Fall 2024: Programming Fundamentals (CS1002)

Self-Evaluation Sheet

Student Information

Name: _____

Roll #: _____-_____

Section: _____

Evaluation Rules

Assign yourself full marks if you claim a complete implementation of the given Question.
Assign yourself zero marks if you have missed the implementation of the given Question.

Phase 1: Implementation (160 Marks)

#	Self Evaluation Sheet	Marks	Obtained Marks
1	Implementation of Spray Can mechanics (20 Marks).		--
	Movement: Moves left and right across the entire screen.	5	
	Sprays: Clearly show the number of sprays left for the spray can.	5	
	Lives: Visually display the remaining lives to the player.	5	
	Accurately sprays one shot at a time.	5	
2	Correct implementation of bee types (worker and killer bees) (30 Marks).		--
	Correct Movement of Bees: collision with borders, and alternative left right movement.	10	
	Worker bees collide with honeycombs, but hunter bees do not.	5	
	Worker bees occasionally stop randomly for a short duration.	5	
	Worker bees turn into yellow honeycombs, while hunter bees turn into red honeycombs.	5	
	Bees properly exit the borders after pollinating the flowers.	5	
3	Implementation of flowers (20 Marks).		--
	The first bee creates two consecutive flowers on the left and right borders.	10	
	Subsequent bees create only one flowers.	5	
	A flower is created in the middle if a bee reaches the center.	5	
4	Functionality of the hummingbird and its interactions (35 Marks).		--
	Movement: Randomly decides the direction to move.	5	
	Movement: Travels several blocks in the chosen direction.	5	
	Movement: Pauses briefly before changing direction.	5	

		Movement: Properly navigates and moves across the entire screen.	5	
		Interaction: Eats a honeycomb upon reaching it, awarding the player points.	5	
		Interaction: Becomes sick and exits the screen when hit (3 times).	5	
		Return: Reappears after a delay if it exited due to sickness.	5	
5	Honeycombs and hives (20 Marks)			--
		Collision: Honeycombs and hives properly interact with sprays shot by the spray can.	5	
		Hive Creation: A bee correctly forms a hive when it gets stuck.	15	
6	Accurately implements all 3 levels, ensuring all elements are correctly created as specified in the project PDF (15 Marks).		15	
5	Accurate scoring mechanism as per gameplay rules (10 Marks).		10	
8	Complete and navigable game menu (10 Marks).		10	

Phase 2: Implementation (140 Marks)

#	Self-Evaluation Sheet		Marks	Obtained Marks
1	High-score tracking system using file handling (40 Marks)			
		Stores both player name and high score in file.	10	
		High scores are stored in ascending order.	5	
		File Handling: Proper implementation of file handling to store and retrieve high scores.	5	
		High scores are accessible from the game menu.	10	
		Displays updated high scores when the player wins the entire game or loses.	10	
2	The Boss Level is properly created, accessible from the main menu, and includes all elements as specified in the project PDF. (10 Marks)		10	
3	Power-ups (45 Marks).			
		Power-ups must create noticeable changes to the spray can, ensuring the game remains playable.	15	
		Each power-up should have a timer bar that visually represents its duration. The timer must gradually decrease, and the effect ends when the timer depletes.	15	
		If the player picks up the same power-up while it's active, the timer resets, extending the effect.	7.5	
		Opposing power-ups should cancel each other out, and the effect should end instantly.	7.5	
4	Infant Bee Mechanic (if not created dynamically then this entire section will be a straight 0) (45 Marks)			
		The Infant Bee must spawn dynamically from the top of the bee hive. It should move upward and avoids	30	

		obstacles by moving left or right. If trapped, it transforms into a new hive.		
		Once the Infant Bee reaches the top, it should matures into a Hunter Bee.	5	
		Killing the Infant Bee in its child form should result in a 500-point penalty.	5	
		The Infant Bee spawns after a fixed interval. The spawn interval should be balanced—long enough to clear other bees, but short enough to maintain challenge.	5	

Bonus Section (60 Marks)

#	Self Evaluation Sheet	Marks	Obtained Marks
1	View implementation (double grid, dynamic view shifts)	50	
2	Animation of the Infant Bee using a sprite sheet	5	
3	Upload of project code on GitHub with a detailed README.md	5	

Eligibility for Bonus: Bonus points will only be awarded to students who have fully implemented the required features in Phase 1 and Phase 2.

Total Marks for Phases 1 & 2: 300

Bonus Marks: 60

Overall Total (with bonus): 360