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UML Class diagram and testing plan for Part - 1

Lab 2 – Role-PLaying GAMES

CS5010 – Programming Design Paradigm

**UML Class Diagram:**

**A diagram of a computer game

Description automatically generated with medium confidence**

**Test Plan:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Method** | **Description** | **Input Assignment** | **Expected Output** |
| testAddGearsOfSameType() | Test combining gears correctly | Two gears of same type | Defense and Attack should be adjusted, total name is created - as per the requirement |
| testAddDifferentGearTypes() | Tests combining gears incorrectly | Two gears of different type | IllegalArgumentException |
| createGearsWithNullOrEmpty() | Tests incorrect creation of gear | Null adjective / type | IllegalArgumentException |
| testGearAssignmentToPlayer() | Tests the gear addition to the player | Success case | Player1 is assigned to the specified gear |
| testCreatePlayerWithNullArgument() / Empty String | Tests incorrect creation of player | Null player name | IllegalArgumentException |
| testAddExcessHeadGear() / HandGears / FootGears | Tests gear limit | Add gears more than the limit | IllegalStateException |
| testPlayerToString() | Tests the details of the player | Get the player details | Prints the details of the player. |