

# Project coin combination Teamwork gflesher - gflesher

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: gflesher											
2	Individual name: Grant Flesher											
3	Individual netid: 902222559											
4	Other team members names and netids: none											
5	Link to github repository: <a href="https://github.com/grantflesher/NTM">https://github.com/grantflesher/NTM</a>											
6	Overall project attempted, with sub-projects: I attempted the NTM project, where i coded a NTM that could evaluate if an inputted string would be accepted or rejected											
7	<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" style="text-align: center;">Code Files</td> </tr> <tr> <td>NTM_gflesher.py</td> <td>This file is my project code. It takes a csv file as input from one of the test files, and a string from the user. From this it runs a NTM, to see if the string would be accepted or rejected on the NTM inputted.</td> </tr> <tr> <td colspan="2" style="text-align: center;">Test Files</td> </tr> <tr> <td>test_files (foulder)</td> <td>The csv files include inputs that showcase varying NTMs. They show various cases to show how various machines work with the</td> </tr> </tbody> </table>		File/folder Name	File Contents and Use	Code Files		NTM_gflesher.py	This file is my project code. It takes a csv file as input from one of the test files, and a string from the user. From this it runs a NTM, to see if the string would be accepted or rejected on the NTM inputted.	Test Files		test_files (foulder)	The csv files include inputs that showcase varying NTMs. They show various cases to show how various machines work with the
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			project
	Output Files		
	output_files (foulder)		These are the output files for each of the test files. Each test file was run 5 times, with a different input each time. This would showcase the test files accepting and rejecting varying inputs.
	Plots (as needed)		
	Analytics File		
	NTM Project Analytics_gflesher.pdf		This file showcases the inputs and outputs of varying machines! Additionally, each machines nondeterminism and depth for each run is provided aswell
8	Individual Student time (in hours) to complete: 7 hours		
9	Your specific activities and responsibilities: all, I completed the project solo		
10	What was personally learned (topic, programming, algorithms): In this project I personally learned a more in depth knowledge about NTMs. After writing code that mimics a NTM, I believe I have a better understanding of how they operate. Additionally, I believe I had good practice with parsing data, utilizing breadth first search, and backtracking throughout this project!		
11	How team was organized, and what might be improved. Staying better organized, and not accidentally deleting important files would be ideal, and a good lesson going forward to NEVER push to main.		
12	Any additional material: This helps to this day: <a href="https://www3.nd.edu/~pbui/teaching/cse.20312.fa23/">https://www3.nd.edu/~pbui/teaching/cse.20312.fa23/</a>		