

Criterion B – Record of Tasks

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Record of Tasks

Task Number	Planned Action	Planned Outcome	Time Estimated	Target Completion Date	Criterion
1	Introduced to the IA by computer science supervisor.	Understand the IA requirements by reading through the documentation provided by the IB.	2h	03/04/2023	A
2	Come up with potential topics for the IA.	Decided on the topic that the IA will be about.	1h 30m	10/04/2023	A
3	Discuss with my father, the client, about the solution to his problem.	Understand why my client, my father, needs the program I will create and what problem I will be solving.	30m	18/06/2023	A
4	First interview with the client.	Discuss the main idea behind the program and what my father expects it to be able to perform.	45m	20/06/2023	A
5	Request permission to pursue this idea from my computer science supervisor.	Get the idea approved and begin working on it.	10m	20/06/2023	A
6	Fulfilling Criterion A by writing the document.	Planning the program to satisfy the requirements of the IB, creating success criteria and everything else required.	2h	02/07/2023	A
7	Create mockups of the program interface.	Create a mockup of how the program will look and feel and request feedback on it.	1d	04/07/2023	B

8	Interview with client to get feedback on the interface changes.	Get feedback on the currently designed interface and make any changes if necessary.	25m	06/07/2023	B
9	Create final mockups of the prototype design interfaces.	Finalize the mockups for the interfaces based on the client's feedback.	2h	07/07/2023	B
10	Create use cases chart.	Create a diagram showing all the potential use cases for the client based on the success criteria.	15m	07/07/2023	B
11	Create flowchart diagrams as well as initial flowchart.	Illustrate the flow of a user when using the program.	3h 30m	08/07/2023	B
12	Illustrate a versioning diagram.	Create a diagram to show the planned progress for the program.	20m	08/07/2023	B
13	Create a table discussing the data types used.	Show the different variables I plan to use in the development of the program.	30m	08/07/2023	B
14	Creation of UML diagrams.	Create diagrams to represent all the proposed classes in the program and the functionality (methods) of each.	1h	09/07/2023	B
15	Develop a hierarchal chart.	Create a chart to illustrate the proposed program's windows and how the interface will be linked together.	5m	09/07/2023	B
16	Draw a connection chart.	Illustrate a chart showing the different classes I plan to have in the program and the	20m	09/07/2023	B

		relationships between them.			
17	Create multiple data flow diagrams.	Create diagrams illustrating the flow of data through the program in certain scenarios.	1h	10/07/2023	B
18	Create testing plan table.	Write out a table listing all the success criteria and tests for each one with a method and expected outcome so that I can know if the program does what it is supposed to do.	2h 30m	10/07/2023	B
19	Write and design the document for Criterion B.	Add all the tables and figures to a document for Criterion B.	6h	12/07/2023	B
20	Create the "User" class.	Implement a basic model for the user.	30m	15/07/2023	C
21	Create the "CompanyList" and "Company" classes.	Implement the linked list functionality of companies, having them handled by the "CompanyList" class. Also, basic attributes are added and created.	2h	15/07/2023	C
22	Create the "Statistic" and "Data" classes.	Create classes representing statistics and add an ArrayList of that class to the "Company" class, representing how each company has multiple statistics. Also use the "Data" class for data point representation for statistics.	2h	16/07/2023	C

23	Create the basic “Authentication” class.	Implement a class that holds a “User” object as the currently authenticated user.	30m	16/07/2023	C
24	Develop the features for authentication.	Implement methods for logging in and signing up as well as storage in DAT file for userbase.	2h	17/07/2023	C
25	Configure the files that are created upon user startup.	When the program is started, files need to be generated (and certain folders) within the user’s appdata folder.	45m	19/07/2023	C
26	Create storage of individual user file and companies associated.	Implement the loading functionality and saving for companies from the user file as well as the adding and removing of them.	2h	19/07/2023	C
27	Create the interface for logging in and signing up.	Using NetBeans create a new interface for the logging in and signing up.	1h	02/08/2023	C
28	Create main dashboard interface.	Create the new interface for the main dashboard where users can add companies.	2h	02/08/2023	C
29	Create main Company dashboard.	Implement the functionality for when a Company button is clicked from the overall dashboard.	1h 30m	12/09/2023	C
30	Create the final company CSV file ¹ template.	Each company has data and has this data stored alongside its details in the CSV file for the company. This	4h	16/09/2023	C

¹ (Comma Separated Values (CSV) Standard File Format, n.d.)

		was a complicated process figuring out a structure that works.			
31	Implement detail changing through company dashboard interface.	Implement the ability for a user to alter the name, description, and country of a company using the interface.	20m	16/09/2023	C
32	Add company removal and window refresh buttons.	Add the button to remove (“Delete”) the company from the user’s file holding the companies that belong to them. Also added a button to refresh the company interface.	15m	17/09/2023	C
31	Create the “Statistic” and “Data” classes	Added new classes to represent a statistic and data point in the system so that the program is able to load company data predictably.	1h	20/09/2023	C
32	Create statistics interface	Create the interface that opens the statistics (revenues and costs) of a company and displays a list of them.	30m	20/09/2023	C
33	Make statistics graphable by the program.	I added the functionality to click on a button which is the statistic and then it opens as a popup with a graph of the data.	2h	25/09/2023	C
34	Added user input validation to all inputs.	Made sure that user input during the stages of login/signup and	30m	10/10/2023	C

		adding a company are valid.			
35	Add functionality for getting the current value of the company.	Create the foundation for being able to calculate the value of the company in the current moment with current data.	2h	14/10/2023	C
36	Make it so that company value is calculated based solely on data from the last year.	This was a hard feature to code where only data from the most recent whole year is used to calculate the value of the company.	2h	18/10/2023	C
37	Add data extrapolation to the statistical data.	This was incredibly difficult to implement as due to the nature of the program it was hard to debug when something went wrong, took a while but settled on linear extrapolation with an exaggeration factor for extrapolating the statistic data.	3h 30m	27/10/2023	C
38	Created methods to extrapolate data for multiple statistics at once.	Implemented methods to loop through statistics extrapolating data for each one.	1h	03/11/2023	C
39	Method created to extrapolate all the data for a company and calculate the final value.	This method made it possible to calculate the value of a company over different periods of time using extrapolation.	4h 20m	10/11/2023- 12/11/2023	C
40	Implemented company value prediction into	Added a button and a popup prompting the user to input	15m	12/11/2023	C

	the company dashboard interface.	how many years ahead they want to predict the value of the company for (0 if they want to get current value). When their value is entered the program returns a popup with calculated value of the company.			
41	Creating methods to be able to combine data from a statistic together.	Setting up the basic methods that will allow for company merging, the merging of the data itself.	1h	20/11/2023	C
42	Create functionality for merging statistics from two companies.	Create the functionality of being able to take costs and revenues from each company and merge them.	3h 15m	21/11/2023- 23/11/2023	C
43	Implement the full merging functionality of creating a new merged company.	Create the functionality where two company objects are taken and all their data is combined (apart from details) to create a new company CSV file.	4h 50m	28/11/2023- 01/12/2023	C
44	Add merging interface into the company dashboard.	A button is added to the dashboard of the company labelled "Merging" that when pressed opens and interface where the user is prompted to select the companies they wish to merge and write the new details for the newly merged company.	2h	07/12/2023	C
45	Writing up of Criterion C.	With the finished code I wrote all the	8h	28/12/2023- 10/02/2023	C

		documentation for Criterion C.			
46	Testing of individual classes.	To test that the functionality of each class works as expected.	1h	11/02/2023	C
47	Integration testing of classes.	To test that all classes collaborate as expected.	1h	11/02/2023	C
48	Gave program to client to test.	Allowed the client to test the program before doing the final interview so that they can test it and give their thoughts afterwards.	30m	12/02/2023	E
49	Final interview with the client.	Doing the final interview with the client to get their thoughts about the final product I have produced.	30m	14/02/2023	E
50	Write evaluation document.	Write the final evaluation document reflecting on future changes I could make as well as if the program has met the success criteria, I set with my client at the beginning of the IA process.	45m	26/02/2023	E
51	Recorded video.	Recorded the video highlighting all the functionality of the program.	10m	27/02/2023	D
52	Internal Assessment handed over	Handing over the final draft of my IA to my computer science teacher.	15m	?	A, B, C, D, E

References

Comma Separated Values (CSV) Standard File Format. (n.d.). Retrieved 2 27, 2024, from
Edoceo, Inc: <http://edoceo.com/utilitas/csv-file-format>