

## Record of tasks

Task number	Planned action	Planned outcome	Time estimated	Target completion date	Criterion
1.	A brief discussion with the client	Getting a general idea of the problem; arranging for a full interview.	20 min	2022.04	A
2.	Analysis of the problem	Initial ideas about the solution.	1 h	2022.04	A
3.	Discussion with the advisor	Confirmation of the project for the IA.	30 min	2022.04	A
4.	First interview with the client	Form of the solution discussed. Initial design choices, evaluated success criteria	1 h	2022.04	A
5.	Analysis of the solution	Tools needed to create the application chosen: the programming language, and database.	1 h	2022.04	A
6.	Research on the creation of dashboards in web applications	Understanding how web applications are made, how to deploy dashboards, how the application interacts with the database, and how to make it interactive.	10 h	2022.04	B
7.	Basic design of the app's main	Constructing a prototype of the	8 h	2022.05	B

	view	application for the client to evaluate.			
8.	Second interview with the client	Feedback from the client, suggestions for improvements	10 min	2022.05	B
9.	Application data flow diagram	Designed a data flow diagram, showing how the data transfers when using the application.	1 h	2022.05	B
10.	Application system structure diagram	Designed a system structure diagram, splitting the program into classes and modules.	1 h	2022.05	B
11.	Application UML diagram design	Developed UML diagram, showing how the application classes interact.	1 h	2022.05	B
12.	Database table planning	Developed detailed database tables, showing how the information will be stored.	20 min	2022.05	B
13.	Application testing outlining	An outline of testing, written with consideration of the feedback from the advisor.	30 min	2022.06	B
14.	Database integration	Database integration into the application along with the basic functions.	3 h	2022.06	C
15.	Finish the design	The design of the	4 h	2022.06	C

	of the application.	forms and dashboard is functional and interactive.			
16.	Analyzing e-commerce websites needed to gather data from	HTML structure of the ecommerce websites are identified and XPath expressions are created for the later implementation of Web Crawlers.			
17.	Implementing the functions of the user.	Sign in, log in and register pages are fully functional.	3 h	2022.06	C
18.	Improving data storage	Encrypted data when storing information about the user.	30 min	2022.06	C
19.	Implementing the basic crawler	Crawler is capable of downloading data from websites.	2 h	2022.06	C
20.	Implementing crawlers for 2 e-commerce websites.	Fully functional crawler which gathers information given an API call.	5 h	2022.06	C
21.	Implementing dashboard.	Fully functional dashboard which queries data according to parameters given and displays it on the screen.	5 h	2022.06	C
22.	Client testing the implemented functions	Client feedback on the implemented functions, and suggestions for	20 min	2022.07	B

		improvements.			
23.	Implementing dashboard table	Fully functional dashboard table.	5 h	2022.07	C
24.	Implementing table filter	Fully functional filtering algorithm.	2 h	2022.07	C
25.	Implementing table search	Fully functional search algorithm.	2h	2022.07	C
26.	Client testing the implemented functions	Client feedback on the implemented functions.	20 min	2022.07	B
27.	Application optimization	Fixing found bugs.	5 h	2022.07	C
28.	Meeting with client; testing the final version of the application	Acceptance testing, success criteria, and evaluation.	1 h	2022.08	B, E
29.	Finalizing the implementation of the product	The application is deployed and is accessible from the client's personal computer and ready for daily use.	1 h	2022.08	E
30.	Filming video	Video, showing the functionality of the product.	1 h	2022.08	D