

ITMS-448/548

Cyber Security Technologies

“Media Flayer”

Project Plan

Nov, 2024

Overview

“Media Flayer” is an OSINT application designed for the purposes of aggregating data from social media sites corresponding to a target username. Utilizing web-scrapers built of social media APIs Media Flayers tendrils reach into the depths searching and exfiltrating any and all data it can acquire.

Goals

1. **GUI Based Social Media Scraping:** Media Flayer aims to create an easy to use targeting system for automatic target searching and data scraping. Its GUI is designed to be simplistic and clean, offering simple inputs along with minimalistic settings to fine tune its application.
2. **AI Data Parsing of Target Info:** Once data has been collected, the program will give the data to a LLM and utilize AI for data parsing and reporting.

Specifications

Media Flayer is primarily Python based, it features a browser GUI with streamlit, and accesses social media APIs for X (Twitter), Instagram, Reddit , and TikTok.

It operates by first taking a target username, then scraping each respective social media site with custom tailored web-scrapers. If the username is found within the site, all data available corresponding to that user is taken and given to the Ollama LLM to parse and analyze for further reporting.

Milestones

1. Functioning GUI

Clean and simple to understand GUI with a target selection input, control settings, and "go button".

2. X(Twitter) and Reddit data scraping

Functioning X and Reddit Data Scrapers. Scrapers take target input, search for targets on selected platforms and begin a data collection process.

3. Instagram and TikTok data scraping

Functioning Instagram and TikTok Data Scrapers. Scrapers take target input, search for targets on selected platforms and begin a data collection process.

4. Successful Ollamma AI reporting

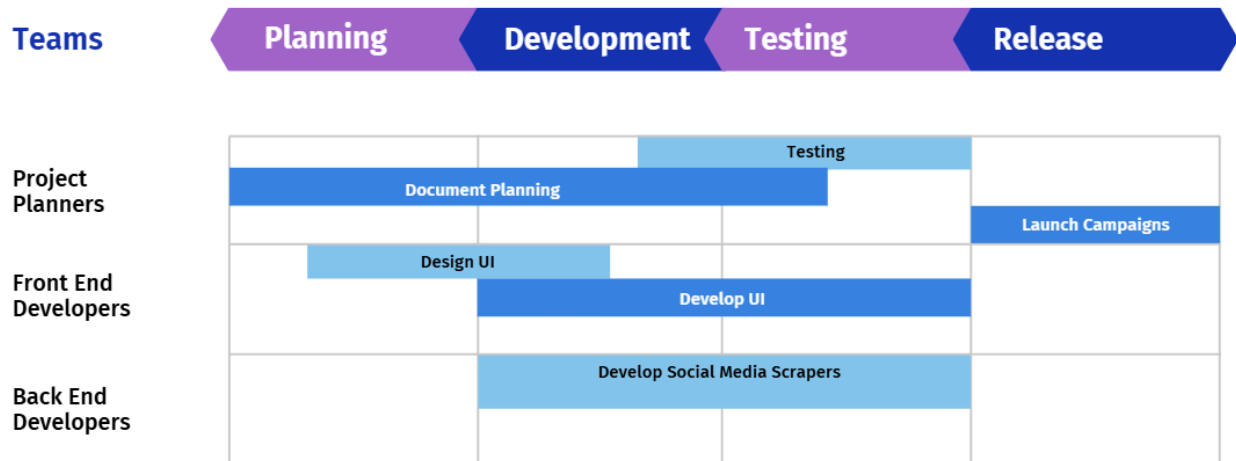
Scrapers successfully take all aggregated data and pass it to Ollamma for analysis.

5. Multiple Target Aliases

Users can provide multiple target "aliases" to be targeted and searched for on each platform, this will expand the scope of data collection and account for subtle differences of the same person's usernames on different platforms.

Timeline:

PROJECT ROADMAP



Roles:

Project Planners: Responsible for Project Plan, Risk Management, EVS, and Management, Project Planners ensure each phase of the project is aligned with the goals and milestones, and on track to meet the objectives.

Frontend Developers: Responsible for the GUI Development, Frontend developers are tasked with creating the user experience when using Media Flayer.

Backend Developers: Responsible for the Social Media Scraper Development, Backend developers are tasked with ensuring the core processes of Media Flayer are working as intended.

Testing:

The testing of the finished program will proceed as follows:

1. **Testing both real and fake target users:** Run tests with both a real and fake user account, ensure username targeting is working as expected.
2. **Testing Each Social Media Scraper:** Test each scraper individually, ensure data collection is working and returning properly.
3. **Ensure AI parsing works as intended:** Test the AI with results and test its ability to parse and find important data from what is collected.

Appendices:

Media Flayer App Logo:



(A Cartoon Mind Flayer Grasping At An Orb)