**VEX Game Design Challenge 2017-18**

**Requirements:**

* The game must incorporate at least one of the challenge objects described below, and the challenge object(s) used must be significantly involved in the scoring of the game.
* A YouTube video showing the game that is No more than 3:00 minutes long with up to an extra 15 seconds at the end (not the beginning) for credits.
* You must use music in the public domain.

The Challenge Objects are part of the challenge to introduce a real-world limitation. Like any other engineering problem there are constraints and in this contest the Challenge Object is one of your constraints.

**The game must include a minimum of two scoring objects:**

* **You must incorporate at least one scoring object from past games** (such as cubes or stars from Starstruck, barrels or balls from Gateway, etc.). You can find these pieces at the following link: https://www.roboticseducation.org/competition-teams/competition-history/
* **You must also include one additional scoring object of your own creation,** and the object used must be significantly involved in the scoring of the game. And here’s the catch: This new object cannot have appeared in any previous VRC games.
* **All scoring objects must be made of different materials with different textures.**For example, Starstruck had rigid foam stars and soft plush cubes – both objects were not the same material. You must incorporate the physics of these different materials into the game, showing how it affects game play.
  + Objects can be light or heavy, small or large, or a combination of both
  + Materials can be hard, soft, squishy, flexible, etc.
  + Textures may be smooth, rough, hairy, slippery, etc.

**Instructions for your video:**

**Any animation method may be used,** including computer-generated images (CGI), claymation, stop motion, paper, or hand-crafted art. Traditionally this is a CGI contest, but we are always interested in other creative approaches.

* Start with a title screen and introduction that states the name of the game.
* Show and explain the scoring objects and field objects (goals, ramps, barriers, obstacles, etc.) in the game.
* Identify which scoring objects are from past game(s), and which you custom designed for this game.
* Explain how the challenge objects are used in scoring.
* Demonstrate the game being played, explaining and/or showing important game dynamics, rules and penalties.
* Show how a demo match would be scored, and show who would win.
* The 15-second credits at the end must include the VEX team number (if any), entrant(s) names, credit to any music used, and the software used to create and edit the video (if any). You may include other information if you would like.
* The video should well-produced and exhibit good editing, animation techniques, and use of music and narration. Please note: you must use music in the public domain, or YouTube may delete your video.
* Robots featured in the animations should be constructed from VEX parts, follow the laws of physics, and should be functional in the real world.
* The game should be playable, interesting, and incorporate the challenge object(s) in a creative, interesting way. It is a good game.
* Robots featured in the animations should be constructed from VEX parts, follow the laws of physics

**Grading Criteria (10 pts per category)**

* Quality of your game: can this be a real VRC game that is affordable and easily constructed?
* Is the game easy to understand and score?
* Is the game interesting and creative?
* Are the robots constructed using VEX parts, and can they function in the real world?
* Quality of your animation: does it look professional?
* Quality of sound: is the narration easy to understand and is the music mix clear and easy to hear?
* Is the video well-produced: does it exhibit good editing, animation techniques, and use of music and narration?