



2022 NJ TSA MIDDLE SCHOOL DESIGN PROBLEMS

Coding

Best of New Jersey APP CHALLENGE

New Jersey residents know that the Garden State is a great place to live. There are so many good things to do that it's impossible to do them all. But it will be fun to try.

Conduct research among your friends and classmates to identify some of their favorite New Jersey places and activities. Possibilities include, sports, concerts, restaurants, the shore, etc. Add your own ideas and finalize a top 5 list. The App you create should include a photo and useful information including a link for each of the 5 activities/places. Include a place that will allow users of your App to leave one sentence reviews.

- **PLATFORM:** The app can be on any platform.
- **PROGRAMMING LANGUAGE:** Use any programming language.
- **FUNCTIONALITY:** The app must have some degree of functionality.
- **CONTENT SUITABILITY:** All content must be in good taste and observe all school rules.
- **ORIGINALITY:** The app must be original in design and content.
- **VIDEO:** Create a 1-3 minute video that contains the following information:
 - First name of each team member
 - The name of the app
 - Clearly explain the purpose of the app
 - The tools and coding language used to create the app
 - Show how the app works
- **IN ADDITION** submit a document that includes the following information:
 - Your ID number(s)
 - Title of the app
 - Explain the app in ONE sentence.
 - What is your app trying to accomplish? (200 characters max.)
 - What technical /coding difficulty did you face in programming your app, and how did you address this technical challenge? (250 characters max.)
 - With what you've learned, what improvements would you make to version 2.0 of your app? (250 characters max.)

EVALUATION

- **VIDEO** (50 points)
 - The purpose of the app is explained (10 points)
 - Tools and coding language are explained (10 points)
 - At least 3 features of the app are demonstrated and explained (30 points)
- **DOCUMENTATION** (50 points)
 - Written description of the app's purpose (10 points)
 - Technical difficulty and solution are explained (20 points)
 - Improvements that should be included in version 2.0 are explained (20 points)

SUBMISSION INSTRUCTIONS

- The URL for the video (posted on YouTube), and required documentation (PDF) must be uploaded to the NJ Online Conference System by 11:59pm on March 30, 2022. Specific upload procedures will be provided by NJ TSA. Entries/files must be labelled with ID number(s) and "Middle School Coding."

Computer-Aided Design (CAD) Foundations

Use CAD to produce isometric and 3-view (orthographic) drawings of the object illustrated below. Choose an appropriate scale so that you can print the drawings on a single page. Include a border, title block with the event name (CAD Foundations), ID number and drawing scale. Shading and color are optional and may be used on the isometric drawing. Follow directions in the NJTSA Supplement to submit your drawing.

