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| General Information | |
| Use Case Name\Number : 005  Subject Area : Controller  Description : User wants to connect the controller | Responsible Analyst : Sanchez |

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| Requirements/Feature Trace | |
| **REQ#** | Requirements Name and / or Short Description |
| 2.4 | System interface for converting controller signals to servo and motor signals from server system |
| 2.5 | System interface for collecting controller signals from the client system |
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| Revision History | | |
| Author | **Date** | **Comments** |
| Sanchez | 10/28/14 | Initial draft of use case |
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| **Insertion Points in other Use Cases** | | |
| Use Case Name | **Use Case Number** | **Step Inserted After** |
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| **Actors** | | |
| **Actor Name** | **Person/System** | **Brief Description** |
| Driver | Person | The driver needs to connect the controller to use it |
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| **Pre-Conditions** | |
| # | Description |
| 1 | Controller is not previously connected |
| 2 | User has the required Microsoft Wireless Adapter and correct Windows drivers |

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| **Start Stimulus** |
| User wants to use the controller |

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| **Use Case Main Course Steps** | | | |
| **Number** | **Description** | **Adds/Alt Name/Number** | **Bus Rule#** |
| 1 | User plugs in Microsoft Wireless Adapter |  |  |
| 2 | User powers on the Xbox Steering Wheel |  |  |
| 3 | System notifies user the controller is connected |  |  |

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| **Exception Conditions** | | |
| **Exception Situations** | **Action(s) on Exception** | **Adds\Alt UC #** |
| Adapter and Controller pairing issue | Prompt user to unplug the Microsoft Wireless Adapter and plug it back in, then to power on the controller again |  |

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| Post-Conditions | |
| **#** | **Description** |
| 1 | System recognizes Xbox Steering Wheel controller |
| 2 | Controller is hooked up and ready to go |

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| **Candidate Objects** | | |
| **Class/Object Name** | **Descriptions** | **Possible**  **attributes** |
| XInputManager | Manages the driver level communication to the controller | ControllerHandle, Controller |
| Controller | Data object which reflects the current controller state | ButtonA, ButtonX, ButtonY, ButtonB, LeftBumper, LeftTrigger, RightBumper, RightTrigger, LeftJoystick |

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| **Assumptions** | | | | | |
| **#** | **Assumption** | **Date**  **Raised** | **Raised**  **By** | **Date**  **Verified** | **Verified By** |
| 1 | User understands how to connect the steering wheel controller | 10/28/14 | Sanchez | 10/28/14 | Sanchez |
| 2 | User has pre-installed the Microsoft Wireless Adapter drivers | 10/28/14 | Sanchez | 10/28/14 | Sanchez |

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| **Issues** | | | | | |
| **#** | **Issue** | **Date**  **Raised** | **Raised**  **By** | **Date**  **Verified** | **Verified By** |
| 1 | Occasionally the controller does not pair to the adapter immediately | 10/28/14 | Sanchez |  |  |
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| **Other Comments** | | |
| **Author** | **Comment** | **Date** |
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| Frequency of Execution |
| **Frequency:**  Minimum: Maximum: Average: (OR)Fixed:  **Per:** Hour:Day:  Week:  Month:  Other: Tied to Use Case 003 |

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| **Timing Information** | | | | | | | |
| **#** | **At/**  **Between** | **Step(s)** | **Timing**  **Unit** | **Minimum** | **Average** | **Maximum** | **Comments** |
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| **Volume Information** | | | | | | |
| **#** | **Step #** | **Unit of**  **Measure** | **Minimum** | **Average** | **Maximum** | **Comments** |
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| **Alternate Course General Information** |
| Alternate Course Name:  Alternate Course Number:  Parent Use Case Name:  Parent Use Case Number:  Description:  Reason for Execution: Non Exception:  Exception:  Exception #: |

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| Insertion Point |
| Step Inserted After |
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| Pre-Conditions | |
| 1. |  |
| 2. |  |

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| Alternate Course Steps | | | |
| **#** | **Step Description** | **Adds Use Case #** | **Business Rule(s)#** |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |

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| Post-Conditions | |
| 1. |  |
| 2. |  |