

Technical Specifications

All games submitted for judging in the Australian STEM Video Game Challenge must adhere to the following technical specifications.

1. All submitted games must run in a Microsoft Windows operating system, or in an identified Internet browser.
2. All submitted games must utilize a keyboard and mouse-based control system.
3. All submitted games must function, first and foremost, as single-player games.
4. All submitted games must function/run independently of a need to download/install specific game development software, or additional software.
5. Submitted games should refrain from the use of store-bought or purchased assets.
6. All submitted games must utilise platforms that allow judges to view the game code.
7. A screen recording must be submitted with the entry in .mp4 file format.

Each of these specifications are explained below:

All submitted games must run in a Microsoft Windows operating system, or in an identified Internet browser.

While games may be developed using any free, or free for education, development platform, on any given operating system, the final version of the submitted game must run on a Microsoft Windows operating system, or in a nominated internet browser.

When selecting a game development platform, participants should ensure that the resulting game can be produced/exported successfully for operation on Microsoft Windows.

All submitted games must utilize a keyboard and mouse based control system

The rise and increasing prominence of tablet-based and mobile-based games is noted by the Australian STEM Video Game Challenge, and we understand there may be a strong desire from students to develop games for these platforms; however traditional PC gaming is, in many instances, still highly relevant and is the supported format for this competition.*

To support our ability to effectively judge, compare and assess the games submitted in this year's competition, participants are asked to constrain their efforts to games designed to be played using:

- a standard keyboard only
- a standard two-button mouse only
- a combination of a standard keyboard and standard two-button mouse used simultaneously

All submitted games must function, first and foremost, as single-player games.

Games that provide an opportunity to play with others are great, and the Australian STEM Video Game Challenge fully endorses the value of cooperative, collaborative or competitive play between multiple parties, however we require that all games submitted in the Australian STEM Video Game Challenge are designed primarily for play by a single player.

We do not wish to discourage participants to omit multiplayer modes of play, however, we ask that these considerations be treated as secondary to the single player experience.

All submitted games must function/run independently of a need to download/install specific game development software, or additional software.

Games submitted in the Australian STEM Video Game Challenge must be submitted in such a way that they will open, run and allow play without a need to download or install additional software on the players' behalf.

For the most part, this requirement refers to specific complete programs. We understand that, when developing games in an environment that is constantly changing and advancing, there may be a need to update versions of plugins and commonly used utilities (i.e. Adobe Flash Player) to the most current versions. Such updates are an acceptable expectation and will not invalidate any submission.

Submitted games should refrain from the use of store-bought or purchased assets

The Australian STEM Video Game Challenge is intended to build and encourage capabilities in a number of areas. The development of characters, construction of environments and the realization of artwork is an important component of the game development process, and part of the challenge that exists in creating an original game.

While many game development platforms offer an ability to purchase/utilize store-bought assets, or assets developed by a broader community of users, the Australian STEM Video Game Challenge wishes to discourage the use of these assets for the purposes of the competition.

We do, however, recognize that in many cases participants in the Australian STEM Video Game Challenge are developing games for the first time, and in these cases the use of purchased assets may be advantageous to the building of skills and to the understanding of the game development process. Therefore, while we do not encourage the use of these assets, we understand their usefulness as vehicles for learning, and will not disqualify, or omit submissions that make use of them.

At a minimum, we expect that the main characters and sounds, important tools and obstacles, as well as primary backgrounds are the student's original work.

All submitted games must utilise platforms that allow judges to view the game code

It is the Team Mentor's responsibility to ensure the correct files and/or links have been included in the submission. If the chosen platform allows export of the game as a .exe or a link, then it must be submitted this way.

Note: Code is not visible for games made on platforms such as Roblox, Gamestar Mechanic and Minecraft. Refer to the Recommended platforms table on the Challenge page of our website for guidance.

A screen recording must be submitted with the entry in .mp4 file format.

The screen recording will assist judges in scoring more of your teams' game, as sometimes judges cannot get to the highest levels or might miss important features as they assess it. The screen recording is not intended to be a trailer and does not require fancy headings or editing. The screen recording should be 1 to 5 minutes long. For guidance see our Teacher and Students Resources accessible through the website.

Failure to adhere to these guidelines may impact our ability to adequately judge and assess game submissions, and may result in the submission being disqualified from the competition.

