1. Evaluating component correctness

Testing the correct bot output based on the user input. The bot that is added to the form shall be the bot chosen and described in the dropdown menu on the form. The bot shall be positioned initially in the specified x and y coordinates. The bots will be removed from the form when that bot loses a battle.

Test Set 1: Adding correct bot

Method: Test script

Pass Criteria: Expected output observed

Test Set 2: Bots are unique

Method: Test script

Pass Criteria: Expected output observed

Test Set 3: Adding bot to correct coordinates

Method: Test script

Pass Criteria: Expected output observed

Test Set 4: Bots remain on form

Method: Test script

Pass Criteria: Expected output observed

Test Set 5: Bot battles

Method: Test script

Pass Criteria: Expected output observed

1. Evaluating performance

Testing the performance of the speed adjustment and bot movement based on the user input.

Test Set 1: Adjusting speed up

Method: Test script

Pass Criteria: Expected output observed

Test Set 2: Adjusting speed down

Method: Test script

Pass Criteria: Expected output observed

Test Set 3: Response time to user input

Method: Test script

Pass Criteria: Expected output observed

1. Evaluating system functionality

Testing the BotList class and the bot classes. The BotList shall hold the bots added to the form by the user. The BotList class must control the bots and delete the bots when necessary. The bots shall be different from each other and must keep track of their energy and current coordinates.

Test Set 1: Adding bots to list

Method: Testbed main (Located in main of BotList.cpp)

Pass Criteria: Add method tests pass

Test Set 2: Deleting bots from list

Method: Testbed main (Located in main of BotList.cpp)

Pass Criteria: Delete method tests pass

Test Set 3: Handling battles

Method: Testbed main (Located in main of BotList.cpp)

Pass Criteria: Battle method tests pass

Test Set 4: Energy added/subtracted

Method: Testbed main (Located in main of each bot class)

Pass Criteria: Energy level method tests pass