

Hall County Regional Technology Fair Categories

3D Modeling*

This category is defined as any original artwork that had been created and can be modeled in three dimensions. Software may include, but not be limited to, Maya, AutoCad, Sketch Up, GollyGee Blocks, and Light Wave.

Animated Graphic Design*

This category is defined as an original design with the primary purpose for allowing for the motion of objects. Software may include, but not be limited to, Flash, KidPix, etc.

Case Modification

A student may decorate, paint, add lights or moving parts to any working computer. Use your imagination and fancy up those computers for a fun event!

Digital Photography*

This category is defined as any computer created original project using photographs. Software may include, but not be limited to, Photoshop, Corel Draw, Microsoft Photo Editor. **The project must be displayed on a computer in the program in which it was created.** The student should be prepared to demonstrate to judges how the software was used to create the finished project. A hard copy of the finished project may be displayed.

Digital Video Production*

This category is defined as any original video project that has been edited on a computer with digital video editing software and exported into a digital video format. The project must be displayed for viewing on a computer.

Game Design*

Game Design should include original content, design, and rules of an interactive game. Students may use the software program of their choice in order to demonstrate creativity, originality, organization, and interactivity. Students should be able to explain to judges what inspired their game idea and how they programmed their game to achieve project goals.

*=You may have up to 2 people on a team but teams and individuals will compete against each other within each grade grouping.

^=Because of the specialized nature of the competition, this competition is open to 7th grade and above ONLY.

Hardware*^

This category is for student-built computers. Parts do not have to be new, but the operating components of the computer should be essentially built or put together by the student. The case modification category is for modifications to the non-electronic parts (the case or enclosure). For any component such as a floppy drive or CDROM, the student should be able to demonstrate that the system recognizes it and can access it. There should be a purpose for building the computer and the components should match that purpose. (Ex: An appropriate video card that would support video editing or gaming).

Individual/Team Programming Challenge^

This category is an on-site event in which one student is given a series of problems that she/he must solve during the two-hour competition time. Each individual will be awarded points for each problem solved correctly. Programs will also be judged on structure, design, and organization. Each contestant must be able to enter their programming code, execute the solutions to the problems and save them as directed by the judges.

Regarding the challenge in teams- it is the same as the individual challenge (the one described above), except that teams of two members may participate. Winners in this category receive separate awards from the Individual Programming Challenge.

Mobile Apps*

An entry in this category is an app that is specifically developed for a mobile device (phone, tablet, slate, etc.). This app can be developed for any operating system (Android, iOS, etc.) as long as the entrant has a mobile device that can run the app on the day of the fair. (This category does not include mobile-friendly web pages - please see the Web 2.0 category). Pre-planning documentation materials such as a storyboard and a flowchart are required (examples).

Multimedia Applications*

Multimedia projects are defined as computer-based reports or creative presentations using any combination of sound and/or images with text. Possible software used for projects in this category include but are not limited to: Power Point, KidPix, AppleWorks, Astound, Storybook Weaver and HyperStudio. If appropriate to the project, a storyboard may be displayed to show sequencing of project creation. Videos do not go in this category. Any hyperlinks need to be captured one level deep since Internet access will not be guaranteed. NO tri-boards are allowed.

Non-Animated Graphic Design*

This category is defined as any computer created original art project. This category does not include photography or 3D design projects (see below). Software may include, but not be limited to, Paint,

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KidPix, Photoshop, Corel Draw, Illustrator, or Free Hand. The project must be displayed on the computer in the program in which it was created. A hard copy of the finished project may be displayed.

Non-Multimedia Applications*

Entries can be developed from various non-multimedia application programs such as word processing, spreadsheets, databases or any other non-multimedia software. This category includes, but is not limited to, desktop publishing projects. Hard copies of projects may be displayed at original size to show the judges, but no large displays are allowed, including tri-board displays.

Project Programming*

Projects in this category are self-executing programs created using recognizable programming languages such as BASIC, C++, Pascal, LOGO, etc. All parts of the program must be the author's own design.

Programs must be identifiable in one of the three following categories:

1. Computer-aided instruction or educational/learning games.
2. Business or commercial applications.
3. Personal applications that, with minor alterations, could be marketed for larger commercial audiences.

Robotics*

Projects may be constructed from kits or published drawings, modified from other devices to create new applications, or constructed from the student's own concepts and designs. All entries must be a working and functional piece of electro-mechanical hardware in which movement and intent is controlled through student created programming. Examples of commercially available kits are robotic "arms" or robot movers, Lego and K'Nex style building kits, Capsella, VEX, and Technics style robotics kits. Devices controlled through direct, real time remote control by the student are not appropriate (ie: remote controlled cars). Once started, the robotics project should operate as a standalone independent machine without human interaction.

Technology Literacy Challenge

Written exams will be given on-site for each of the grade level categories. The exams will have 50 multiple-choice questions. Questions will be vocabulary and concept oriented. They will come from the following topic areas:

1. History of computers
2. Parts of the computer
3. Peripheral computer devices
4. Uses and limitations of computers
5. General uses of common computer applications software

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6. New and emerging technologies
7. The Internet
8. Social implications of computers

Web 2.0 Internet Applications*

Projects in this category have strength in their use on networks, either the World Wide Web or LANs (Local Area Networks). Examples of Internet application projects include web pages, web sites, chat rooms, interactive games, bulletin boards, podcasts and blogs.

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