# COAL Project – Space Ship Battle Game Evaluation Rubric

## Level 1: Basic Setup and Gameplay Interface (Marks In Lab)

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| Task | Description | Marks |
| Welcome Screen with Name Input | Display the player’s name input on the welcome screen | 2 |
| Game Menu | Menu includes Start, Instructions, and Exit options | 5 |
| Pause Functionality | Pause/resume feature during gameplay using a key (e.g., P) | 3 |
| Instructions Screen | Display game rules, keys (arrows, spacebar, ESC), and level info | 2 |
| Gameplay Screen | Clear game screen with player ship, bullets, enemies, and score | 5 |
| Lives/Health System | Display remaining lives; decrease on enemy collision or fire | 3 |
| Level 1 - Basic Enemy Logic | Enemies move slowly in straight line; player eliminates 5 enemies | 5 |
| Bullet Mechanics | Bullet fires correctly and resets on hit or exit | 5 |

## Level 2: Intermediate Mechanics and Game Behavior (Marks In Theory)

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| Task | Description | Marks |
| Level 2 - Side Movement Enemies | Enemies move side-to-side while descending; increased frequency | 5 |
| Enemy Shooting | Enemies fire bullets downward; player must avoid or lose a life | 5 |
| Improved Score System | Score updates with each hit; bonus for completing levels | 5 |
| Random Enemy Spawn | Use randomization for enemy appearance and movement | 5 |

## Level 3: Advanced Game Logic and Features (Marks In Theory and Lab)

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| Task | Description | Marks |
| Level 3 - Complex Enemy Behavior | Fast-spawning enemies with random movement and increased fire rate | 5 |
| Advanced Collision Detection | Player/enemy bullet collisions work reliably with all movement patterns | 5 |
| End Screen with Stats | Game shows final score and name upon completion or game over | 3 |
| Difficulty Scaling | Progressive challenge per level (speed, frequency, number of enemies) | 5 |

## File Handling and Modular Code (Marks In Lab)

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| Task | Description | Marks |
| Store High Scores/Player Data | Save player name, score, and level reached using file handling | 5 |
| Modular Code Structure | Use of multiple files (main.asm, player.asm, etc.) with clear roles | 5 |
| Code Commenting & Documentation | Code is well-commented and easy to understand for all modules | 5 |

## Bonus and Creativity

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| Task | Description | Marks |
| Unique Mechanics | e.g., shield mode, power-ups, level boss | Up to 5 |
| UI & Visual Creativity | Creative use of console text, symbols, and animations | Up to 5 |
| Audio Integration | Use PC speaker for effects like shooting, enemy hit | Up to 5 |

## Contribution and Presentation

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| Task | Description | Marks |
| Group Contribution (if group project) | Fair work distribution; all members involved | 5 |
| Report | Clear explanation of game logic, modules, and assembly concepts | 5 |

✅ Total Marks: 108 (including bonus)  
Main marks = 93  
Bonus = Up to 15