OSINT - Group 2

Project Management Plan

College of Computing

Department of Information Technology and Management

December 2023

Version 1.1

Revision History

Note: The revision history cycle begins once changes or enhancements are requested after the document has been baselined.

Date	Version	Description	Author
4/20/23	1.0	First draft	Michael Bui,Raj
5/4/23	1.1	Final Draft	Michael Bui, Raj

The Revision History pertains only to changes in the content of the document or any updates made after distribution. It does not apply to the formatting of the template.

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Artifact Rationale

The Project Management Plan (PMP), according to the Guide to the Project Management Body of Knowledge (PMBOK®), is a formal, approved document used to guide both project execution and project control. The primary uses of the PMP are to document planning assumptions and decisions, facilitate communication among stakeholders, and document approved scope, cost, and schedule baselines. By showing the major products, milestones, activities and resources required on the project, it is also a statement of how and when a project's objectives are to be achieved.

The project manager creates the PMP following input from the project team and key stakeholders. The plan should be agreed on and approved by at least the project team and its key stakeholders.

The PMP is mandatory for all projects. While it is a project-level document, it should be updated as necessary, including for each increment.

The following project types are required to complete this artifact. Exceptions are outlined where needed throughout the document.

Activity	New Capability (1)	Feature Enhancement (2)
Field Deployment (A)	NO	NO
Cloud/Web Deployment (B)	Yes	Yes
Mobile Application (C)	NO	NO

Table of Contents

1. Introduction

##This PMP describes the project management processes that <name of project team/entity managing the project > will follow during execution of the <project name> project. The project's processes will align with plans and processes of the Project Management Accountability System (PMAS) Guide New processes will be defined for any management areas not covered by the PMAS Guide. This PMP will govern the management practices across the life of the project. As those practices evolve, this document will be updated to reflect the changes.

1.1. Project Overview

- The goal of the project was to collect and analyze public data using Facebook, Instagram and Twitter's API to generate information about users and posts. The project's budget is $15,000. We could analyze the data we scraped, as well as the risks, vulnerabilities to assess what the impact could potentially be.
- There are four milestones of this project.
    - 1. Developers code
    - 2. Analysis report
    - 3. PM Plan
    - 4. Project submission
- This project will consist of three sub-groups, each with three key personnel. There will be a PM (Project Manager) team, a Developer team, and an Analyst team. The project uses multiple channels of communication to discuss with the key personnel and fulfill all requirements of the project. The supporting applications are Whatsapp and Zoom

1.2. Scope Statements

We have divided the work in three portions:

- Software coding which include dashboard creation, software designing, data collection, and data exporting
- Data analysis of data exported using open source tool
- Document of all the work done such as training and communication plan, budget and project management plan, risk analysis and quality assurance plan.

1.3. Goals and Objectives

Obtaining information from Facebook, Instagram and Twitter based on posts, the users, which were the most sought out results found, etc

1.4. Stakeholders and Key Personnel

Categories	Name	Role
Organization	Illinois Institute of Technology	sponsor
Staff	Dr. Maurice Dawson	Professor
	Ranu Ginare	Teaching Assistant
Student	Michael Bui	Project Manager
	RajAbinandhan Periyagoundanoor Gopal	Project Manager
	Presley George	Analyst
	Deekshita Siddagoni	Analyst
	Jerin Gige Varghese	Project Manager
	Bharath viswa Teja vidya charan Marsala	Developer
	Bhargava Reddy Kikkuru	Developer

2. Project Organization

See project Charter

3. Acquisition Process

There is no Acquisition for the Project.

4. Monitoring and Control Mechanisms

This project follows standard monitoring and control processes as defined in ProPath for risk management, requirements traceability, and operational readiness.

5. Systems Security Plans and Requirements

System security plans and requirements will be developed as part of the project's planning phase.

6. Work Breakdown Structure (WBS) and Schedule

Work Breakdown Structure (WBS) is located in the project charter. The file is labeled as 'work breakdown structure table.mpp' in the google drive, here is the link

Schedule is located in WBS in the project charter and in the Project Plan file. As for deadlines, see project charter

7. Project Success Criteria

See project charter.

Social	Information Retrieved	Result
Twitter	Tweets	Success
	Followers	Success
Facebook	User info	Success
Instagram	User Profile	Success

8. Communication Management Plan

See the project's communication plan. Provide information on where it is located.

9. Risk Management Plan

See the risk management plan page.

10. Software Configuration Management (SCM) Plan

This section applies to all software development projects.

See the software configuration management plan. Provide information as to where it is located.

11. Training Plan

The training plan will be developed during the planning and active stages of the project.

12. Quality Assurance Plan

The Quality Assurance (QA) Plan details the overall approach to QA activities for a project. The plan documents how the project defines, implements, and assures quality during the software development process. The plan is also a communication vehicle for the entire project team, including the project manager, technical project manager, developers, test analysts, SQA analysts, technical writers, functional analysts, other project teams, and users. Depending on the size and complexity of the project, the PM can determine if a separate document is needed or if the information will be included in this section. If a separate document, refer the reader to its location.

13. Project Measurement Plan

This project is not tracked by PMAS. More details of the project measurement can be found in sections 13.1 and 13.2 of this document.

13.1. Description

Measurement Objectives: Evaluate progress, monitor quality, identify issues, measure team performance Metrics: Progress against success criteria Features implemented Time taken to complete each phase Issues and bugs identified and resolved Code and documentation quality Team engagement and participation Adherence to project management plan Data Collection and Storage: Daily meetings and documentation on collaboration tools User feedback for feature analysis Project management tools for time tracking Issue tracking systems for bug tracking Code and documentation reviews Team participation and engagement monitoring Data Analysis and Reporting: Project manager analysis and reporting Sharing reports with team members Dashboards for tracking key metrics Identifying areas for improvement Submission of reports to Professor or TA

13.2. Performance Measurements

Table 5: Performance Measurements

No.	Measurement Name	Measurement Objective	Metric
1.	Team	Team planning and determining roles & responsibilities	10/10
2.	Project Management Plan	Developing project management plan and project charter	10/10
3.	Schedule	Assigned tasks are met by deadlines; attended meetings	10/10
4	Development	Functionality of Front-end and Back-end	10/10
5	Analysis	Analyst report	10/10

14. Reference Materials

A. Project Charter

Project Charter

Last Revised Date: 12/05/2021
Author: Tenzin Choeying

Project Title: Open Source Intelligence Application
Project Start Date: 11/10/2021
Project Finish Date: 12/06/2021
Project Managers: Tenzin Choeying, Jacob Brooker, Yanlin Chen

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Project Overview

Project Goals and Objectives

Develop an Open Source Intelligence Application that gathers intelligence on Facebook, Instagram and Twitter by developing a software program using python and generating an analysis report . All of which will be delegated by project managers. Then, present the project to either the Professor or TA of Cybersecurity ITMS 448/548 course with presentation slides either via recording them and submitting on 5/4/2023 by 11:59 pm or schedule an appointment with one of them and present virtually on an assigned date and time.

Success Criteria

1. Develop an Open Source Intelligence Application with Project Management Plan by 5/4/2023

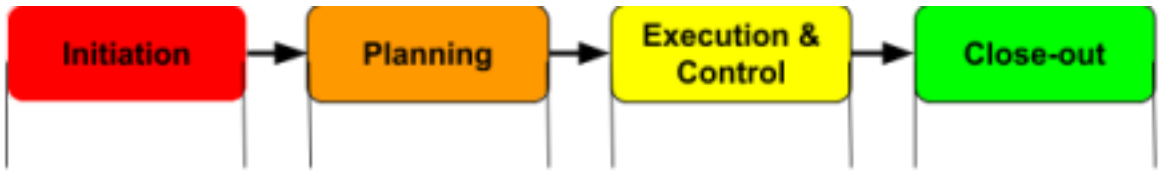
2. Present or record project presentation by 5/4/2023
3. Submit all required documents and media on Blackboard by 5/4/2023

Approach

This OSINT project consists of nine members where they were then divided into three sub-groups: Project Managers (PM), Developers, and Analyst. Then the PM group

distributed the project into four phases: Initiation, Planning, Execution & Control, and Close-out. The Initiation phase is responsible for Planning and Execution & Control phases however those two phases are independent of each other. Lastly, Close-out is reliant on the completion of all other phases to be able to record the presentation and submit all relevant files by the project submission deadline. All members participated in all phases however some roles had more responsibilities in some phases than others.

Timeline



Roles and Contact

Resources	Roles	Mail ID
Michael Bui	Project manager	mbui2@hawk.iit.edu
RajAbinandhan Periyagoundanoor Gopal	Project Manager	rperiyagoundanoorgop@hawk.iit.edu
Jerin Gige Varghese	Project Manager	jvarghese2@hawk.iit.edu
Deekshita Siddagoni	Analyst	dsiddagoni@hawk.iit.edu
Presley George	Analyst	pgeorge1@hawk.iit.edu
Bharath viswa Teja vidya charan Marsala	Developer	bmaddala@hawk.iit.edu
Bhargava Reddy Kikkuru	Developer	bkikkuru@hawk.iit.edu

Duties and Deadlines

Roles	Duties	Deadline
Project Managers	● PMP Plan ● Risk Management Log ● EVM Workbook ● Presentation ● Team delegation and planning	● The tasks were distributed throughout the project process however all were due by 5/4/2023
Developers Analysts Team	● Complete and submit codes for Twitter account ● Complete and submit codes for Web crawler account ● Finish front-end then combine with back-end ● Analysis report #1, #2, and #3 (two twitter, one web crawler) ● Presentation slides ● Presentation recordings	● Code submissions due by 5/1/2023 ● Front-end completion and compiling with backend due by 5/3/2023 ● Due 5/3/2023 ● 5/4/2023

Scope Statement

Scope Description

Our team will develop and implement Open Source Intelligence Application for their Cyber Security Technologies ITMS 448/548 final project with the objective of obtaining data from the OSINT dashboard with the software programmed in python. Further, we will analyze the data and create a report using an analysis tool called RapidMiner. All of which will be delegated by the Project Managers.

Project Deliverables

- Develop software programs written in python and store the data in different csv files.
- Import the data from the csv files into an analysis tool called RapidMiner.
- Generate reports from RapidMiner into pie charts.
- Present the findings in the final presentation and in PMP.

Project Acceptance Criteria

- Successful software implementation
- Successful analysis implementation
- Functional OSINT project
- Successful project presentation

Project Constraints

- Students have other obligations, and must fit this around their busy schedule.

Project Assumptions

- Everyone is expected to fulfill all tasks assigned.

B. Project Organization

Project Organization Structure

Author: Michael Bui

C. Work Breakdown Structure

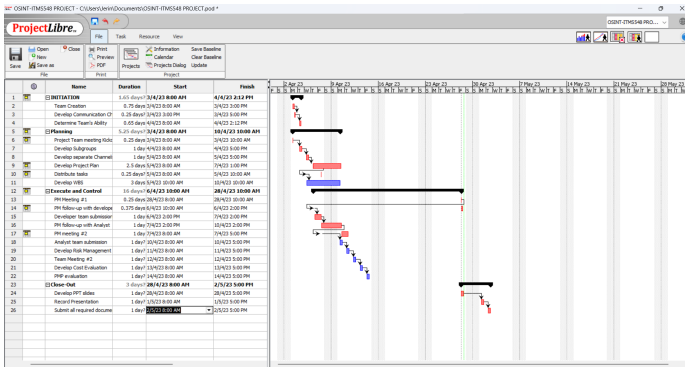
Work Breakdown Structure (WBS)

Last Updated Date: 5/1/23

Authors: Michael Bui

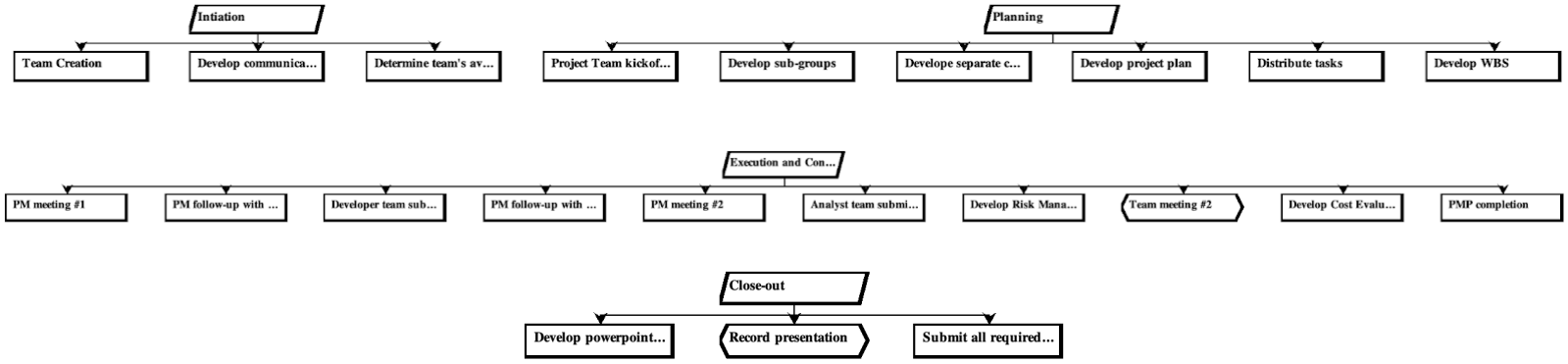
Work Breakdown Structure and Gantt Chart

Work breakdown structure table.mpp file in google drive.



Preview of WBS in ProjectLibre

Work Breakdown Structure in Projectlibre



Work Breakdown Structure Table

Work Breakdown Structure Table

	Name	Duration	Start	Finish
1	**INITIATION**	1.65 days?	**3/4/23 8:00 AM**	**4/4/23 2:12 PM**
2	Team Creation	0.75 days	3/4/23 8:00 AM	3/4/23 3:00 PM
3	Develop Communication Ch	0.25 days?	3/4/23 3:00 PM	3/4/23 5:00 PM
4	Determine Team's Ability	0.65 days	4/4/23 8:00 AM	4/4/23 2:12 PM
5	**Planning**	5.25 days?	**3/4/23 8:00 AM**	**10/4/23 10:00 AM**
6	Project Team meeting Kickc	0.25 days	3/4/23 8:00 AM	3/4/23 10:00 AM
7	Develop Subgroups	1 day	4/4/23 8:00 AM	4/4/23 5:00 PM
8	Develop separate Channel	1 day	5/4/23 8:00 AM	5/4/23 5:00 PM
9	Develop Project Plan	2.5 days	5/4/23 8:00 AM	7/4/23 1:00 PM
10	Distribute tasks	0.25 days?	5/4/23 8:00 AM	5/4/23 10:00 AM
11	Develop WBS	3 days	5/4/23 10:00 AM	10/4/23 10:00 AM
12	**Execute and Control**	16 days?	**6/4/23 10:00 AM**	**28/4/23 10:00 AM**
13	PM Meeting #1	0.25 days	28/4/23 8:00 AM	28/4/23 10:00 AM
14	PM follow-up with develope	0.375 days	6/4/23 10:00 AM	6/4/23 2:00 PM
15	Developer team submissior	1 day	6/4/23 2:00 PM	7/4/23 2:00 PM
16	PM follow-up with Analyst	1 day	7/4/23 2:00 PM	10/4/23 2:00 PM
17	PM meeting #2	1 day	7/4/23 8:00 AM	7/4/23 5:00 PM
18	Analyst team submission	1 day?	10/4/23 8:00 AM	10/4/23 5:00 PM
19	Develop Risk Management	1 day?	11/4/23 8:00 AM	11/4/23 5:00 PM
20	Team Meeting #2	1 day?	12/4/23 8:00 AM	12/4/23 5:00 PM
21	Develop Cost Evaluation	1 day?	13/4/23 8:00 AM	13/4/23 5:00 PM
22	PMP evaluation	1 day?	14/4/23 8:00 AM	14/4/23 5:00 PM
23	**Close-Out**	3 days?	**28/4/23 8:00 AM**	**2/5/23 5:00 PM**
24	Develop PPT slides	1 day?	28/4/23 8:00 AM	28/4/23 5:00 PM
25	Record Presentation	1 day?	1/5/23 8:00 AM	1/5/23 5:00 PM
26	Submit all required docume	1 day?	2/5/23 8:00 AM	2/5/23 5:00 PM

WBS table in Projectlibre

D. Project Communication Plan

Project Communication Plan

Author: Tenzin Choeying

Stakeholders

The OSINT project includes three types of stakeholders: Organization, Faculty, and Students.

- Organization
    - Illinois Institute of Technology
- Faculty
    - Professor Maurice Dawson
    - TA Ranu Ginare
- Students
    - Michael Bui
    - RajAbinandhan Periyagoundanoor Gopa
    - Jerin Gige Varghese
    - Deekshita Siddagoni
    - Presley George
    - Bharath viswa Teja vidya charan Marsala
    - Bhargava Reddy Kikkuru

Roles and Responsibilities

Name	**Role**	**Responsibility**
Michael Bui	Project Manager	• Complete WBS in Projectlibre and complete EVM • Complete Project Management Plan • Follow up with other members to ensure all tasks were being completed on time • Make PM slides for presentation • Participate in all meetings
RajAbinandhan	Project Manager	• Follow up with other

Periyagoundanoor Gopa		members to ensure all tasks were being completed on time ● Make PM slides for presentation ● Participate in all meetings
Jerin Gige Varghese	Project Manager	● Complete WBS in Projectlibre ● Follow up with other members to ensure all tasks were being completed on time ● Delegate the team ● Compile all presentation together ● Submit all documents and media to BB ● Participate in all meetings
Bharath viswa Teja vidya charan Marsala	Developer	● Complete Front End Development ● Make Developer slides for presentation ● Participate in general meetings
Bhargava Reddy Kikkuru	Developer	● Complete Back End Development ● Make Developer slides for presentation ● Participate in general meetings
Deekshita Siddagoni	Analyst	● Complete 3 Analysis ● Make Analysis slides for presentation ● Participate in general meetings
Presley George	Analyst	● Complete Risk Management Log ● Complete 3 Analysis ● Make Analysis slides for presentation ● Participate in general meetings

Channels of Communication

1. Discussions

    1.1 Whatsapp Group Chat

        1.1.1 The primary usage of this communication channel is to create a single method of communication within all members of the project. Whatsapp is used by all members to communicate and discuss on general topics pertaining to the project such as figuring out availability and setting up meeting times or PM to do a quick follow up.

    1.2 Google Meet

        1.2.1 This channel was used for all meetings using audio chat. Members met multiple times to discuss project tasks and the PMs followed up on completion of tasks. We used the primary channel to discuss our availability and schedule a date and time for a group or PM meeting. This channel was also used to do one-on-one discussions with any member that had difficulty getting their tasks done or needed to discuss anything with the PM or other team members.

    1.3 Zoom

2. Collaboration

    2.1 GitHub

        2.1.1 This channel was mainly used by developers to push their codes to the OSINT repository that is managed by the project managers. The developers accessed each other's code through this method of communication. Here is the link: **https://github.com/bhargava-k/OSNIT/tree/main**

    2.2 Google Drive

        2.2.1 This method of communication was used by all personnel to upload and access all files relevant to the project including Project Management Plan, Risk Management Log, Presentation recordings, and more. Here is the link: https://drive.google.com/drive/u/1/folders/1kFgIugR2UbezCja8LJVTyCE0phcxoPTa

3. Project Submission

    3.1 Blackboard

        3.2.1 We used this method to submit all relevant documents and media to obtain a final grade for the ITMS course by Professor Maurice Dawson and TA Ranu.

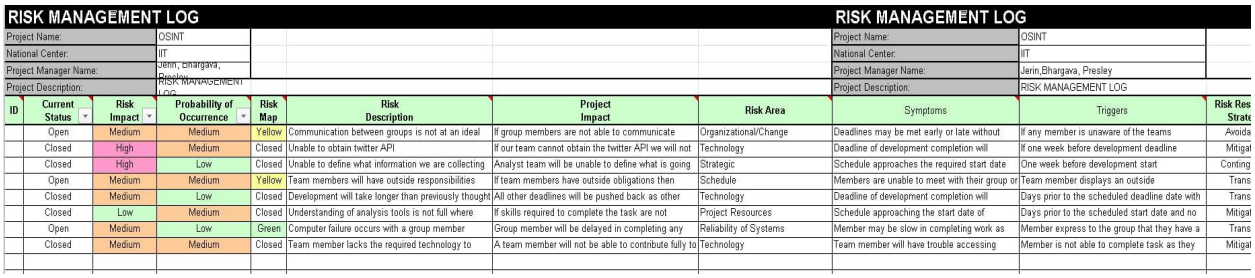
E. Risk Management Plan

Project Risk Management Plan

Author: Michael Bui

Risk Management Log

See Risk_Management_Log_OSINT.xlsx in google drive



RISK MANAGEMENT LOG									
Project Name:	OSINT						RISK MANAGEMENT LOG		
National Center:	IIT								
Project Manager Name:	Jerin, Bhargava, Presley								
Project Description:	RISK MANAGEMENT LOG								
ID	Current Status	Risk Impact	Probability of Occurrence	Risk Map	Risk Description	Project Impact	Risk Area	Symptoms	Triggers	Risk Res Strate
	Open	Medium	Medium	Yellow	Communication between groups is not at an ideal	If group members are not able to communicate	Organizational/Change	Deadlines may be met early or late without	If any member is unaware of the teams	Avoida
	Closed	High	Medium	Closed	Unable to obtain twitter API	If our team cannot obtain the twitter API we will not	Technology	Deadline of development completion will	If one week before development deadline	Mitigat
	Closed	High	Low	Closed	Unable to define what information we are collecting	Analyst team will be unable to define what is going	Strategic	Schedule approaches the required start date	One week before development start	Contin
	Open	Medium	Medium	Yellow	Team members will have outside responsibilities	If team members have outside obligations then	Schedule	Members are unable to meet with their group or	Team member displays an outside	Trans
	Closed	Medium	Low	Closed	Development will take longer than previously thought	All other deadlines will be pushed back as other	Technology	Deadline of development completion will	Days prior to the scheduled deadline date with	Trans
	Closed	Low	Medium	Closed	Understanding of analysis tools is not full where	If skills required to complete the task are not	Project Resources	Schedule approaching the start date of	Days prior to the scheduled start date and no	Mitigat
	Open	Medium	Low	Green	Computer failure occurs with a group member	Group member will be delayed in completing any	Reliability of Systems	Member may be slow in completing work as	Member express to the group that they have a	Trans
	Closed	Medium	Medium	Closed	Team member lacks the required technology to	A team member will not be able to contribute fully to	Technology	Team member will have trouble accessing	Member is not able to complete task as they	Mitigat

Preview of Risk Management Log

F. Software Configuration Management (SCM) Plan

Project Software Configuration Management (SCM) Plan

Author: Michael Bui

All relevant codes for the Open Source Intelligence Application are published in GitHub. Here is the link https://github.com/bhargava-k/OSNIT/tree/main

Demo of the application:
https://drive.google.com/file/d/1ncyJdlPF7FGjeweG0v0lICZkBqSi-yP9/view?usp=share_link

Control

Due to the nature of the project and lack of Project Management skill, the only configuration control that was processed was assigned the software development task to the developer team and followed up on their completion status. No other process was performed.

Quality Assurance

1. Implement all requirements needed to build the software.
2. Monitor the process of software development using primary communication channels.
3. Demonstrate successful execution to the team during team meetings.
4. Inform of any issue to respective project managers.

Approval Signatures

15. Project Plan Approval

The signatures below indicate that the undersigned:

- Have reviewed the Project Plan.
- Have formally voiced applicable concerns to the PM.
- Concur that the Project Plan accurately represents their expectations and conditions required for the project.
- Are committed to providing the required resources.
- Are unaware of undocumented conditions that prevent the success of this project.

REVIEW DATE: May 1st, 2023

SCRIBE: Michael Bui

Signed: _____MB_____

Project Manager Date

Signed: _____

Business Sponsor Date

See the Digital Signature Guide in the ProPath library for procedures to add digital signing capability to this form.