

# PA Media and Design Competition

## Programming

### Project & Software Examples

Projects entered into the Programming category must be based on the following scenario:

- Create an application that solves a real-world problem that is appropriate for all ages. Use your imagination!
- The program should be displayed on the device/platform it is intended for. Platforms can include mobile devices such as iOS or Android, Raspberry Pi, or Microbit.

### Specific Category Rules and Rubric

- **Projects MUST contain a pseudo code listing** (see **Programming Scoring Guidelines** for details).
- Internet connections will be provided at the State competition.
- Displays and monitors must not exceed 24 inches.
- Space will be assigned and limited to 3 feet per project.
- Spelling and grammar will be judged on narrative and project.
- Directions for re-launching the project must be provided, as well as any passwords. (May use narrative)
- A project will be **disqualified** if any of the following occur:
  - The narrative description is missing. (see below)
  - Copyright information and credits are not included in the narrative or displayed with the project. (see below)
  - Pseudo code is not displayed/available that clarifies the operation of the project. (See **Programming Scoring Guideline**)
  - If a project meets the above rules it will be judged using the following: **Programming Scoring Guideline**

### Pseudo Code:

- All projects need a pseudo-code listing that shows the algorithmic solution to the programming problem. This listing should be specific and detailed enough to give the judges a good idea of how your program works. Also, the pseudo code should demonstrate that the programmers worked from a well thought out plan.
- You may choose to put it on your tri-fold display or bring a loose-leaf notebook with your notes.
- The pseudo code will not be judged for grammar or appearance but should be legible and organized.
- The pseudo code is **REQUIRED** for this category. Projects without it will not be judged.

### Coding Conventions:

- Indenting: Code should be indented consistently and meaningfully.
- Consistency: Braces, parentheses, operators and function names should be used in the same manner throughout the code base. If this code extends an existing project, the style guidelines from the parent project should be respected.
- Inline comments: Comments should be written to sufficiently explain complex code blocks so that others can understand the algorithm in use.
- Organization: Code and other assets (images, videos, style information, etc.) should be logically organized within the project.

### Example Languages

- Java
- JavaScript
- HTML5
- Swift
- PHP
- Ruby
- Python

## **Narrative Description**

Narrative descriptions are required for all projects; the narrative description/project summary is now included in the **PA Media and Design Competition Participation Packet**. If the narrative is not provided, the project will be disqualified. Narratives must be detailed enough to provide the judges with any information to fairly judge the project. Attach additional pages if necessary.

## **Copyright Requirements**

The **PA Media and Design Competition Participation Packet** includes a participation agreement that must be signed by all participating students on a project and their teacher sponsor. Part of the agreement outlines copyright expectations, as well as other project requirements.

### **Suggested sites to search for media:**

**Creative Commons** - This site provides searchable material from various authors that are usable under certain conditions.

**Public Domain Pictures.net** - The PA Media and Design Competition, although educational, removes the student work from the classroom and therefore requires the student to get permission from the owner to use any copyrighted music, video, graphics, etc. Fair use does NOT apply. Remember to credit music or items that were created by yourself or friends as well.

## **Storyboard/Planning Doc**

All projects need to display the process used to create the project. This should be specific and as detailed as possible to give the judges the necessary background regarding how it was developed. You may choose to put it on your tri-fold display or bring a loose-leaf notebook with your notes.

- The document will not be judged for grammar or appearance.
- Tri-fold displays are not judged, they are for clarification purposes only.
- Get photo releases signed from everyone in your project in any media format.