Student Name:	Dylan Manley	Student Number:	C00286789
Working Title:	Knuckle Duster		

Description:	2D melee combat game with an emphasis on movement and environmental traversal using SFML. - Strong focus on free running and parkour mechanics such as: - Wall running - Wall jumping - Sliding - Swinging - A finite state machine (FSM) will be used to create a fluid and dynamic movement system. - Each state will include transition states to any compatible state, ensuring smooth transitions and a realistic sense of motion. - Combat mechanics will adapt based on the player's current movement state, allowing for unique attacks or manoeuvres while running, jumping, or sliding. - Combat should remain possible in nearly every movement state to keep gameplay fast-paced and satisfying. - The player will have access to multiple weapon types, with animations controlled by a separate FSM. - Enemies will share the same movement and combat abilities as the player, allowing them to give chase and engage in similar parkour-based interactions.
Reasons for selecting project:	- Interest in games with free running mechanics like Dying Light and Mirrors Edge - interested in the challenge of translating those mechanics to 2D
External links (if applicable):	https://play.google.com/store/apps/details?id=com.nekki.vector&pli=1 https://store.steampowered.com/app/557340/My_Friend_Pedro/
Hardware requirements:	Keyboard for player input.

	• Mouse for aiming, camera control, or menu navigation. • Computer capable of running SFML projects at a minimum of 30 FPS
Software requirements (Technology Stack):	• SFML • Finite State Machine • Combat mechanics • Enemy AI using a separate Finite State Machine • Collision system
Other requirements:	

Signed: Dylan Manley   Date: 10/10/2025

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Approved/Not Approved:	_____
Reasons for not approving project:	
Conditions attached to approving project:	
Approved/Not Approved:	
Name of Supervisor:	

Signed: _____   Date: _____