

Record of Tasks

No.	Planned action	Planned outcome	Time estimate	Target Completion Date	Criteria
1	Initial client consultation	Client problem and solution requirements	45 minutes	25 February 2023	A
2	Brainstorming ideas and program design	Rough draft and feature list	1 hour	1 March 2023	A
3	Plausibility research and updating rough sketch	Updated feature list, only containing those implementable by a programmer of my calibre	1 hour	7 March 2023	A
4	Pitching solution to client and updating feature list	Idea serves as a perfect solution for client's problem	30 minutes	17 March 2023	A
5	Adviser consultation	Ensures software idea is complex enough for the CS HL criteria	15 minutes	21 March 2023	A
6	Final brainstorming session	Lay down success criteria and final feature list	20 minutes	23 March 2023	A
7	Designing GUI	Rough sketch of GUI through all menu pages	1 hour	30 March 2023	B
8	Consult client for opinion on GUI, make adjustments as needed	The GUI sketch that has been approved by the client	15 minutes	3 April 2023	B
9	Research most suitable languages to be used for the software	Have a list of languages I need to learn that will make up the software, as well as a strong justification for using them	3 hours	17 April 2023	A
10	Research libraries that will be useful for the software	Have a rough idea of the libraries I will be using and why they are useful	2 hours	25 April 2023	A

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11	Set up text editor and installing languages and associated libraries	Prepare my workspace and create a program folder to store all my files in the future.	2 hours	1 May 2023	C
12	Experiment chosen languages and libraries as well as consult relevant guides	Have a basic understanding of how the languages work and how they can be integrated to create the software.	1 week	31 May 2023	C
13	Begin development of the homepage	Implement the software's app, as well as the home page's frames, buttons, and GUI structure	4 hours	19 June 2023	C
14	Create instances of other pages and connect together with the homepage. Fix bugs.	Connected pages together with a click of a button as specified by the blueprint	3 hours	20 June 2023	C
15	Reserve space in the homepage for the todo list and implement listbox	A space is reserved with spaces for a label and listbox for the todo list	2 hours	24 June 2023	C
16	Fixed a bug where the listbox does not expand to meet its allocated space	The listbox works as intended	2 hours	25 June 2023	C
17	Connect the listbox to the database and implement load functions to fill the list upon initialization	The listbox can read entries from the database and load it in	3 hour	27 June 2023	C
18	Implement a double click function to display task description	A new window with the task description appears when the task is double-clicked	1 hour	30 June 2023	C

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19	Implement an add and remove task function	The remove function works and the add function pops a new window for registration	1 hour	2 July 2023	C
20	Save every edit to the task list to the database	The database is fully connected to the GUI task list, and all changes are reflected	2 hours	4 July 2023	C
21	Fix a bug: Database does not save changes after the application closes	The database sustains data even after the application closes	30 minutes	5 July 2023	C
22	Implement a similar listbox on the right side for the songs.	The right section has a listbox, and 2 spaces to store the buttons and currently playing song	1 hour	14 July 2023	C
23	Fixed a bug where the right side eats up space from the left side	The areas are now equally divided	3 hours	15 July 2023	C
24	Initialise pygame music player and the play buttons at the bottom	The play bottoms are connected to the music player and can pause and play	2 hours	17 July 2023	C
25	Put dummy data in the song database and load it into the listbox	The listbox contains the list of the titles of all songs	1 hour	18 July 2023	C
26	Create a custom queue class to store song queue	Have a flexible blueprint for the song queue	20 minutes	19 July 2023	C
27	Import a Lifo queue object and combine it with the custom queue class	Have a song queue and history system	30 minutes	21 July 2023	C
28	Create methods for a song shuffler and queue filler	Have a song shuffler and song queue filler	1 hour	22 July 2023	C

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29	Create a song class to store song title, duration, and file location	Have a song class to simplify the song playing process	30 minutes	23 July 2023	C
30	Implement a load function and link it to the queue and pygame music player	Pygame music player can now play music based on the song queue and stores the played songs in the stack history	2 hours	24 July 2023	C
31	Implement the next and previous song functions to skip and store songs in their respective queues	Next and previous song methods work properly and linked to the pygame player	1 hour	25 July 2023	C
32	Fixed a bug where clicking previous multiple time after program initialises adds the same song to the stack multiple times	Songs are no longer added many times unintended	2 hours	27 July 2023	C
33	Add a function to update a label to show currently playing song	Label now shows currently playing song	1 hour	29 July 2023	C
34	Create GUI for settings page by making a scrollable frame out of a canvas and scroller	The page can now be scrolled through and can store a lot more elements	4 hours	30 July 2023	C
35	Fixed a bug where the scroller only works for a small area instead of the entire screen	Scroller works properly for the entire settings screen	1 hour	31 July 2023	C
36	Create settings label, content frame	Space is created for the entry fields and the title label	30 minutes	1 August 2023	C
37	Add entry field for each setting and a slider for the volume	The setting fields contain spaces with default values. Users can change that value	20 minutes	2 August 2023	C

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38	Fixed a bug where the volume extends beyond the assigned area	The volume slider is properly sized in the right position	1 hour	3 August 2023	C
39	Store the default values in a JSON file and load them in when the page is initialised	JSON file contains settings which is accessible by the program at any time	30 minutes	5 August 2023	C
40	Implements a function to reset values to default if the user exits the screen and has not saved	All entries reset to default values if the user did not save	20 minutes	5 August 2023	C
41	Implements a load settings function that sets the “default” values of all entries from the database	User data in the database is the new default value for the setting fields	1 hour	5 August 2023	C
42	Implement a save function that saves values to the database and updates the default	Save function works and the page can write things into the database	1 hour	6 August 2023	C
43	Implement validation functions for every single entry field. This includes hexadecimal, integer, and empty fields.	Entries can only be saved when all validation processes are passed	3 hours	6 August 2023	C
44	Create a reset to default function that resets all user preferences in the database to the default setting from the json file.	The button can revert any changes to the true default value. It also rewrites the database	1 hour	6 August 2023	C
45	Fixed a bug where going out of the page and coming back in does not properly reflect the database’s entries	Database is in perfect sync with the entries in the page	30 minutes	6 August 2023	C
46	Create the Add Music page GUI	The page has a title label and is divided into the add section and the remove section	1 hour	7 August 2023	C

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47	Make a listbox for the remove section and load all music titles from the database into it	The listbox contains all the songs from the database. A remove button is positioned below it	45 minutes	7 August 2023	C
48	Create a function for the remove button to remove the selected song from the listbox and the database	Remove button works as intended and its effect is reflected in the database	1 hour	7 August 2023	C
49	Create an add song button that opens a file explorer window for audio files	The button can choose an audio file from the user's files and return its path to the program	1 hour	8 August 2023	C
50	Use the pydub library to convert the audio file into a .ogg file and the shutil library to make a copy and put it in a secured folder	The secured folder now contains the audio files that the database has access to in proper format	2 hours	8 August 2023	C
51	Prompt the user for a title and whether or not they want to keep the original file name before the transfer process	The program can now retrieve the song title from the user	20 minutes	8 August 2023	C
52	The database is updated with the new song's duration, title, and location	The changes made in this page are now reflected in the database	25 minutes	8 August 2023	C
53	Create the studying page in a similar setup to the add music page.	The GUI exists with all the proper labels	10 minutes	10 August 2023	C
54	Create a function that returns hours and minutes from a total number of minutes	The function can now be used by all methods managing time	10 minutes	10 August 2023	C

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55	Create a timer module to keep track of the time and link it to the labels so that they display the time remaining	The labels count down from a set time and displays it to the user	1 hour	11 August 2023	C
56	Create functions to determine the session type, and how many sessions until a long break	The timer times short breaks, long breaks, and study sessions based on the user settings.	3 hours	11 August 2023	C
57	Upload study time to database table	The page is linked to the database and all activities are recorded	1 hour	12 August 2023	C
58	Create GUI for analytics page, similar to that of the add music page	Create a frame, make labels for every single field and value	30 minutes	14 August 2023	C
59	Add the static labels, and then make a format for the dynamic time labels	The GUI is finished	20 minutes	14 August 2023	C
60	Link the page to the database so that it displays actual data	The page showcases the user's study activity for the past week	30 minutes	14 August 2023	C
61	Create a login page with entry fields for the username and password, as well as a login button	The page can accept responses to login	20 minutes	16 August 2023	C
62	Connect the page to the database, and make a validation function for the entries	The page can verify if the username and password are correct. Then, the user will be redirected to the homepage	1 hour	18 August 2023	C
63	Create a register page, similar to the login page but registers users instead	The page can accept inputs and verifies to see that the username is unique, then it will input the data in the database	30 minutes	18 August 2023	C

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64	Add a logout function that transports the user to the login page	The button logouts the user and reflects that in the database	10 minutes	18 August 2023	C
65	Fixes a bug where the old user's data is still displayed when the user logs in another account	The application only displays the data of the logged in user	30 minutes	19 August 2023	C
66	Run the test plan through the program and make any changes to found bugs	The application is mostly bug free and is ready to use for the user	1 hour	22 August 2023	B & C
67	Record a use video and send the results to the client for feedback.	The client's needs are clearly fulfilled by the program. The design choices are aligned with the client's wishes	40 minutes	25 August 2023	A
68	Package the application in a .exe file and send it to the client. Help the client install the program.	The client receives the application and can now use it regularly	1 hour	27 August 2023	E
69	Do a final interview with the client after he has accustomed to the program and record any recommendations for improvements	Get feedback from the client	45 minutes	4 September 2023	E