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| Test case | Intented outcome | Actual outcome | Comments |
| Compiling the code | Code compiles and runs | Everything compiled and run correctly | Passed |

Test date: 18.03.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| Code compiles after introducing an enum for finite states machine | Code returns no error and run as before | Code compiled and run correctly | Passed |

Test date: 25.03.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| Tank’s movement | Tank chooses a random spot and moves towards it | Tank first chooses a random spot in the world, rotates towards it and moves forward | Passed |
| Tank’s movement | Tank chooses a spot to move to again after hitting an obstacle | When tank had hit a building or an edge it chose different movement spot | Passed |
| Tank’s aim | Tank marks player’s bases and aims at them | Tank rotates its turret towards player’s base when they’re in range, but sometimes it’s slightly off | Partially passed – problem with clamping angle values between 0 and 360 |
| Tank’s aim | Tank prioritizes bases closer to itself | Tank marks all in-range player’s bases and rotates the turret towards the closest of all of them | Passed |
| Tank’s aim | Tank fires at player’s bases | Tank marks a base and fires at it when the turret faces base’s position | Passed |

Test date: 01.04.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| Tank’s aim | Tank detects the player | Tank detects the player as soon as player’s come in range | Passed |
| Tank’s aim | Tank rotates turret and fires at player | Turret’s been rotated and shell’s been fired | Passed |
| Tank’s aim | Improving targeting base’s | Tank’s turret is no more off from the base’s position | Passed – introduced a while loop to the calculations |
| Tank’s aim | Tank prioritizes player when targeting | Tank doesn’t prioritize player | Not passed – problem with placing data in vector |

Test date: 02.04.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| Tank’s aim | Tank prioritizes the player | Tank now aims at player as soon as player’s tank is in range, doesn’t matter whether it currently sees player’s buildings or not | Passed – overriding current target’s position |
| Tank’s aim | Tank scans the area around when reached the destination | Tank rotates the turret 360 degrees around it | Passed |
| Tank’s aim | Tank resets the turret position | Tank rotates the turret back to the front of the tank, so it always faces forward when moving around | Passed |

Test date: 03.04.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| Compiling the code | Code compiles without any error after introducing 2 new classes | Code compiled | Passed |
| A\* map | Map is placed correctly (not starting in the wall, but slightly off from the top left corner) and is of reasonable size | Map starts in the right place and is of good size (node size: 30x30, map size: 19 rows, 26 columns) | Passed |
| A\* map | Map is being drawn in debug mode; nodes have different colours according to their purpose | Map is drawn, nodes have different colours – e.g. path is blue, neighbors path nodes are red | Passed |
| A\* map | Obstacles (buildings) are marked in the correct places | Buildings are marked when the game starts – tank does not consider them as possible path | Passed |
| A\* pathfinding | Tank chooses shortest path to the destination | Destination and path towards it is chosen correctly, but for some reason tank considers neighbors of explored nodes as path | Partially passed – problem with score calculations |
| A\* pathfinding | Buildings are located dynamically rather than having predefined locations | Tank did not recognize buildings | Not passed – to investigate |
| A\* pathfinding | Constructed path transferred from A\* map to tank | A bizarre error occurs when the A\* is too short | Not passed – iterator is crashing when the A\* path is of size 1 |

Test date: 07.04.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| A\* pathfinding | Buildings are located dynamically | Tank doesn’t know buildings’ positions at start and dynamically marks them when they are discovered – they are not considered to be possible path. When the building is destroyed and tank sees this position again – marks it as possible path again. | Passed |
| A\* pathfinding | Paths is updated upon buildings’ discovering | If the building is being seen by the AI and the building is current tank’s path, tank slightly changes the path to the destination so it’s not colliding with buildings | Passed |
| A\* pathfinding | Tank avoids walls | AI’s destination is almost never being chosen as a wall. | Passed |
| A\* pathfinding | Fix of the problem with nodes neighbors | Path is now smooth, with no weird movement to the neighboring nodes | Passed – updated scoring calculations |
| A\* pathfinding | Tank’s actively moving around, presenting the same behavior as before but with combination with A\* algorithm | Tank’s constantly moving around, scans area, aims at shoots at bases/player when they’re in sight | Passed |
| A\* stability | Game was crashing (“cannot decrement begin list iterator”) when the path was of size 1 | Game is not crashing anymore – tank can be moving around endlessly | Passed – introduced conditions and A\* is being told to redo the process if the path is of size 1 |

Test date: 08.04.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| Tank’s aim | Tank keeps targeting the player when player’s tank in sight | Tank constantly rotates the turret towards the player’s position (if player keeps moving) and fires when turret’s faces it | Passed |

Test date: 09.04.2019

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| Test case | Intended outcome | Actual outcome | Comments |
| Tank’s movement & aim | When AI tank is out of ammo it starts just moving around, ignoring all the other behaviors, such as targeting and shooting | When tank has shot all of the shells it started moving around and ignoring the player and player’s buildings | Passed |

Test date: 10.04.2019