

# Project 2 Teamwork Transition Titans - mdaly22

Version 1 11/16/25

A **separate copy** of this template should be filled out and submitted by each student, regardless of the number of students on the team. Also change the title of this template to "Project x Teamwork <team> - <netid>"

1	Team Name: Transition Titans																	
2	Individual name: Matt Daly																	
3	Individual netid: Mdaly22																	
4	Other team members names and netids: Andrew Myers, amyers9																	
5	Link to github repository: <a href="https://github.com/MDaly27/Daly-Myers-Project1-TOC">https://github.com/MDaly27/Daly-Myers-Project1-TOC</a>																	
6	<p>List of included files (if you have many files of a certain type, such as test files of different sizes, list just the folder): (Add more rows as necessary). Add more rows as necessary.</p> <table border="1"> <thead> <tr> <th>File/folder Name</th> <th>File Contents and Use</th> </tr> </thead> <tbody> <tr> <td colspan="2">Code Files</td> </tr> <tr> <td>src/bin_packing.py</td> <td>Algorithms code for best case and backtracking solutions</td> </tr> <tr> <td colspan="2">Test Files</td> </tr> <tr> <td>Binpacking_tests.txt, binpacking.txt</td> <td>Test input, input</td> </tr> <tr> <td colspan="2">Output Files</td> </tr> <tr> <td>results/ (best_case_binpacking_sat_solver_results.csv, btracking_binpacking_sat_solver_results.csv)</td> <td>Function outputs</td> </tr> <tr> <td colspan="2">Plots (as needed)</td> </tr> </tbody> </table>		File/folder Name	File Contents and Use	Code Files		src/bin_packing.py	Algorithms code for best case and backtracking solutions	Test Files		Binpacking_tests.txt, binpacking.txt	Test input, input	Output Files		results/ (best_case_binpacking_sat_solver_results.csv, btracking_binpacking_sat_solver_results.csv)	Function outputs	Plots (as needed)	
File/folder Name	File Contents and Use																	
Code Files																		
src/bin_packing.py	Algorithms code for best case and backtracking solutions																	
Test Files																		
Binpacking_tests.txt, binpacking.txt	Test input, input																	
Output Files																		
results/ (best_case_binpacking_sat_solver_results.csv, btracking_binpacking_sat_solver_results.csv)	Function outputs																	
Plots (as needed)																		

	<div data-bbox="277 205 1068 688"> <p>Binpacking: Time Taken by Algorithm</p> <p>Time Taken (seconds, log scale)</p> <p>10<sup>-6</sup></p> <p>BackTracking      BestCase</p> <p>Algorithm</p> </div>
8	Individual Student time (in hours) to complete: 8
9	Your specific activities and responsibilities: Coded the bin packing problem, with some assistance from Andrew Myers. This problem was my selected one.
10	What was personally learned (topic, programming, algorithms) I learned how you can use recursion to track multiple parameters and implement a backtracking solution for this problem. I also learned how bin packing and the coin change problem are distinct.
11	<p>How team was organized, and what might be improved.</p> <p>Matt - Lead developer Andrew - Co lead developer</p> <p>We could have focused more on partner programming/ mob coding on this assignment to breed mutual understanding.</p>
12	<p>Any additional material:</p> <p>Some use of online resources and ChatGPT for debugging.</p>