

COMP3000 Computing Project

2024/2025

Project Title

DigitalWaves: Using Open Source Intelligence to monitor and reduce digital footprints

Links

Source code: <https://github.com/harry976/Comp3000Project>

links to the Trello boards for product backlog and requirements breakdown can be found in the GitHub readme.

Project Vision

The modern world of technology is awash with data. Whilst this is useful, more information can exist on you than you might realise, leading to dangerous outcomes. Whilst 81% of internet users want to do more to protect their data online, finding this data is a complicated process that requires technical skills, hence most people can't, leading to a lack of awareness of the dangers that this personal data can pose to their livelihood. DigitalWaves is a web application that makes this easier, by allowing the user to search for specific information and automating the use of complicated tools to find results online. These are then provided to the user, along with a digital footprint score and advise on how to reduce this. The user can then return to the application and see how they have improved.

Currently existing OSINT tools can be difficult to use for the less technically-inclined user. These tools – such as Maltego – are also aimed at the more technical elements of OSINT, such as investigating systems such as DNS servers, mail servers and IP addresses ect. DigitalWaves fills the gap in the market by aiming to make the service less technical, and focussing on the user finding personal information about themselves online.

For: A day to day user

Who is: concerned about their digital footprint but does not know how to remedy this

The: DigitalWaves

Is a: web application

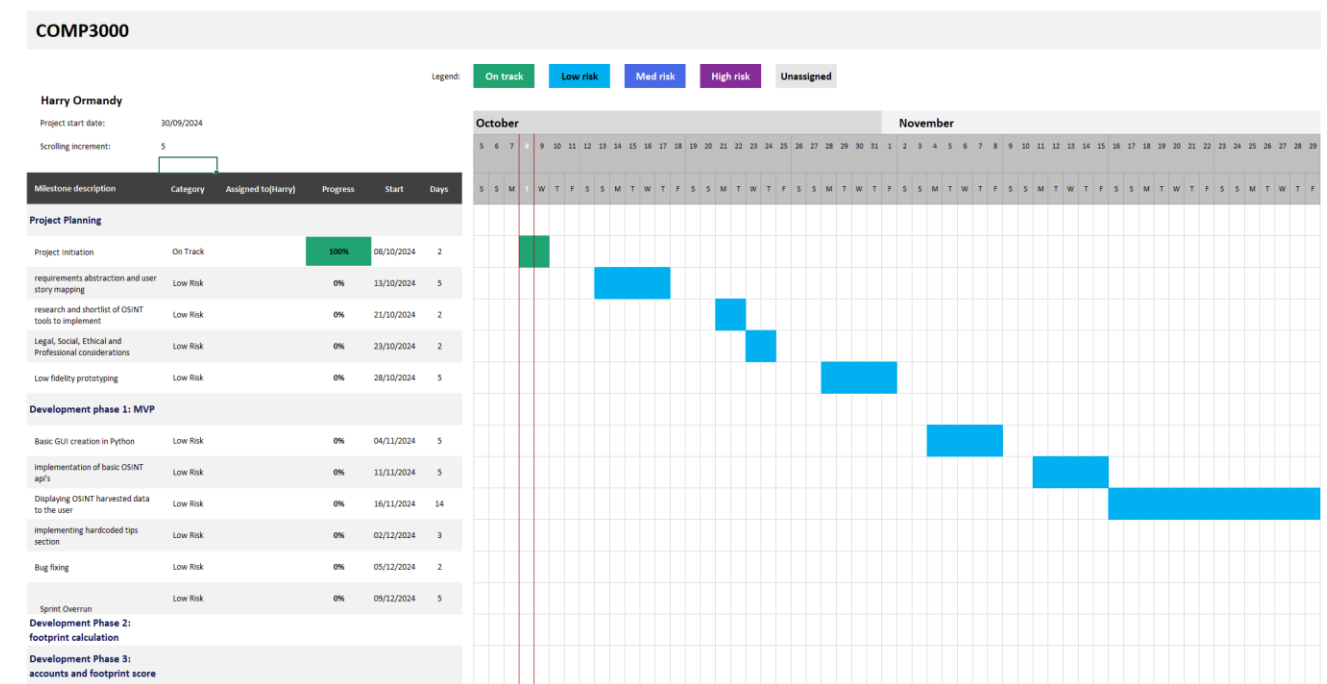
That: allows the user to see the information available about them online and helps them to remove it.

Risk Plan

Risk	Mitigation
Use of open source tools	Third parties will be researched and used to ensure that they can be trusted

Individuals searching for others' information	The user will have to sign into their account to ensure that they can only search for their information
Personal information stored with a third party	A trusted data store will be implemented to reduce legal responsibility for the developer
Lack of HCI considerations	Low fidelity prototypes will be created to ensure ease of navigation around the program
GDPR	Data will only be stored when necessary. The user will be able to delete their account should they wish. The user will agree to Terms and conditions upon creation of an account to ensure they agree to the use of their data within the confines of GDPR
General misuse of the application	The user will agree to a terms of service policy to ensure they understand how the program should be used.

Proposed Gantt chart



<https://github.com/harry976/Comp3000Project/blob/main/Documentation/SprintPlans/GanttChart.xlsx>

Keywords

OSINT

Digital Footprint

Protection

Data Safety
User Friendly
Cyber
Cyber Security
Shodan
Python
HCI principles