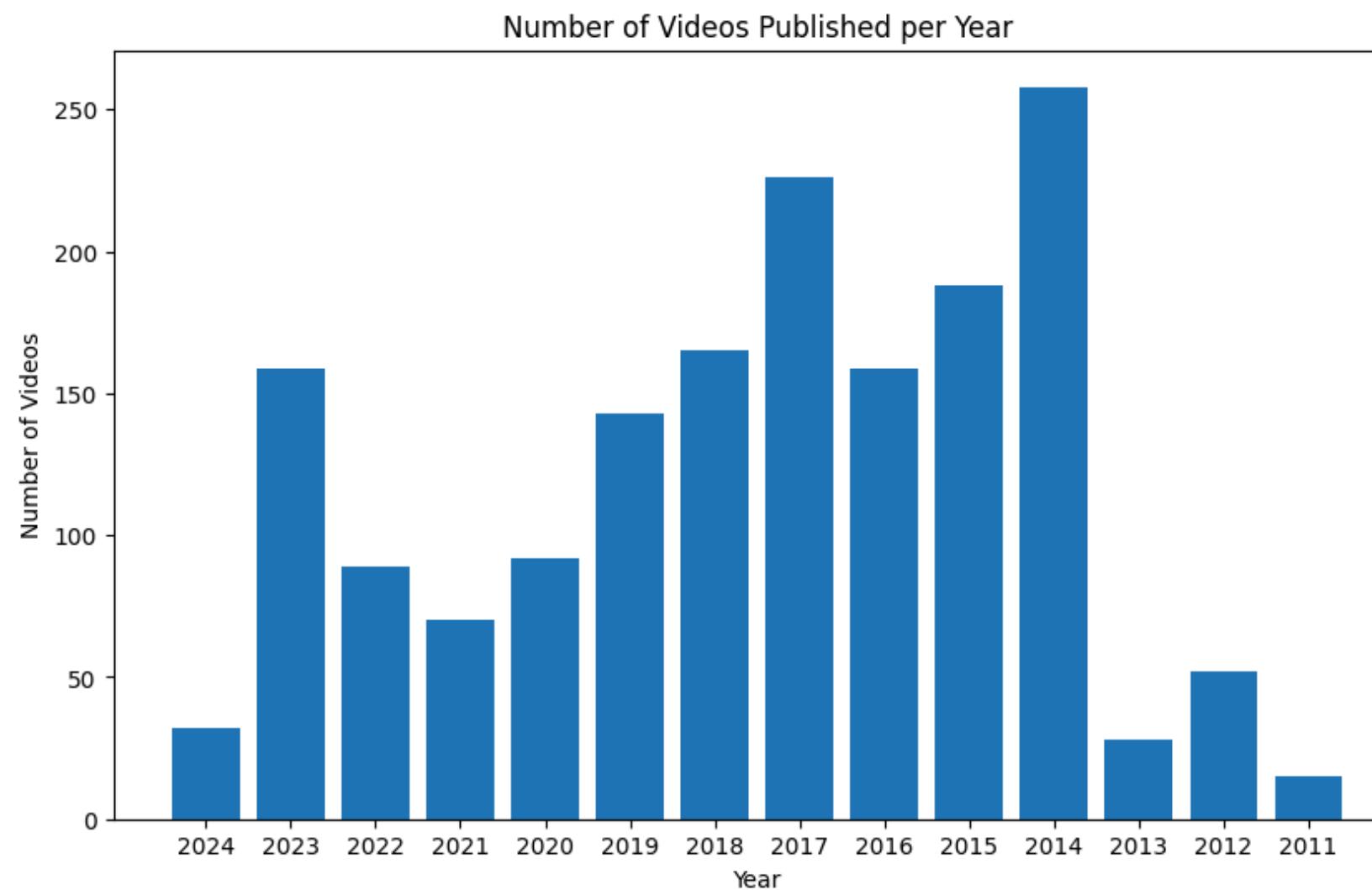
- **Risk Identification:** Conducting brainstorming sessions, utilizing past project experiences, and research to identify potential risks associated with our project. This could include technical challenges, security, strategy, project resources, project management, dependency, interoperability, schedule or team communication problems.
 - **Risk Assessment:** Once identified, assess the likelihood of each risk occurring (high, medium, low) and its potential impact on the project (high, medium, low). By multiplying these values, the risk priority was determined, which helped in focusing on the most critical issues.
 - **Risk Mitigation:** For high-priority risks, mitigation strategies were developed. This involved but not limited to finding alternative data sources, having backup plans for technical hurdles, or establishing clear communication protocols within the team.
 - **Monitor and Review:** The risk management process is ongoing. Periodic review of the risk register, update assessments as the project progresses, and adapt mitigation strategies accordingly.
-

Risk Management Log

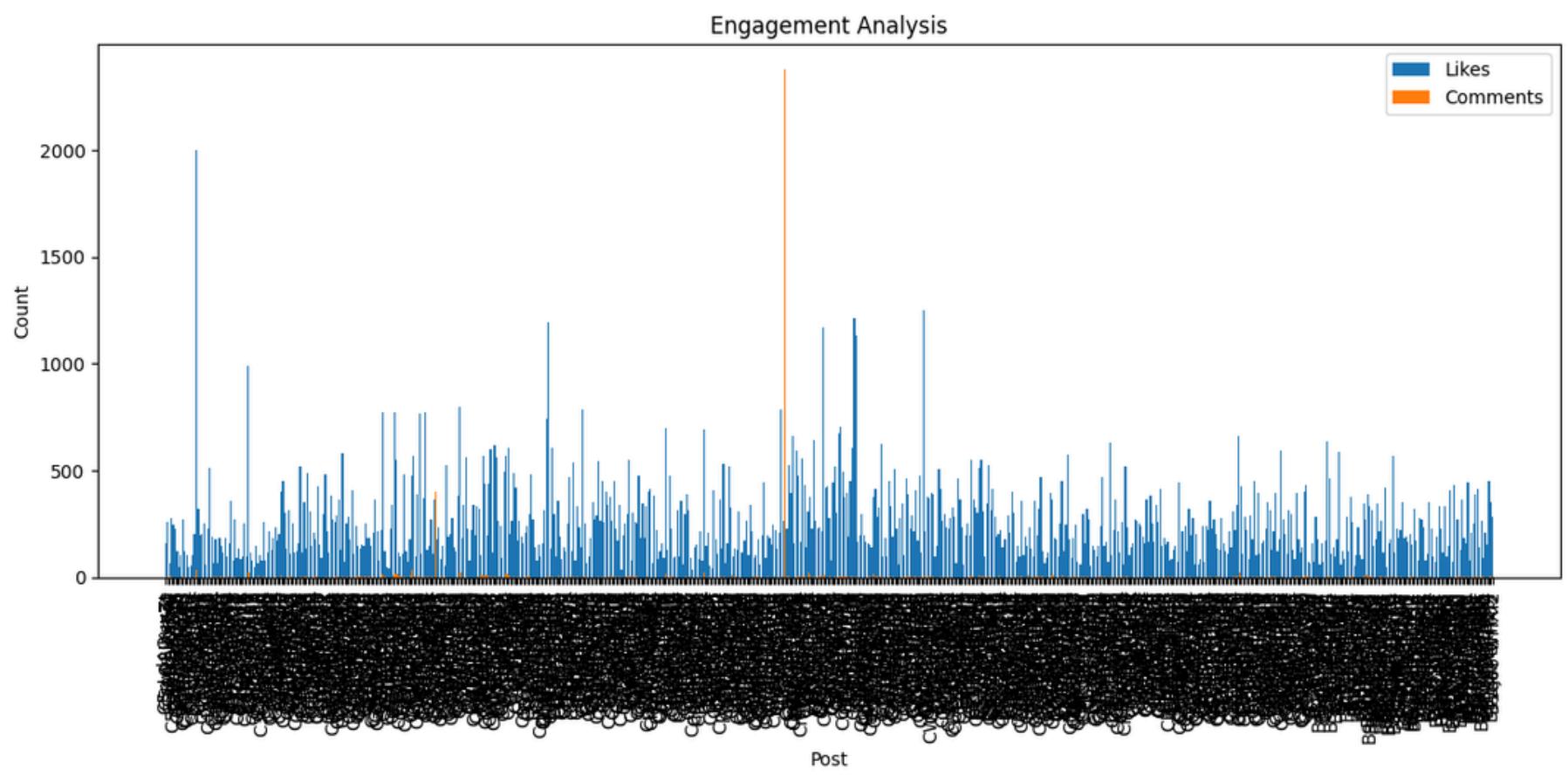
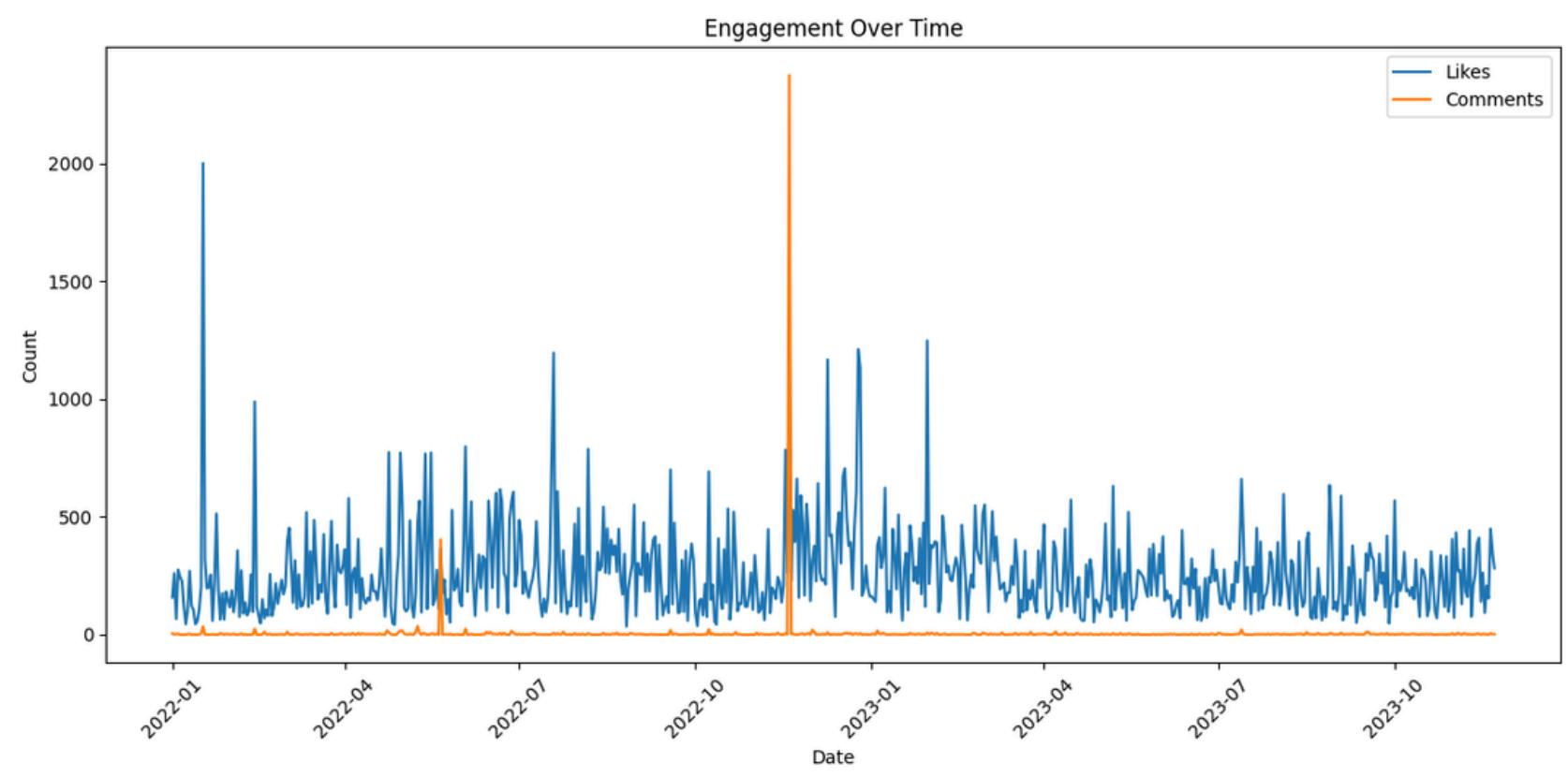


ID	Current Status	Risk Impact	Probability of Occurrence	Risk Description
1	Closed	High	Low	Insufficient expertise or abilities among team members in particular areas needed for the project.
2	Open	Medium	Medium	Lack of clarity in communication may lead to misunderstanding of project objectives among team members.
3	Closed	Medium	High	Delays in obtaining the requisite API keys may delay data retrieval activities.
4	Closed	High	Medium	Selected platforms may not provide a public API for data retrieval.
5	Closed	Medium	Low	Special characters in usernames create unhandled failures in API calls, resulting in failed data extraction.
6	Closed	High	Medium	Dependencies that require higher versions of Python may result in environment incompatibility.
7	Closed	High	Medium	APIs may be deprecated or their access restricted without prior notice.
8	Open	Medium	Low	Misuse of internal APIs may result in the team's IP being blacklisted.
9	Open	High	High	Incompatibility issues between APIs

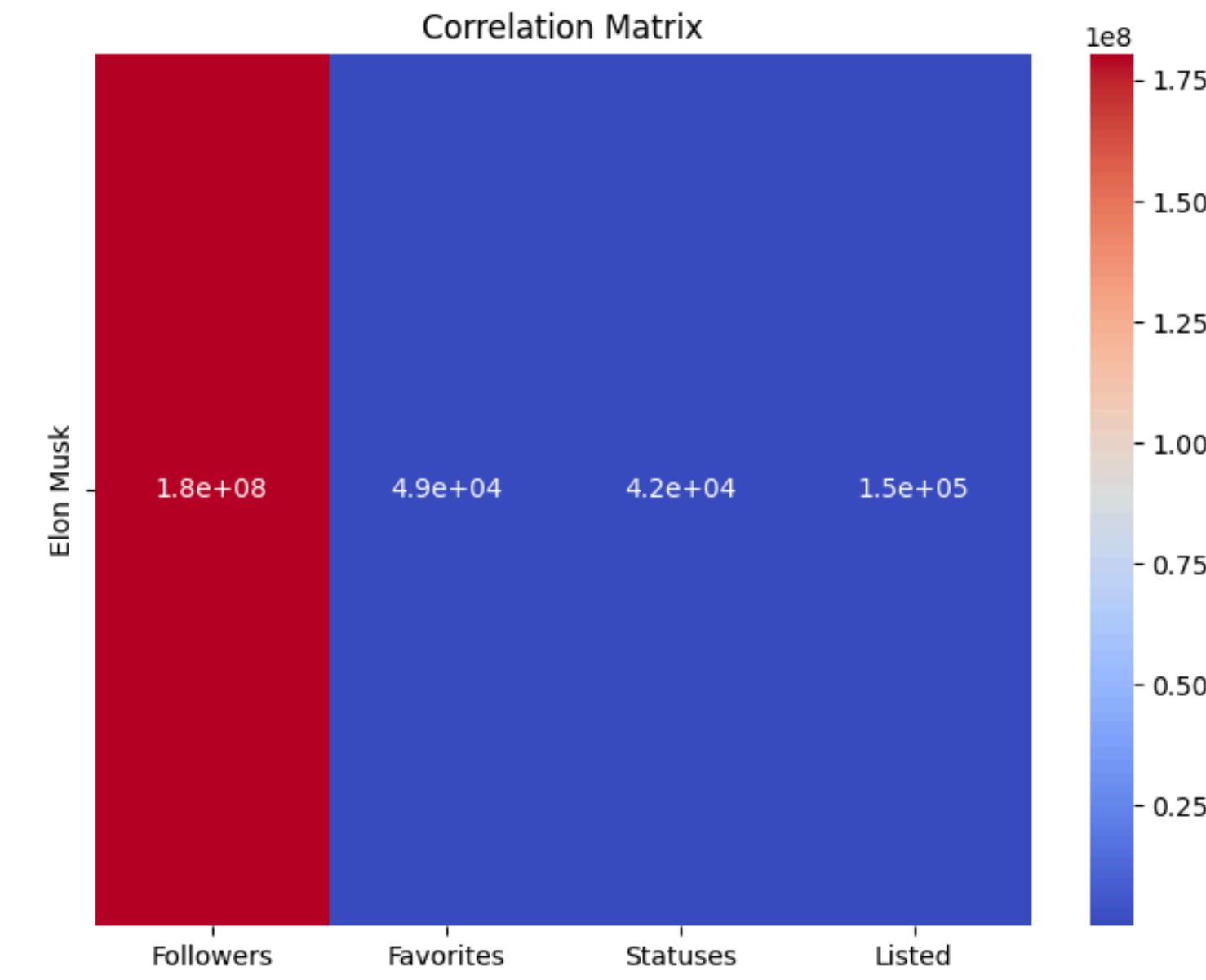
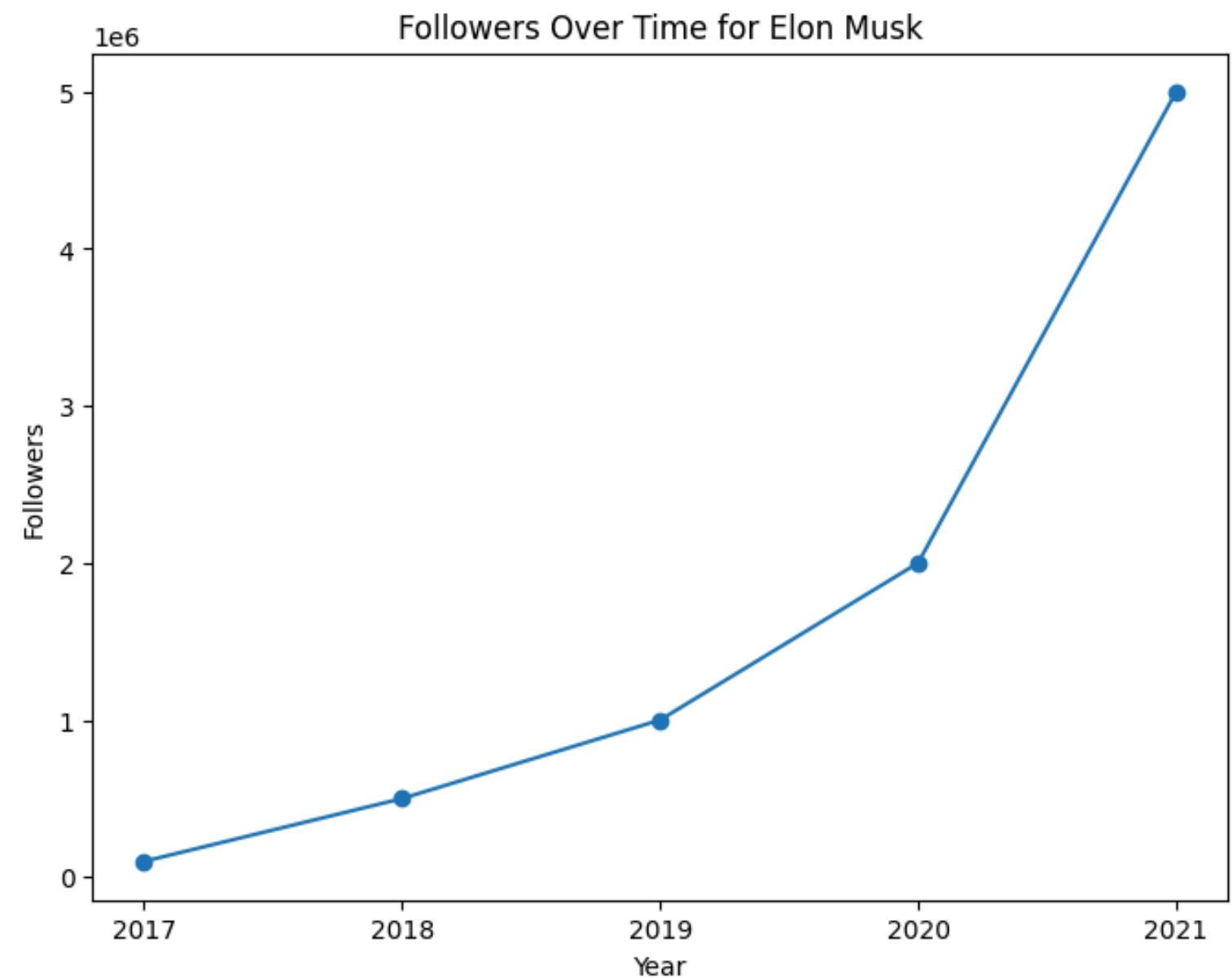
Data Analysis

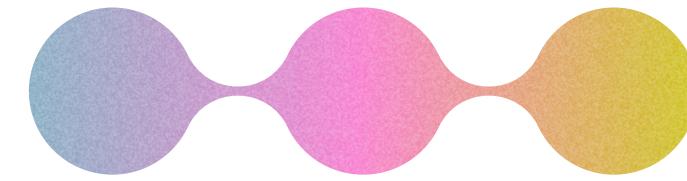


Data Analysis



Data Analysis





Project Plan

OPEN SOURCE INTELLIGENCE APPLICATION

Project Plan

Objective:

The objective of this project is to develop a comprehensive open-source intelligence (OSINT) application using Flask that retrieves, visualizes, and displays details from Instagram, Twitter, Reddit, and YouTube profiles. The project will be completed in five phases: Planning, Development, Testing, Documentation, and Deployment.

Project Phases:

- Planning Phase:
 - Define project scope, objectives, and requirements
 - Identify essential project participants and their responsibilities
 - Create a detailed project plan outlining tasks, milestones, timelines, roles, and responsibilities

Project Management Plan

Open Source Intelligence Application

Project Management Plan



ILLINOIS INSTITUTE OF TECHNOLOGY

Department of Information Technology and Management

April 2024

Earned Value Sheet

Planned Value (PV) or Budgeted Cost of Work Scheduled (BCWS)		
Work Breakdown Structure	Task Name	Total Budgeted Cost (TBC)
1.1	Brainstorm	1000
1.2	Project Management Plan	2000
1.3	Application Development	1500
1.4	Risk Management Plan	1000
1.5	Testing	1500
1.6	Analysis	1000
1.7	Presentation/Documentation	1000
Total Budgeted Cost		9000
		Cumulative Planned Value (COPV)

Actual Cost and Earned Value

Cumulative Actual Cost (CAV)
Cumulative Earned Value (CEV)

Project Performance Metrics

Cost Variance (CV = EV - AC), Schedule Variance (SV = EV - AC), Cost Performance Index (CPI = EV/AC), Schedule Performance Index (SPI = EV/AC), Estimated Cost at Completion (EAC)

Report | Earned Value Sheet | Actual Cost Sheet

S. No	Test Case Description
1	All the buttons should be clickable
2	Confirm that the Dashboard initializes correctly.
3	Verify data refresh functionality
4	Test API rate limiting handling
5	Validate cross-platform compatibility
6	Validate error handling during data processing
7	Verify the ability to input parameters (Tokens and Username) for Instagram, X, and YouTube.
8	Test for concurrent user access
9	Perform actions on the Dashboard while data is being scraped.
10	Validate API response time
11	Verify data consistency across platforms
12	Test for concurrent API requests
13	Evaluate error recovery mechanisms
14	Assessed the responsiveness and performance of the Dashboard.
15	Verified the accuracy and integrity of the data
16	Test for scalability
17	Evaluate long-term data storage
18	Test for data validation

Test Cases

sree-charan/osint



1 Contributor 0 Issues 0 Stars 0 Forks

sree-charan/osint

Contribute to sree-charan/osint development by creating an account on GitHub.

 GitHub

Github Repository

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8	Open	Medium	Low	Misuse of internal APIs may result in the team's IP being blacklisted.
9	Open	High	High	Incompatibility issues between APIs.
10	Closed	Medium	Medium	Availability of skilled developers.
11	Open	Medium	High	API rate limits and quota restrictions.
12	Open	High	Low	Changes in API endpoints or authentication methods.
13	Closed	Medium	Low	Delays in development due to unforeseen technical challenges.
14	Open	High	Medium	Security vulnerabilities in the application.
15	Open	Medium	Medium	Dependency on third-party libraries or services.
16	Open	Medium	High	Unforeseen changes in platform policies.
17	Open	High	Low	Incompatibility issues between libraries and APIs may arise.

Risk Management

Completion Phases

Multiple phases of the project have been completed on the mentioned dates

Phase 1

Requirement Gathering
and Analysis

28th
March

Phase 2

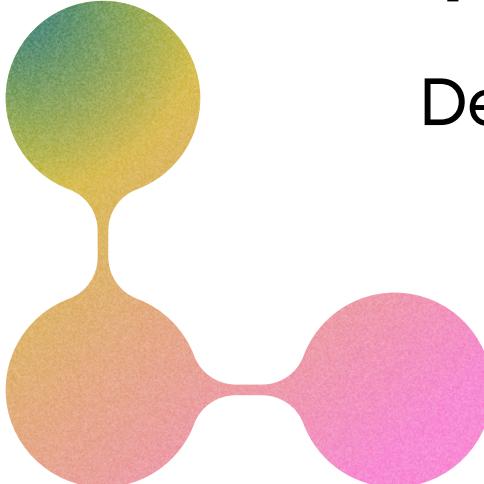
Phase 2

Desing and Prototyping

4th
April

Phase 3

Development and Testing



19th
April

Phase 4

Deployment and Maintenance

27th
April

Thank

YOU