

Fall 2024: Programming Fundamentals (CS1002)

Self-Evaluation Sheet

Student Information

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Roll #: __24I__ - __0544__

Section: __D__

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	5
	Sprays: Clearly show the number of sprays left for the spray can.	5	5
	Lives: Visually display the remaining lives to the player.	5	5
	Accurately sprays one shot at a time.	5	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	8
	Worker bees collide with honeycombs, but hunter bees do not.	5	5
	Worker bees occasionally stop randomly for a short duration.	5	0
	Worker bees turn into yellow honeycombs, while hunter bees turn into red honeycombs.	5	5
	Bees properly exit the borders after pollinating the flowers.	5	5

3	Implementation of flowers (20 Marks).			--
		The first bee creates two consecutive flowers on the left and right borders.	10	8
		Subsequent bees create only one flowers.	5	5
		A flower is created in the middle if a bee reaches the center.	5	5
4	Functionality of the hummingbird and its interactions (35 Marks).			--
		Movement: Randomly decides the direction to move.	5	5
		Movement: Travels several blocks in the chosen direction.	5	5
		Movement: Pauses briefly before changing direction.	5	3

		Movement: Properly navigates and moves across the entire screen.	5	3
		Interaction: Eats a honeycomb upon reaching it, awarding the player points.	5	5
		Interaction: Becomes sick and exits the screen when hit (3 times).	5	3
		Return: Reappears after a delay if it exited due to sickness.	5	3
5	Honeycombs and hives (20 Marks)			--
		Collision: Honeycombs and hives properly interact with sprays shot by the spray can.	5	2
		Hive Creation: A bee correctly forms a hive when it gets stuck.	15	0
6	Accurately implements all 3 levels, ensuring all elements are correctly created as specified in the project PDF (15 Marks).		15	10
5	Accurate scoring mechanism as per gameplay rules (10 Marks).		10	6

8	Complete and navigable game menu (10 Marks).	10	6
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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	
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		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