Unit Tests

TestID	Reason For Test	Pass/Fail	Testing Code Evidence	Author
boatInstantiationTest	Test if a Boat is instantiated with the correct values given a certain boat type	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/BoatTest.java	Benji Garment
checkCollisionTest	Test if a Boat collision returns the correct boolean value when given an obstacle and its position	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/BoatTest.java	Benji Garment
checkFinishedTest	Test if a Boat has crossed the finish line given its distance travelled	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/BoatTest.java	Benji Garment
getFinishTimeStringTest	Test if the conversion from a long value to a string gives the correct output for the time at which the boat finished	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/BoatTest.java	Joseph Wrieden
getTotalTimeStringTest	Test if the conversion from a long value to a string gives the correct output for the total time the boat has raced	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/BoatTest.java	Joseph Wrieden
checkValidCPUBoatTypes	Checks if the array list of boats available to the cpu boats does not contain the player boat or any other invalid boat types	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/GameplayTest.java	Benji Garment
playerInFirstTest	Checks if the position of the player is in first after a given round with a given time compared to other CPU boats	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/GameplayTest.java	Benji Garment
playerNotInFirstTest	Checks if the position of the player is not first after a given round with a given time compared to other CPU boats	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/GameplayTest.java	Benji Garment
playerReceivesCorrectMedal	Checks that the medal received for a podium positio is correct and that if the player is not in the top 3 there is no medal	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/GameplayTest.java	Benji Garment
isPlayerLaneTest	Checks if the lane given is a player lane	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/LaneTest.java	Benji Garment
updateMaxObstacleRoundMultipleTest	Checks if the max obstacles updates to the correct value for rounds based on multiple test cases	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/LaneTest.java	Benji Garment
updateMaxObstaclesRoundSingleTest	Checks if the max obstacles updates to the correct value for rounds based on a specific test case	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/LaneTest.java	Benji Garment
updateMaxObstaclesSingleDifficultyTest	Checks if the max obstacles updates to the correct value for difficulty based on a spesfic test case	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/GameplayTest.java	Benji Garment
updateMaxObstaclesMultipleDifficultyTest	Checks if the max obstacles updates to the correct value for difficulty based on multiple test cases	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/GameplayTest.java	Benji Garment
obstacleInstantiationTest	Checks if the obstacle instatiated has the correct values from the constructor	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/ObstacleTest.java	Benji Garment
obstacleMovementCharacteristicTest	Checks if a given obstacle gets the correct movement characteristic	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/ObstacleTest.java	Benji Garment
applyPowerUpTest	Checks if a power up applies the correct effect and to the correct amount	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/PowerUpTest.java	Benji Garment
invalidPowerType	Checks if when given an invalid power up type, a NullPointerException is given	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/PowerUpTest.java	Benji Garment
powerUpInitialisationTest	Checks if an obstacle created has the correct values from the constructor	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/PowerUpTest.java	Benji Garment
saveBoatTest	Tests if the string created for a boat from the save function is correct	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment
saveLaneTest	Tests if the string created for a lane from the save function is correct	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment
saveObstacleTest	Tests if the string created for a obstacle from the save function is correct	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment
savePowerUpTest	Tests if the string created for a power up from the save function is correct	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment

loadBoatTest	Checks if the boat created from a save file instantiates with the correct values	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment
loadLaneTest	Checks if the lane created from a save file instantiates with the correct values	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment
loadObstacleTest	Checks if the obstacle created from a save file instantiates with the correct values	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment
loadPowerUpTest	Checks if the power up created from a save file instantiates with the correct values	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/SaveLoadTest.java	Benji Garment
tupleToStringTest	Checks if the string created by Tuple.toString is correct	Pass	https://github.com/Fluxticks/ENG1-DragonBoatRace/blob/master/tests/src/com/dragonboatrace/game/TupleTest.java	Benji Garment