

## Criterion B: Record of tasks

Task number	Planned action	Planned outcome	Time estimated	Target Met completion date	Criterion
1	Contact Client	A brief discussion with my client to learn about a problem they have and how I can help	1 day	✓	A
2	Brainstorm and Create Flowchart	Brainstorm ways of solving my client's problem and create a flowchart to represent the best solution.	1 day	✓	A
3	Define the Success Criteria Create a schedule for the project	Create a list of tasks that are essential for implementing the chosen solution.  Create a schedule to guide when each task will be addressed.	1 day	✓	A
4	Present the flowchart to client and discuss	Use the flowchart to explain how I plan to solve the problem to my client. Listen to feedback and amend the flowchart to incorporate it.	1 day	✓	B
5	Find databases online for the project	Locate Databases for <ol style="list-style-type: none"> <li>1. university rankings</li> <li>2. city populations</li> <li>3. city weather data</li> </ol> (Related to completing vi, vii, viii in the success criteria)	3 days	✓	C
6	Program the ability that draw information from	Write a function that can read a CSV file. Create unique		✓	C

	the databases into a master database	functions for each database which matches data with a given city and arranges it into a master database.  (Completes iv, v, vi, vii, viii in the success criteria)	3 days		
	Program a function that saves the data from a python list into a csv file	Write a function that converts data in a python list into csv format and then writes it to a csv file.  (Completes xii in the success criteria)		✓	C
	Implement the filter functionality which returns cities that meet criteria given by the user	Write a function that saves the type of specifications and the lower and upper bound of the specification. Write another function which tests these filters on all cities in the master city database and only returns the city's which meet them.  (Completes success criteria ix, x)		✓	C
7	Create a prototype program in the python terminal	Create a text based user interface for testing the functions and getting feedback from the client. The program will be able to do all that the final project can, but within a text format.		✓	C
8	Get feedback from Client	Demonstrate how the text based prototype works to	1 day	✓	E

		the client and ask for feedback.			
9	Implement Feedback	Use the feedback from the client to improve the program.	1 day	✓	C
10	Create colour pallet and website design for the web app	Use CSS and HTML to create a mock up webpage to represent the design of the final program. (Related to completing xiv in the success criteria)	2 day	✓	C
11	Present the colours and design to Client and get feedback	Show the client the design of the web page and ask for feedback. (make sure to ask specifically about the layout and colours)  (Related to completing xiv in the success criteria)	1 day	✓	E
	Implement feedback on the design of the webpage	Add the changes to the web design suggested by the client.  (Completes the xiv in the success criteria)	1 day	✓	C
12	Learn how to use the python library Flask	Research how to use the python library Flask to control the webapp	3 day	✓	C
13	Use Flask to run the webpage and then connect the python functions to the webpage to add functionality.	Use the python library Flask to open the webpage and then connect the input to the python functions and again use flask to display	2 day	✓	C

		results on the webpage			
15	Final discussion and feedback from the client	Present the website to the client and ask for feedback on the functionality.	1 day	✓	E
16	Integrate the feedback from the client	<p>Use the feedback from the client to improve the functionality of the website.</p> <p>Added a function to group the cities by country so that the list of eligible cities is easier to read, search, and understand.</p>	1 day	✓	C
	Test the functioning of the program for bugs.	<p>Use the website and look for errors.</p> <p>A bug was found where cities that share both a name and country were confused with each other in the data</p>	2 days	✓	E
	Send the program to the client to test for bugs.	<p>The client spends two days with the website and will report to me when bugs are found.</p> <p>The client found that the data for korean cities was not collected correctly.</p>	2 days	✓	E
	Go through the list of discovered	Go through the list of discovered bugs and address them.		✓	C

	bugs and address them.	<p>Cities that share both name and country were mistaken for each other in the data, using the current systems of the program, this cannot be fixed as most of the databases that fed the information gave no shared way to distinguish between this set of cities. A note was made to collect data from wikipedia to fix the issue. Unfortunately this fix could not be implemented immediately because parsing so many wikipedia articles could take several days on my computer and would interfere with my ability to complete other aspects of the project.</p> <p>The data for korean cities was not arranged correctly because many databases notated South Korea and North Korea in different ways (eg. Korea, South) which prevented the program from arranging the data correctly. To fix this I</p>			
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		simply replaced all references to North and South Korea to the standard "South Korea" or "North Korea".			
17	Obtain approval from the client to publish the website.	Discuss how the project went with the client and ask for approval that this is the final version of the program and no other changes have to be made.	1 day	✓	E
18	Publish the website online	Put the website online for the Client to use.	1 day	✓	C
19	Write down possible improvements for the program	Collect problems and shortcomings of the website design, functionality, and code.	1 day	✓	E
20	Produce the Product Demonstration Video	Create a video that displays how the webapp looks and functions.	1 day	✓	D