

Tilt Five Technical Requirements Checklist (TRC) v0.8

TRC Published Date: 18 January 2023

[GAME / APP TITLE]

[TRC DATE]

TRC Type:

TRC Category	TRC Sub-category	TRC Description	Required (Full)	Recommended (Full)	Required (T5 Lab)	Recommended (T5 Lab)
T5-1.0 App Delivery, Install & Updates	T5-1.1 App Quality for Submission	T5-1.1.1 The app does not contain any placeholder text or placeholder graphics.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-1.1.2 The app does not contain any functionality that is inaccessible during testing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-1.1.3 The app does not contain any spelling or grammar errors.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	T5-1.2 Packaging	T5-1.2.1 The app must be built using a supported SDK and engine version.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-1.2.2 All Tilt Five applications must be submitted as 64-bit binaries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	T5-1.3 Functionality	T5-1.3.1 App must install and run without crashes, freezes, extended unresponsive states, loss of user data, or causing an unintended reboot of the machine.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-1.3.2 The app must not leave the user stuck at any point in the experience.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-1.3.3 The app must respond to the glasses positional tracking as well as orientation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-1.3.4 If the app supports online multiplayer for both PC (non-T5) and T5 users, it is required that it offer multiplayer 'cross-play' functionality in the following ways: - PC Player (player 1) can play with T5 Player(s) - T5 Player (player 1) can play with PC Player(s) - T5 Player (player 1) can play with other T5 Player(s) Note: PC multiplayer games that add a T5 solo mode only and not a T5 multiplayer experience are exempt. Pure T5 multiplayer games that do not offer a PC multiplayer experience are exempt.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a	n/a
		T5-1.3.5 The app supports MixCast, including support for all of the different gameboard variants (e.g. LE, XE & XE Raised).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
T5-1.4 Drivers Not Up to Date	T5-1.4.1 The app checks whether they require a newer version of the Tilt Five driver than is installed. If the app detects out of date drivers it will notify the user they need to install new drivers on-screen with the following message: Your Tilt Five Drivers need to be updated before running this application. Please download the latest drivers at https://www.tiltfive.com/downloads T5-1.4.2 If the app detects out of date drivers, it functions as if the glasses are not connected.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a	n/a	
T5-2.0 App Design	T5-2.1 Frame Rate	T5-2.1.1 The frame rate remains constant at a minimum of 60FPS through all areas of the app when using single headset.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-2.1.2 The frame rate remains constant at a minimum of 60FPS while loading large amounts of data – i.e. loading screens, saving data, or changing scenes.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-2.1.3 The frame rate remains constant at a minimum of 60FPS when a large number of objects are spawned, particularly in apps with user generated objects. Consider limiting how many objects the user can spawn if spawning objects causes reduced frame rate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	T5-2.2 Audio	T5-2.2.1 The app supports 3D spatial audio	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a	n/a
		T5-2.2.2 In multiplayer games, if the original game supports voice chat, audio and voice chat are supported for Tilt Five glasses.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
T5-2.2.3 All audio events within the app, including music and sound effects, must be normalized across the app's user experience when heard through the Tilt Five™ Glasses' built-in speakers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a	n/a		
T5-3.0 User Interaction	T5-3.1 Wand Inputs	T5-3.1.1 The app supports wand button inputs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		T5-3.1.2 The app supports positional wand tracking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		T5-3.1.3 If your app supports multiple control input options (gamepad, wand grip, side wand grip etc.), the in-game prompts and/or tutorial screens (including controller diagrams and button mapping screens) reflect all available input devices and/or the input device currently in use.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.1.4 T5 button input on highest level game screen invokes Exit game action (similar to ESC key)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a	n/a
		T5-3.1.5 The app includes side grip support	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		T5-3.1.6 (Wand grip) Trigger and/or 1 button for primary action/select buttons	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.1.7 (Side grip) Trigger and/or A for primary action/select buttons	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.1.8 (Wand grip) Use 2 button as 'back' button to navigate UI hierarchy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.1.9 (Side grip) Use 2 button and/or B button as 'back' button to navigate UI hierarchy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a	<input type="checkbox"/>
		T5-3.1.10 T5 button used to pause the game (if pause supported)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a	n/a
		T5-3.1.11 Wand inputs behave as intended	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	T5-3.2 Gamepad Inputs	T5-3.2.1 The app supports gamepads (ex. Xbox Wireless Controller etc) without any bugs or errors	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	T5-3.3 Mouse/keyboard Inputs	T5-3.3.1 The app supports keyboard + mouse input without any bugs or errors	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	T5-3.4 App Loading and Exiting	T5-3.4.1 The app allows users to invoke an exit action using the T5 button (ex. A 'Close App', 'Exit Game' option in the main menu). This can occur on desktop monitor OR on the Tilt Five game board.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.4.2 The app presents the user with an exit confirmation dialog before closing the app. This can occur on desktop monitor OR on the Tilt Five game board	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		T5-3.4.3 When launching a Tilt Five supported app or enabling Tilt Five mode, if the glasses are not connected, your app informs players to connect their Tilt Five glasses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a	n/a
		T5-3.4.4 User able to use the wand to Exit application	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.4.5 App Launch Option : Detect & Ask - The app detects the headset and asks the user if they want to enable Tilt Five mode. Selecting NO will launch the app in PC mode.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.4.6 App Launch Option : Auto Launch - The app auto detects the headset and boots directly into Tilt Five mode WITHOUT asking the user. Users can switch from Tilt Five mode to PC mode via one or more of the options below. 1) The user selects a settings option to switch between PC mode & Tilt Five mode. 2) The user unplugs the headset and the app auto switches to PC mode. 3) The user closes the app, unplugs the headset, and re-launch the app.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
T5-3.5 Viewing Comfort and Accessibility	T5-3.5.1 No UI and necessary game objects clipping at both primary viewing distances: 1) Sitting on a chair with game board on a standard 28" to 30" (72cm-76cm) height table 2) Sitting on chair with game board on the ground or low coffee table	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	T5-3.5.2 No UI and necessary game objects clipping at secondary viewing distance: Standing with game board on a standard 28" to 30" (72cm-76cm) height table	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	T5-3.5.3 UI text should be legible between 1.5ft - 4ft (~45cm-120cm) from the center of game board at the nearest edge of the game board, at both primary viewing distances and viewing angles 1) Sitting on a chair with game board on a standard 28" to 30" (72cm-76cm) height table 2) Sitting on chair with game board on the ground or low coffee table	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	T5-3.5.4 UI text should be legible between 1.5ft - 4ft (~45cm-120cm) from the center of game board at the nearest edge of the game board, at secondary viewing distance: Standing with game board on a standard 28" to 30" (72cm-76cm) height table	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Tilt Five Technical Requirements Checklist (TRC) v0.8

TRC Published Date: 18 January 2023

[GAME / APP TITLE]

[TRC DATE]

TRC Type:

TRC Category	TRC Sub-category	TRC Description	Required (Full)	Recommended (Full)	Required (T5 Lab)	Recommended (T5 Lab)
		T5-3.5.5 Game object Level of Detail (LOD)s remains clear / game object clarity at primary viewing distances between 1.5ft - 4ft (~45cm-120cm) away from the center of game board at the nearest edge of the game board, at both primary viewing distances and viewing angles 1) Sitting on a chair with game board on a standard 28" to 30" (72cm-76cm) height table 2) Sitting on chair with game board on the ground or low coffee table	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.5.6 Game object Level of Detail (LOD)s remains clear / game object clarity at primary viewing distances between 1.5ft - 4ft (~45cm-120cm) away from the center of game board at the nearest edge of the game board, at secondary viewing distance: Standing with game board on a standard 28" to 30" (72cm-76cm) height table	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		T5-3.5.7 Game objects maintains proper orientation and perspective when user moves head/glasses at both primary viewing distances: 1) Sitting on a chair with game board on a standard 28" to 30" (72cm-76cm) height table 2) Sitting on chair with game board on the ground or low coffee table	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.5.8 Desktop monitor representation of game set to normal desktop playing perspective when not looking at the game board	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		T5-3.5.9 Game content snap rotates 90 degrees around board to match player's position (game specific option)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.5.10 The app does not render objects too close to face, may cause disorientation or discomfort.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.5.11 Gameplay is not interrupted if player views game board from different sides (can test by rotating game board)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.5.12 If the app is optimized for sitting or standing only, it must be made clear to the user with an in-game notification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	T5-3.6 Tilt Five Mode menus	T5-3.6.1 If a non Tilt Five user selects a Tilt Five menu option, a dialogue window opens with 'Learn more about Tilt Five' options, this can direct users to T5 website or the game's Steam page T5 section, this can happen on the game board or on the desktop monitor	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	T5-3.7 Interruption Testing	T5-3.7.1 For apps that use the wand, if the wand loses power or disconnects during play, the app notifies the user to check their wand.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.7.2 If Tilt Five glasses are disconnected when app is in 'Tilt Five enabled mode', game pauses (if appropriate), and app notifies user ex. 'Switch to 'default mode' or 'reconnect Tilt Five glasses' dialogue options.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		T5-3.7.3 When changing windows or alt+tab away to different windows application and back to Tilt Five application, the Tilt Five app must maintain all inputs and tracking functionality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-3.7.4 There is no interruption to primary input device when other input device is connected Ex) Tilt Five wand becomes inoperable when I connect an Xbox gamepad, or vice versa.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
T5-3.8 User Interface	T5-3.8.1 the app should be functional and usable in its entirety while viewed through the Tilt Five glasses and should not require use of additional or external display devices for gameplay, UI or menus.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	T5 3.8.2 If your app supports the Tilt Five wand controller, the app must provide clear instructions on how to use and hold the wand. For example, when the wand is in use, all on-screen UI (including diagrams, tutorials, tooltips, and button prompts) corresponding to gameplay and use of menus must reference and look like the buttons and features of the Tilt Five wand. Also, if the app offers any UI menus featuring controller diagrams or button- / keyboard-mapping instructions, there should be a likewise diagram or instruction provided for use of the Tilt Five wand.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	T5 3.8.3 If the app makes use of the Tilt Five glasses' head-tracking camera for input (whether gameplay or menu selection) this must be explained clearly to the user via in-game prompts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
T5-4.0 Privacy, Safety, Legal	T5-4.1 Privacy Policy	T5-4.1.1 The app's privacy policy is accessible on the developer's website, on the storefront, on the desktop app or on the Tilt Five game board. Only apps that use Network privileges are required to have a privacy policy.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-4.1.2 The user is not required to download the app's privacy policy in order to view it (e.g. via a PDF file download)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
T5-5.0 Distribution, License & Monetization	T5-5.1 Correct usage of System Terminology	T5-5.1.1 Use the correct spelling of Tilt Five Correct: Tilt Five Incorrect: T5, Tilt5, Tilt 5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-5.1.2 Use trademark symbol ™ when referring to Tilt Five hardware, NOT when referring to Tilt Five as a company or organization. Correct: Tilt Five™ Glasses, Tilt Five™ Wand, Tilt Five™ game board Incorrect: Tilt Five glasses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-5.1.3 Use correct terminology for Tilt Five™ Wand: Correct: Tilt Five™ Wand, Wand Incorrect: Tilt Five wand, Controller, Magic wand, other.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-5.1.4 Use correct terminology for Tilt Five™ Glasses: Correct: Tilt Five™ Glasses, Glasses Incorrect: Tilt Five glasses, goggles, HMD, Headset, other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-5.1.5 Use correct terminology for Tilt Five™ game board: Correct: Tilt Five™ game board, game board Incorrect: Tilt Five game board, game board, game mat, playmat, other.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		T5-5.1.6 Use the correct terminology for the Tilt Five™ system components outlined in the Naming Conventions Guide	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	T5-5.2 Use of the Tilt Five Logo and Marks (see Branding Guidelines)	T5-5.2.1 The app does not use Tilt Five branding logos or trademarks within any in-app imagery if not previously approved. Note: This is not limited to UI elements and includes 3D models of Tilt Five logo, wand, glasses, and/or game board within the app.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>