VBS Number	Task Name	WBS Description	Must Start by Date	Must End by Date	Planned Start Date	Actual Start Date	Status	Date Completed	Reason for Delay	Task Level of Effort (in hours)	Task Duration (in days)	Predecessor (Finish-to-Start Dependency) (comma separated)	Resource Name(s)	Author (of Item for follow-on questions)
	Project Initialization	Define goals, plan research, and set up the environment.	12/10/2024	12/17/2024	12/10/2024	12/10/2025	Complete	12/17/2024	N/A	49	7	None	Project Manager	Alexander Shelton
ı	Define Project Objectives	Outline project goals, deliverables, and scope.	12/10/2024	12/14/2024	12/10/2024	12/10/2024	Complete	12/14/2024	N/A	24	4	None	Project Manager	Alexander Shelton
1.1.1	Identify Project Goals	Define the primary goals of the project, such as macro recording and key remapping.	12/10/2024	12/11/2024	12/10/2024	12/10/2024	Complete	12/11/2024	N/A	8	1	None	Project Manager	Alexander Shelton
1.1.2	Document Deliverables	List all outputs, including CLI, Key mapping, and macro system.	12/11/2024	12/12/2024	12/11/2024	12/11/2024	Complete	12/12/2024	N/A	8	1	1.1.1	Project Manager	Alexander Shelton
1.1.3	Define Scope	Detail the functionality to include and exclude.	12/13/2024	12/14/2024	12/13/2024	12/13/2024	Complete	12/14/2024	N/A	8	1	1.1.2	Project Manager	Alexander Shelton
2	Research and Planning	Investigate technologies and plan the project structure.	12/14/2024	12/16/2024	12/14/2024	12/14/2024	Complete	12/16/2024	N/A	16	2	1.1	Junoir Software Developer	Patrick Long
1.2.1	Research Python Libraries	Review Python libraries for interacting with peripherals.	12/14/2024	12/15/2024	12/14/2024	12/14/2024	Complete	12/15/2024	N/A	8	1	1.1	Junoir Software Developer	Patrick Long
1.2.2	Research Key Binding and	Investigate Python libraries for key binding macro recording.	12/15/2024	12/16/2024	12/15/2024	12/15/2024	Complete	12/16/2024	N/A	8	1	1.2.1	Junoir Software Developer	Patrick Long
	Setup Development	Configure tools and libraries for development.	12/16/2024	12/17/2024	12/16/2024	12/16/2024	Complete	12/17/2024	N/A	9	1	1.2	Junoir Software Developer	Patrick Long
1.3.1	Install Required Libraries	Install Python and all other required libraries.	12/16/2024	12/17/2024	12/16/2024	12/16/2024	Complete	12/17/2024	N/A	3	1	1.2	Junoir Software Developer	Patrick Long
1.3.2	Configure Virtual Environment	Set up a virtual environment and ensure dependencies	12/16/2024	12/17/2024	12/16/2024	12/16/2024	Complete	12/17/2024	N/A	3	1	1.3.1	Junoir Software Developer	Patrick Long
1.3.3	Verify Setup	Test libraries and environment setup using sample scripts.	12/16/2024	12/17/2024	12/16/2024	12/16/2024	Complete	12/17/2024	N/A	3	1	1.3.2	Junoir Software Developer	Patrick Long
	Input Capture Module	Develop functionality for capturing input from devices.	12/17/2024	12/24/2024	12/17/2024	12/17/2024	Complete	12/24/2024	N/A	56	7	1	Senior Software Developer	Josh Mooney
	Keyboard Input Recording	Implement functionality to capture keyboard inputs.	12/17/2024	12/20/2024	12/17/2024	12/17/2024	Complete	12/20/2024	N/A	24	3	1.3	Senior Software	Josh Mooney
2.1.1	Handle Key Presses	Capture single keypress events and save them.	12/17/2024	12/18/2024	12/17/2024	12/17/2024	Complete	12/18/2024	N/A	8	1	1.3	Developer Senior Software	Josh Mooney
2.1.2	Handle Key Combinations	Capture combinations like Ctrl+Alt and save them.	12/18/2024	12/20/2024	12/18/2024	12/18/2024	Complete	12/20/2024	N/A	16	2	2.1.1	Developer Senior Software	Josh Mooney
!	Mouse Input	Implement functionality to capture mouse	12/20/2024	12/24/2024	12/20/2024	12/20/2024	Complete	12/24/2024	N/A	32	4	2.1	Developer Senior Software	Josh Mooney
2.2.1	Recording Handle Mouse Clicks	inputs. Capture left, right, and middle mouse clicks and save	12/20/2024	12/22/2024	12/20/2024	12/20/2024	Complete	12/22/2024	N/A	16	2	2.1	Developer Senior Software	Josh Mooney
2.2.2	Handle Additional Mouse Buttons	Capture additional mouse presses for specialized mice.	12/22/2024	12/24/2024	12/22/2024	12/22/2024	Complete	12/24/2024	N/A	16	2	2.2.1	Developer Senior Software	Josh Mooney
	Key Binding & Macro	Develop and integrate the key binding and macro system into the project.	12/24/2024	1/10/2025	12/24/2024	12/24/2024	Complete	1/10/2025	N/A	104	17	2	Senior Software Developer	Josh Mooney
	Development Simple Recording Module	Build a module to record and save key and	12/24/2024	12/28/2024	12/24/2024	12/24/2024	Complete	12/28/2024	N/A	32	4	2	Senior Software	Josh Mooney
3.1.1	Record Key Presses	mouse press. Add functionality to save keyboard actions.	12/24/2024	12/26/2024	12/24/2024	12/24/2024	Complete	12/26/2024	N/A	16	2	2.1	Developer Senior Software	Josh Mooney
3.1.2	Record Mouse Presses	Add functionality to save mouse presses to file.	12/26/2024	12/28/2024	12/26/2024	12/26/2024	Complete	12/28/2024	N/A	16	2	2.2	Developer Senior Software	Josh Mooney
	Assignment	Implement functionality to assign commands to	12/28/2024	1/1/2025	12/28/2024	12/28/2024	Complete	1/1/2025	N/A	32	4	3.1	Developer Senior Software	Josh Mooney
3.2.1	Assign Commands to	recorded actions. Add functionality to attach a command to recorded	12/28/2024	12/30/2024	12/28/2024	12/28/2024	Complete	12/30/2024	N/A	16	2	3.1.1	Developer Senior Software	Josh Mooney
3.2.2	Assign Commands to	keyboard actions. Add functionality to attach a command to recorded mouse	12/30/2024	1/1/2025	12/30/2024	12/30/2024	Complete	1/1/2025	N/A	16	2	3.1.2	Developer Senior Software	Josh Mooney
3	Execution Engine	presses. Implement functionality to execute assign	1/1/2025	1/10/2025	1/1/2025	1/1/2025	Complete	1/10/2025	N/A	40	9	3.2	Developer Senior Software	Josh Mooney
3.3.1	Update or Modify	commands when recorded keys are pressed. Add functionality to update or modify existing bindings.	1/1/2025	1/5/2025	1/1/2025	1/1/2025	Complete	1/5/2025	N/A	32	4	3.2	Developer Senior Software	Josh Mooney
3.3.2	Existing Bindings Delete Saved	Add functionality to update or modify existing bindings. Add functionality to delete saved configurations.	1/9/2025	1/5/2025	1/9/2025	1/5/2025	Complete	1/6/2025	N/A	8	1	3.2	Developer Senior Software	Josh Mooney
3.3.2	Configurations Command-Line Interface (CLI)	Build a user-friendly CLI for managing features.	1/10/2025	1/26/2025	1/10/2025	1/6/2025	Complete	1/31/2025	See 4.1.2.	96	16	3	Developer Linux Specialist	Sarah Allen
1	Develop CLI	Set up the CLI structure and integrate basic	1/10/2025	1/16/2025	1/10/2025	1/6/2025	Complete	1/12/2025	N/A	48	6	3	Linux Specialist	Sarah Allen
4.1.1	Framework Setup CLI	commands. Use Python's argpase or similar library to design the	1/10/2025	1/10/2025	1/10/2025	1/6/2025	Complete	1/8/2025	N/A N/A	16	2	3	Linux Specialist	Sarah Allen
4.1.2	Architecture Implement Help Command	command-line framework. Add ahelp command to display usage instructions for all features.	1/10/2025	1/12/2025	1/10/2025	1/6/2025	Complete	1/8/2025	Needed to write documentation and help before I could add it.	16	2	4.1.1	Linux Specialist	Sarah Allen
4.1.3	Add Basic Error Handling	Implement error handling for invalid commands or	1/14/2025	1/16/2025	1/14/2025	1/16/2025	Complete	1/18/2025	I shouldn't have had the error handling before the main program commands.	16	2	4.1.1	Linux Specialist	Sarah Allen
2	Management	missing arguments Add commands for recording, listing, and editing	1/16/2025	1/22/2025	1/16/2025	1/8/2025	Complete	1/16/2025	Delete command added to Management Commands section adding 2 extra days	48	6	4.1	Senior Software	Josh Mooney
4.2.1	Commands Add Command	configurations. Implement an `add` command to add a new binding to	1/16/2025	1/18/2025	1/16/2025	1/8/2025	Complete	1/10/2025	Commands section adding 2 extra days N/A	16	2	4.1	Developer Senior Software	Josh Mooney
4.2.2	List Command	the configuration. Implement `list` command to display all saved	1/18/2025	1/20/2025	1/18/2025	1/10/2025	Complete	1/12/2025	N/A	16	2	4.1	Developer Senior Software	Josh Mooney
4.2.3	Update	configurations. Implement `update` command to allow modifications to	1/20/2025	1/22/2025	1/20/2025	1/10/2025	Complete	1/14/2025	N/A	16	2	4.1	Developer Senior Software	Josh Mooney
	Command	saved configurations.	1/20/2025	1/44/2025	1/20/2025	1/12/2025	Complete	1/14/2025	IN/A	10		4.1	Developer	Justi Mooney

4.2.4	Delete Command	Implement `delete` command to remove unwanted configurations.	1/24/2025	1/26/2025	1/24/2025	1/14/2025	Complete	1/16/2025	N/A	16	2	4.2	Senior Software Developer	Josh Mooney
5	Testing and Debugging	Conduct testing, validate compatibility, and fix bugs.	1/26/2025	2/4/2025	1/26/2025	1/26/2025	Complete	2/1/2025	Writing tests has taken a little longer than I thought it would.	72	9	4	Tester	Linda Montgomery
5.1	Unit Testing	Write unit tests to ensure readability and correctness of all modules.	1/26/2025	1/29/2025	1/26/2025	1/26/2025	Complete	2/1/2025	I should have allocated more time for writing tests.	24	3	4	Tester	Linda Montgomery
5.1.1	Keyboard Input Tests	Write tests for keyboard input recording functionality.	1/26/2025	1/27/2025	1/26/2025	1/26/2025	Complete	1/28/2025	See 5 / 5.1	8	1	4	Tester	Linda Montgomery
5.1.2	Mouse Input Tests	Write tests for mouse input recording functionality.	1/27/2025	1/28/2025	1/27/2025	1/28/2025	Complete	1/30/2025	See 5 / 5.1	8	1	4	Tester	Linda Montgomery
5.1.3	Execution Tests	Write tests for assignment and execution.	1/28/2025	1/29/2025	1/28/2025	1/28/2025	Complete	2/1/2025	See 5 / 5.1	8	1	4	Tester	Linda Montgomery
5.2	Compatibility Testing	Validate functionality across devices and distributions.	1/29/2025	2/2/2025	1/29/2025	2/1/2025	At Issue	N/A	See 5.2.2 / 5.2.3 (Will Still test devices after tests are written.)	32	4	5.1	Tester	Linda Montgomery
5.2.1	Device Validation	Validate input recording on various devices.	1/29/2025	1/30/2025	1/29/2025	2/1/2025	Complete	2/4/2025	Hadn't finished writing tests.	8	1	5.1	Tester	Linda Montgomery
5.2.2	Cross-Distribution Testing	Test execution across major Linux distributions.	1/30/2025	2/1/2025	1/30/2025	N/A	At Issue	N/A	Move to backlog. Don't have time to test on multiple distributions.	16	2	5.1	Tester	Linda Montgomery
5.2.3	Consistency Testing	Ensure functionality remains consistent across distributions.	2/1/2025	2/2/2025	2/1/2025	N/A	At Issue	N/A	Move to backlog. Don't have time to test on multiple distributions.	8	1	5.2.2	Tester	Linda Montgomery
5.3	Bug Fixing	Resolve issues found during testing.	2/2/2025	2/4/2025	2/2/2025	2/2/2025	Complete	2/4/2025	N/A	16	2	5.2	Senior Software Developer	Josh Mooney
5.3.1	Input Recording Bugs	Fix issues in input recording.	2/2/2025	2/3/2025	2/2/2025	2/2/2025	Complete	2/3/2025	N/A	8	1	5.2	Senior Software Developer	Josh Mooney
5.3.2	Execution Errors	Resolve errors in execution.	2/3/2025	2/4/2025	2/3/2025	2/3/2025	Complete	2/4/2025	N/A	8	1	5.2	Senior Software Developer	Josh Mooney
6	Documentation	Create user and developer documentation for the project.	2/5/2025	2/11/2025	2/5/2025	2/3/2025	Complete	2/7/2025	N/A	48	6	5	Documentation Specialist	Jacob Dillinger
6.1	User Documentation	Develop documentation for end users.	2/5/2025	2/11/2025	2/5/2025	2/3/2025	Complete	2/5/2025	N/A	48	6	5	Documentation Specialist	Jacob Dillinger
6.1.1	Installation Instructions	Write a step-by-step installation instructions for Linux distributions.	2/5/2025	2/7/2025	2/5/2025	2/3/2025	Complete	2/5/2025	N/A	16	2	5	Documentation Specialist	Jacob Dillinger
6.1.2	Usage Examples	Provide examples for recording and assigning.	2/7/2025	2/9/2025	2/7/2025	2/4/2025	Complete	2/6/2025	N/A	16	2	5	Documentation Specialist	Jacob Dillinger
6.1.3	Troubleshooting	Document common troubleshooting steps.	2/9/2025	2/11/2025	2/9/2025	2/5/2025	Complete	2/7/2025	N/A	16	2	5	Documentation Specialist	Jacob Dillinger
Phase 2														
7	GUI	Development of a graphical user interface for MacroMancer.	TBD	TBD	TBD	TBD	Future Phase	TBD		184	23	1, 2, 3, 4, 5, 6	Project Manager	Alexander Shelton
7.1	GUI Framework Selection	Evaluate PyQt, GTK, or Tkinter for implementation.	TBD	TBD	TBD	TBD	Future Phase	TBD		16	2	7	Senior Software Developer	Josh Mooney
7.2	GUI Prototyping	Develop wireframes and basic UI interactions	TBD	TBD	TBD	TBD	Future Phase	TBD		32	4	7.1	UX/UI Designer	TBD
7.3	GUI-Core Integration	Connect GUI with MacroMancer's backend.	TBD	TBD	TBD	TBD	Future Phase	TBD		48	6	7.2	Senior Software Developer	Josh Mooney
7.4	Feature Parity Testing	Ensure GUI fuctionality matches CLI capabilities.	TBD	TBD	TBD	TBD	Future Phase	TBD		24	3	7.3	QA Tester	TBD
7.5	GUI Beta Release	Conduct initial testing with users for feedback.	TBD	TBD	TBD	TBD	Future Phase	TBD	_	24	3	7.4	Tester	Linda Montgomery

implement fixes and prepare for full release.

TBD

TBD

TBD

TBD

Future Phase

TBD

Senior Software Developer

Josh Mooney

7.5